AECOM



APPENDIX S

Benthic Resources Characterization Reports

Prepared for

Beacon Wind LLC

Photo credit: Matt Goldsmith, Equinor

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BENTHIC REPORT FOR LEASE AREA OCS-A 0520 (BEACON WIND)

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equinor

BEACON WIND LEASE AREA BENTHIC SURVEY 2021

US EAST COAST
Q3 2021

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ABBREVIATIONS AND DEFINITIONS

aRPD	Apparent Redox Potential Discontinuity
BOEM	Bureau of Ocean Energy Management
CMECS	Coastal and Marine Ecological Standard
DP	Dynamic Positioning
DPR	Daily Progress Report
EFH	Essential Fish Habitat
GIS	Geographic Information System
GNSS	Global Navigation Satellite Systems
HD	High Definition
HDPE	High-Density Polyethylene
HRG	High-Resolution Geophysical
HSE	Health Safety and Environment
IAC	Interarray Cable
MAC	Mobilization and Calibration
NMDS	non-Metric Multidimensional Scaling
M/V	Motor Vessel
NCCA	National Coastal Condition Assessment
NMFS	National Marine Fisheries Service
OSI	Organism Sediment Index
QC	Quality Control
QINSy	Quality Integrated Navigation System
PPS	Pulse Per Second
PV	Plan View
SBET	Smoothed Best Estimated Trajectory
SD	Standard Deviation
SIMPROF	Similarity Profiles Routine
SPI	Sediment Profile Imaging
SSS	Side Scan Sonar
TOC	Total Organic Carbon
USBL	Ultra-Short Baseline
USEPA	United States Environmental Protection Agency
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator
WTG	Wind Turbine Generator

EXECUTIVE SUMMARY

This report details the results from the marine benthic survey of Equinor Wind US, LLC's (Equinor) Beacon Wind, LLC (Beacon Wind) Lease Area (OCS-A 0520). Environmental data acquisition was comprised of benthic video, sediment sampling, photography, and sediment profile imaging to characterize existing habitats and species present on the seabed. The survey was performed using a high-definition (HD) drop/tow camera system, a sediment profile and plan view imaging (SPI/PV) system, a Smith-McIntyre grab sampler for collecting benthic sediment, and a grab-mounted HD benthic video camera, all deployed from the dynamic positioning (DP) 2 survey motor vessel Deep Helder.

A total of 157 benthic stations located at the proposed foundation location stations were sampled spanning the entire Lease Area. These 157 stations were sampled with the full suite of instruments – the HD drop/two camera system, the SPI/PV system, and the Smith-McIntyre grab sampler with mounted benthic camera. An additional 218 interarray cable stations were sampled using only SPI/PV. At each foundation station, samples were collected via benthic grab for benthic infauna taxonomy and biomass, particle size distribution/grain size analysis, and total organic carbon (TOC). Replicate samples were also collected at every 10th station throughout the survey for quality assurance/quality control of particle size distribution and TOC.

The videographic data displayed a seabed characterized by soft bottom substrate consisted primarily of finer particle sizes. No hardbottom substrates, sensitive seafloor communities, or species of concern were identified (with species of concern being informally defined as a species that NOAA's National Marine Fisheries Service [NMFS] has regarding status and threats, at risk of decline but insufficient information available to list the species as endangered). The benthic video collectively showed benthic habitat productivity in the form of biological assemblages with evidence of burrows, bioturbation, polychaete/amphipod tubes, and macrobenthos.

The results from the particle size distribution analysis indicated that the foundation sites mainly consisted of finer grained particles that included Very Fine Sand (0.125 to 0.0625 mm) and Silt (0.0625 to 0.0039 mm) based on the Wentworth grain size classification. Sediment TOC concentrations ranged from 0.064 to 1.200 percent and are within the expected range for the shallower continental margins.

Three Coastal and Marine Ecological Standard (CMECS) Components (Geoform, Biotic, and Substrate) were used to classify sediment type, biological community structure, and geological formations in the Lease Area. The Lease Area was characterized into two Geoform Level 2 classifications (Geologic-Flat or Biogenic-Burrows/Bioturbation) and one Biotic subclass (Soft Sediment Fauna). The Biotic subclass was further defined into four biotic groups where applicable (Small Tube Building Fauna, Clam Bed, Sand Dollar, Bed, and Starfish Bed). The majority of the Lease Area stations were characterized into the slightly gravelly muddy sand CMECS Substrate Component and the Muddy Sand National Marine Fisheries (NMFS) modified CMECS classification. Two stations had sediment greater than 5 percent gravel, a metric threshold for being considered complex habitat (NMFS 2021), while not having physical traits that would be associated with complex habitat.

Infauna analyses focused on fourty-four (44) foundation priority stations (from the total 157 foundation locations) within the Lease Area and included biomass and assemblage structure assessment. Biomass measured for the fourteen (14) taxonomic classes of infauna was 197 g with mean biomass per station of 4.5 g ± 5.9 Standard Deviation (SD). Taxonomic diversity varied among phyla, Echinodermata and Nemertea were both represented by three taxa. Chordata, Cnidaria, Sipuncula and Platyhelminthes were each represented by a single taxon. Annelids were mostly polychaete worms from the orders Phyllodocida, Sabellida, Scolecida, Terebellida, Spionidam and Eunicida. Arthropods of the class Malacostraca (crustaceans) contributed taxa from the orders Amphipoda, Isopoda, Decapoda, Cumacea, and Tanaidacea. The molluscan component, represented by 26 taxa, was composed mostly of bivalves and gastropods.

From these priority stations, a total of 20,895 individuals and 156 total infauna taxa from nine phyla: Annelida, Arthropoda, Chordata, Cnidaria, Echinodermata, Mollusca, Nemertea, Platyhelminthes, and Sipuncula were observed. Number of species per sample averaged 24.9 and ranged from 7 to 36. The species richness (d) values ranged from 1.9 to 5.9; diversity (H') ranged 1.1 to 2.7; Fisher's alpha ranged from 3.2 to 10.5. Evenness measured with Pielou's J' was moderate across all stations averaging 0.653 and ranging from 0.339 to 0.877.

The similarity profiles routine (SIMPROF) tests (statistical tests to determine similarity among and between samples) produced thirteen (13) groups of stations that were similar with respect to species composition and relative abundance. Approximately 80 percent of the priority stations were relatively constant with respect to the grain size and TOC. Some spatial patterns were observed but the range of variation in environmental factors (including water depth) across stations was limited and did not cause appreciable change in the infauna assemblage. Multivariate statistical analyses indicated the infauna assemblage from most of the priority stations to have similarity greater than 50 percent which is indicative of a relatively homogenous community composition. Based on the analytical findings the Lease Area appears to support a relatively homogeneous infauna assemblage.

1 | INTRODUCTION

Equinor Wind US, LLC (Equinor) contracted MMT to provide marine environmental services for the Benthic Sampling Survey within Equinor's Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf off the coast of Massachusetts (OCS-A 0520 Lease: "Beacon Wind"). MMT contracted CSA Ocean Sciences, Inc. (CSA) to provide the benthic sampling services. The Lease Area covers approximately 128,811 acres (ac; 52,128 hectares [ha]) and is located approximately 20 statute miles (mi) (17 nautical miles [nm], 32 kilometers [km]) south of Nantucket, Massachusetts and 60 mi (52 nm, 97 km) east of Montauk, New York (Figure 1).

The Benthic Sampling Survey consisted of sampling at 157 foundation sites spanning the entire Lease Area. These 157 stations were sampled with the full suite of instruments – the high-definition (HD) drop/two camera system, the sediment profile and plan view imaging (SPI/PV) system, and the Smith-McIntyre grab sampler with mounted benthic camera. An additional 218 stations along the interarray cable were sampled using SPI/PV only. The complete SPI/PV report is provided as Attachment D| to this Benthic Report.

At each foundation station, samples were collected via benthic grab for benthic infauna taxonomy and biomass, particle size distribution/grain size analysis, and total organic carbon (TOC). Replicate samples were also collected at every 10th station throughout the survey for quality assurance/quality control of particle size distribution and TOC.

Prior to the benthic survey, a high resolution geophysical (HRG) survey of the Lease Area was performed starting in 2020 and continued into 2021. Using those results, 218 interarray cable station locations and 44 priority foundation sample sites (of the proposed 157 foundation locations) were identified based on review of the HRG survey's side scan sonar and sub-bottom profiling data to obtain information across the Lease Area. Characteristics derived from the HRG data that were used to determine priority foundation site selection included observations of potential homogeneity and heterogeneity of seafloor conditions.

The 44 priority foundation stations were identified for immediate benthic infaunal analysis, while the remaining benthic infaunal samples from foundation sites were archived for possible future analysis. Analysis of the remaining parameters (particle size distribution, TOC, SPI/PV imagery and benthic video imagery) occurred for all 157 foundation stations.

For full details on sample locations and distribution of stations see Attachment A|. Note the 157 foundation stations are labeled with the format WTG - ### and interarray stations are labeled with the format IAC - ###.

Summary of the project details are provided in Table 1.

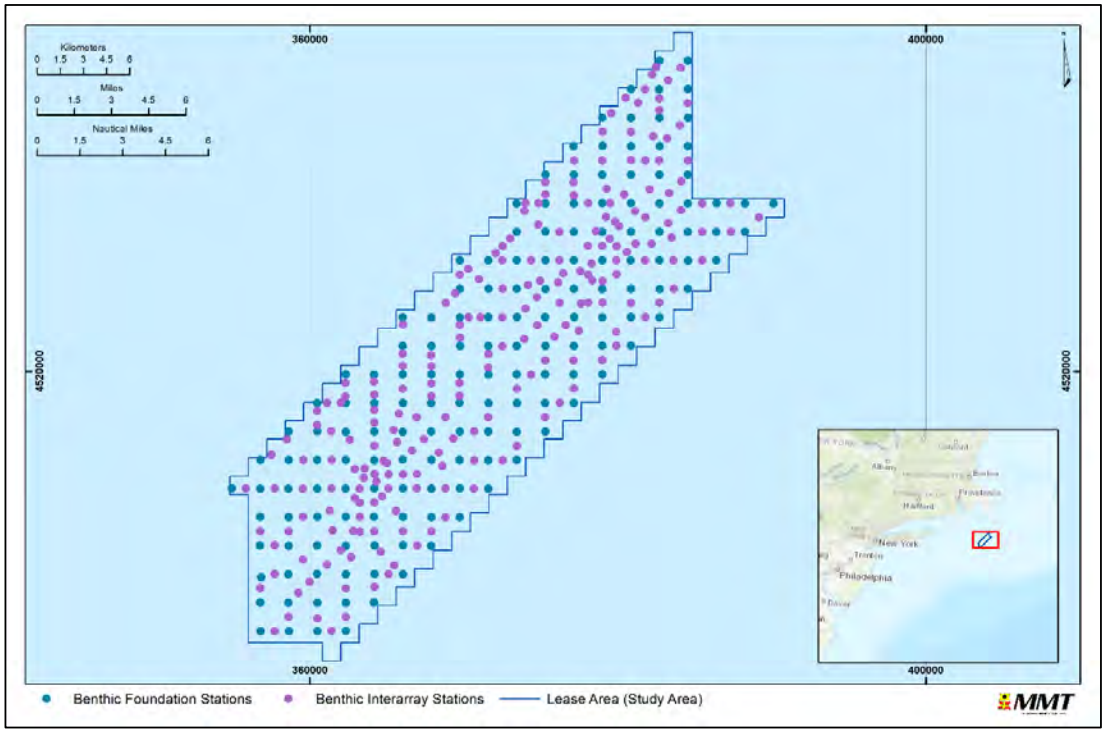

Figure 1 Lease Area overview with the distribution of foundation and interarray cable benthic stations.

Table 1 Project details.

Client:	Beacon Wind, LLC
Project:	Beacon Wind
MMT Sweden AB (MMT) Project Number:	103746
Survey Type:	Benthic
Client ID: Task 3 - Offshore Benthic	EQ21902
Area:	US East Coast Atlantic
Survey period:	July 2021 – September 2021
Survey Vessels:	Deep Helder
MMT Project Manager:	Sara Andersson
Client Project Manager:	Shantelle Worthylake

1.1 | PURPOSE OF DOCUMENT

This report presents detailed information of the survey performance, instrumentation and processing stages of the work together with the results, conclusions, and discussion of these results that define benthic habitat conditions from the environmental survey in the Beacon Wind Lease Area. The objective is to provide information, on the environmental conditions, which are based on interpretations of obtained data.

1.2 | SCOPE OF WORK

A benthic assessment was conducted to document seafloor habitat for understanding the benthic environment and Essential Fish Habitat (EFH), within the study area (Figure 1), as required by Bureau of Ocean Energy Management (BOEM) 2019 guidelines and National Marine Fisheries Service (NMFS) 2021 recommendations.

This baseline seafloor survey was performed to characterize benthic habitat within the Lease Area possibly affected by the proposed construction and operations of the Project. These data will inform siting decisions with the goal of avoiding or minimizing potential impacts to sensitive biological communities and EFH.

Data used to support the following benthic habitat assessment objectives will incorporate multiple lines of evidence including existing literature on marine biological communities in the region and the collection of field data (e.g., grab samples for analysis of physicochemical parameters and benthic infaunal community analysis).

This document specifically addresses the BOEM guidelines for benthic habitat field studies as defined within 30 CFR Subpart F §585.625 and the aforementioned BOEM 2019 guidelines and NMFS 2021 recommendations. Consistent with BOEM guidance and NMFS recommendations, the objectives of this benthic habitat survey were to:

- Identify and confirm dominant benthic macrofaunal and macrofloral communities and substrate in the Lease Area associated with development of the Beacon Wind Project;
- Collect information to support spatial planning, routing, and siting decisions;
- Collect information to reduce uncertainty associated with existing conditions and/or to inform the interpretation of survey results;
- Obtain data to establish existing conditions that may be used to assess potential changes to benthic environment resulting from proposed construction and operations; and
- Provide data to inform the EFH assessment.

1.3 | REFERENCE DOCUMENTS

The reference documents relevant to the marine benthic survey of the Beacon Wind Lease Area are presented in Table 2.

Table 2 Reference documents.

Ref.	Document number	Title	Author
1.	103746-EQU-MMT-QAC-PRO-PROJMANU	Project Manual	MMT
2.	103746-EQU-MMT-QAC-PRO-ENVSPEC	Environmental Specifications	MMT
3.	103746-EQU-MMT-HSE-PRO-HAZOP	Hazard and Operability Study	MMT
4.	103746-EQU-MMT-HSE-PRO-HSEPLAN	HSE Plan	MMT

Ref.	Document number	Title	Author
5.	103746-EQU-MMT-HSE-PRO-ENFDEEPH	Emergency Notification Flowchart	MMT
6.	103746-EQU-GLI-MMT-QAC-PRO-CADGIS	CAD and GIS Specification	MMT
7.	103746-EQU-MMT-MAC-PRO-DEEPHELD	Mobilization and Calibration Procedures	MMT
8.	103746-EQU-MMT-MAC-REP-DEEPHELD	Mobilization and Calibration Report	MMT
9.	103746-EQU-MMT-SUR-REP-OPRBENTH	Benthic Scope Operations Report	MMT
10.	QUA-W-QUA-QASSURAN-MAN	Quality Assurance Manual	MMT
11.	Appendix A	SOW	EQU
12.	Appendix C	Schedule	EQU
13.	Appendix E	Specification	EQU
14.	BOEM (May 27, 2020)	Guidelines for Providing Archaeological and Historic Property Information, Pursuant to 30 CFR Part 585	BOEM
15.	BOEM (May 27, 2020)	Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information, Pursuant to 30 CFR Part 585	BOEM
16.	BOEM (Feb 1, 2013)	Guidelines for Submission of Spatial Data for Atlantic Offshore Renewable Energy Development Site Characterization Surveys	BOEM
17.	BOEM (Jun 2019)	Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585	BOEM
18.	BOEM (May 27, 2020)	Guidelines for Information requirements for a Renewable Energy Construction and Operations Plan (COP) (Version 4.0: May 27, 2020)	BOEM
19.	BOEM	Lease Number OCS-A 0520 – Addendum C Lease Specific Terms, Conditions and Stipulations	BOEM

2| SURVEY PARAMETERS

2.1| GEODETIC DATUM

2.1.1| ACQUISITION

The geodetic datum used for all equipment during acquisition are presented in Table 3.

Table 3 Geodetic parameters used during acquisition.

Horizontal datum: WGS84	
Datum	WGS84
Ellipsoid	WGS84
Prime Meridian	Greenwich
Semi-major axis	6 378 137.000 m
Semi-minor axis	6 356 752.314 245 m
Inverse Flattening (1/f)	298.257 223 563
Unit	International Meter

2.1.2| PROCESSING

The geodetic datum used during processing and reporting are presented in Table 4.

Table 4 Geodetic parameters used during processing.

Horizontal datum: NAD83 (2011)	
Datum	NAD83 (2011)
Ellipsoid	NAD83 (2011)
Prime Meridian	Greenwich
Semi-major axis	6 378 137.000 m
Semi-minor axis	6 356 752.314 m
Inverse Flattening (1/f)	298.257 222 101
Unit	International Meter

2.2| TRANSFORMATION PARAMETERS

The transformation parameters used during the project are presented in Table 5 and test coordinates for the datum shift from WGS84 to NAD83 (2011) is provided in Table 6.

Table 5 Transformation parameters.

Datum Shift From WGS84 to NAD83 (2011) (Right-handed convention for rotation – coordinate frame rotation)	
Parameters	**Epoch 2020**
Shift dX (m)	1.0133
Shift dY (m)	-1.9152
Shift dZ (m)	-0.5556
Rotation rX (“)	0.02744840
Rotation rY (“)	-0.00799430
Rotation rZ (“)	0.01041910
Scale Factor (ppm)	-0.0003300000

Table 6 Test coordinate for datum shift.

UTM Zone	**Datum**	**Easting (m)**	**Northing (m)**	**Latitude**	**Longitude**
19N	WGS84	373465.004	4517637.971	40° 48’ 00” N	70° 30’ 00” W
	NAD83 (2011)	373465.392	4517636.859	40°47’ 59.9642” N	70° 29’ 59.9826” W

2.3 | PROJECTION PARAMETERS

The projection parameters used for processing and reporting are presented in Table 7.

Table 7 Projection parameters.

Projection Parameters	
Projection	UTM
Zone	19 North
Central Meridian	69° East
Latitude origin	0° N
False Northing	0 m
False Easting	5000 000 m
Central Scale Factor	0.9996
Units	meters

2.4 | VERTICAL REFERENCE PARAMETERS

The vertical reference parameters used for processing and reporting are presented in Table 8.

Table 8 Vertical reference parameters.

Vertical Reference Parameters	
Vertical reference	MLLW
Height model	NOAA's VDATUM

Global navigation satellite system (GNSS) tide is used to correct the bathymetry data to MLLW, the defined vertical reference level (Figure 2). The GNSS tide is obtained by post-processing GNSS data collected by an Applanix PosMV 320 system.

The GNSS data is post-processed in the software POSPac MMS. Both the POS MV and POSPac MMS are developed by Applanix. The output from POSPac is ellipsoidal heights with accuracies of 2 in (5 cm) RMS, which are corrected for motion and referenced to the MBES reference point.

By incorporating a model of the defined vertical datum into the process, all heights will use the same vertical reference which is valid at the location of the actual measurement independent of the size of the survey area, instead of choosing a single mean value. Comparisons with the closest water level station were performed to ensure that the data is levelled correctly.

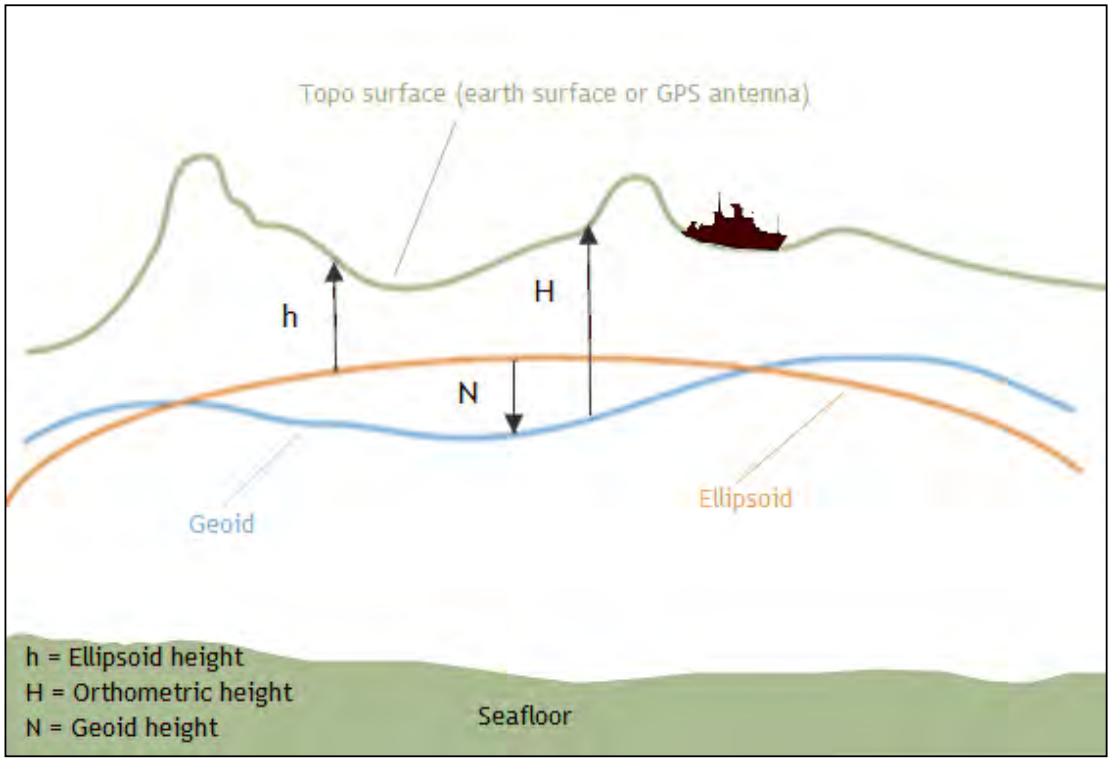

Figure 2 Overview of the relation between different vertical references.

This tidal reduction methodology encompasses all vertical movement of the vessel, including tidal effect and vessel movement due to waves and currents. The short variations in height are identified as heave and the long variations as tide.

This methodology is robust since it is not limited by the filter settings defined online, and provides accurate results in complicated mixed wave and swell patterns. The vessel navigation is exported into a post-processed format, SBET (Smoothed Best Estimated Trajectory) that is then applied onto the MBES data.

The methodology has proven to be accurate as it accounts for any changes in height caused by changes in atmospheric pressure, storm surge, squat, loading or any other effect not accounted for in a tidal prediction.

2.5 | TIME DATUM

Coordinated Universal Time (UTC) was used on all survey systems on board the vessel. The synchronisation of the vessel's onboard system was governed by the Pulse Per Second (PPS) issued by the primary positioning system. All displays, overlays and logbooks were annotated in UTC.

3| SURVEY PERFORMANCE

3.1| SURVEY TASKS

The marine benthic survey was performed using a high-definition (HD) drop/tow camera system, a sediment profile and plan view imaging (SPI/PV) system, a Smith-McIntyre grab sampler for collecting benthic sediment, and a grab-mounted HD benthic video camera. The targeted sampling from SPI/PV, drop camera and benthic grab with mounted HD camera was conducted at each proposed foundation location. Selected stations along the interarray cabling were sampled using the SPI/PV camera system.

The total number of sampling locations for the benthic habitat assessment and sediment sampling program are as follows:

- Foundation locations: 157 (sampling included drop/tow camera, benthic grab with mounted HD benthic video camera, and SPI/PV). The benthic grab samples collected sediment for faunal, particle size, and total organic carbon (TOC) analyses. Of the 157 foundation stations, 44 stations were selected as priority to characterize the benthic faunal assemblage within the collected sediments, with the remaining samples archived should they be needed for further future assessment.
  Particle size and TOC analyses were completed for all 157 stations.

- Interarray cable routes: 218 (SPI/PV only)

3.2| SURVEY PERSONNEL

The marine benthic survey was conducted during 24-hour operations with two marine scientists and two operations technicians provided by CSA. In addition, two SPI personnel from Tombo Environmental and NewFields were onboard for the entirety of the survey. A list of the science and technical staff involved in the effort is provided in Table 9.

Table 9 Science and technical staff involved in the survey effort.

Personnel	Affiliation
Bruce Graham	CSA Ocean Sciences Inc.
Steve Viada	CSA Ocean Sciences Inc.
Jeffery Landgraf	CSA Ocean Sciences Inc.
Terry Stevens	CSA Ocean Sciences Inc.
Keith Spring	CSA Ocean Sciences Inc.
Tony Martin	CSA Ocean Sciences Inc.
Jason Clermont	CSA Ocean Sciences Inc.
Thomas Lamoure	CSA Ocean Sciences Inc.
Ed Hughes	CSA Ocean Sciences Inc.
Woodrow Straley	CSA Ocean Sciences Inc.
Robert Shiffer	CSA Ocean Sciences Inc.
Russ Karnap	CSA Ocean Sciences Inc.
Ian Stupakoff	Tombo Environmental, LLC.
Leon Delwiche	Newfields Inc.
Preston Martin	Newfields Inc.

CSA personnel mobilized benthic sampling equipment and supplies, directed and conducted requisite sample collection and processing, and coordinated transfer/shipment of samples to respective analytical laboratories. The SPI data was processed by Tombo Environmental LLC. And NewFields. Onshore support for benthic sampling was provided by CSA's regional office in East Greenwich, Rhode Island.

3.3 | EQUIPMENT

Equipment utilized during the benthic sampling survey is presented in Table 10, specific to the environmental survey equipment, and Table 11, specific to the navigation and positioning equipment.

Table 10 Environmental Sample Equipment.

Instrument	Name
Grab sampler	Smith McIntyre grab sampler (1-ft^2 [0.1-m^2] surface area, 6.3 in [16 cm] depth penetration)
Camera stills/video	Drop/Tow Camera System: - Outland Technologies high-definition camera - 5,000-lumen light emitting diode (LED) lamp.
	Grab-mounted Camera System: - SOLO Series X Autonomous HD (1080p at 30fps) Recording Camera (Williamson & Associates) with rechargeable battery pack - 5,000 lumens LED light
Sediment Profile / Plan View System	Ocean Imaging System model 3731 sediment-profile camera with internal strobe Chimaera MKII camera with external flash; Images taken 3.3-6.6 ft (1-2 m) from bottom via external trigger
Benthic Sampling Support Equipment and Supplies	Laboratory van for workspace 20-HP winch with spectra line Sieve station 0.5-mm stainless steel sieves 10 percent formalin (preservative) Sample containers and miscellaneous sampling supplies Digital storage for video

Table 11 Vessel equipment summary – M/V *Deep Helder.*

INSTRUMENT	NAME
Navigational System	
Primary Positioning	Applanix POS MV 320 with FUGRO G2 corrections
Secondary Positioning	Fugro Seastar with XP2 corrections
Primary Gyro and INS	Applanix POS MV 320
Underwater Positioning	IXSEA GAPS USBL
Survey Navigation Software	QPS QINSy
Sound Velocity	
Hullmounted SV at MBES transducer	Valeport miniSVS
Sound Velocity Profiler	Valeport Midas SVX2

4 | METHODOLOGY

The field methods and survey design were planned, written and executed by environmental scientists at CSA in consideration of the Bureau of Ocean Energy Management's (BOEM) *Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585* (June 2019), National Marine Fisheries Service's (NMFS) *Updated Recommendations for Mapping Fish Habitat* (March 2021) and the Client's requirements.

4.1 | FIELD METHODS

4.1.1 | SEDIMENT SAMPLING

Parameters, guidelines for containers (type and size), preservation methods, and holding times for sediment samples are provided in Table 12. These guidelines are based on United States Environmental Protection Agency (USEPA) standards and laboratory recommendations.

Table 12 Sediment parameters, minimum weight, guidelines for containers, preservation method, and holding times for samples collected during the Benthic Sampling Survey.

Parameter/ Analyte(s)	Minimum Sample Weight	Container Type and Size	Storage Conditions and/or Preservation Method	Holding Time
Grain size distribution	200 grams	250-mL plastic	Store refrigerated to reduce bacterial proliferation and ship on ice	Indeterminate
TOC	50 grams	125-mL amber glass	Store frozen and ship on ice	28 days
Benthic infauna	---	1-L HDPE	Ship-board processing (sieve through 0.5-mm sieve) and preserve with 7–10 percent buffered formalin	Indeterminate; samples can be transferred to 70 percent ethanol (EtOH) after being fixed and stored in formalin, but is not required

HDPE = high-density polyethylene; TOC = total organic carbon.

A Smith McIntyre grab sampler (1-ft^2 [0.1-m^2] surface area) was deployed using a winch and A-frame system to collect sediment for physicochemical and macroinfauna analyses.

Physicochemical and macroinfauna sampling parameters were collected from a single grab by using a metal insert divider to split the contents of the grab (with a minimum of 2.8-in [7-cm] sediment depth). One portion of the partitioned sediment was used for sediment physicochemistry (i.e., grain size and TOC) and the other portion for macroinfauna analyses.

The metal divider insert was positioned so that the resulting portion for macrofauna analysis had a surface area of approximately 0.4 ft^2 (0.04 m^2) and sediment volume of approximately 1.3 gal (6 L) to align with *Bureau of Ocean Energy Management (BOEM)'s Guidelines for Providing Benthic Habitat Survey Information for Renewable Energy Development on the Atlantic Outer Continental Shelf Pursuant to 30 CFR Part 585* (BOEM, 2019).

Each grab sample was inspected prior to processing to provide suitable samples for the project parameters and to meet the criteria set forth in the Scope of Work (Enquiry No. 464785) and to generally meet sediment sampling criteria provided in the United States Environmental Protection Agency (USEPA) National Coastal Condition Assessment (NCCA) Field Manual (2015). During inspection, CSA scientists looked for the following:

- Grab sampler doors were secure to limit potential scouring of surficial sediments;
- Minimum penetration depth of at least 2.8 in (7 cm);
- Collected sediment was generally intact; and
- No evidence of sediment loss from incomplete closure of the grab sampler jaws.

Prior to processing, each sediment sample was photographed in the grab sampler (Image 1) and notes were collected regarding sediment penetration depth, appearance (i.e., color based on Munsell color chart), texture, odor, and presence/absence of fauna, flora, and/or anthropogenic debris. Depth of Apparent Redox Potential Discontinuity (aRPD) was assessed and measured, if present, using a clear 1.5-in (3.8-cm) diameter acrylic core tube inserted to full depth of the sediment opposite of the macroinfauna portion of the grab sample. The sediment-filled acrylic core was removed from the grab, photographed in proximity to a metric scale, and the depth of the aRPD was noted, if present (Image 2).



Image 1 Representative image of the grab sampler open with metal divider inserted (upper left corner) and sand dollars within soft sediments.



Image 2 Sediment-filled acrylic core removed from the grab, photographed in proximity to a metric scale, so the depth of the Apparent Redox Potential Discontinuity (aRPD) can be measured, if present (no distinct aRPD is present in this core sample).

Following the processing of the aRPD sample, the sediment from the acrylic core tube was homogenized, appropriately allocated for grain size and TOC analyses, and placed directly in pre-cleaned and labeled sample containers. A homogenized split was collected as a field replicate quality control (QC) sample at approximately every 10th station and was submitted for grain size and TOC analysis.

4.1.2| MACROINFAUNA SAMPLING

Macroinfauna samples were collected directly from the full depth of sediment from the designated side of each grab. Sediment was elutriated and wet-sieved on board over a 0.5-mm mesh sieve with gentle streams of seawater of high volume and low pressure using a floatation (overflow barrel) technique that minimized trauma to the infauna organisms and facilitated separation from the sediment matrix.

The infauna sieving station consisted of a seawater supply manifold and hoses, mixing-overflow barrel, sieve screen and holder, and collection sink with drain hoses (Image 3).



Image 3 Sieving station for processing infauna using the floatation (overflow barrel) technique.

The following three steps were required to process macroinfaunal samples:

1. Supply seawater in the barrel with a controllable flow rate to facilitate overflow of seawater from the barrel to the sieve screen.
2. The collected sediment was placed within the barrel in stages and was gently worked by hand and the flow of the supply seawater to break down and suspend the sediment.
3. After the sediment was emptied from the barrel, the processed sample (consisting of macroinfauna, some residual sediment and debris remaining on the sieve screen) was transferred to a sample container (or containers) and preserved with a 10 percent borax-buffered formalin-in-seawater solution (1:10 dilution of 37 percent formaldehyde).

Processed samples were placed in 1-L plastic jars and labeled, sealed with vinyl tape, and stored in cool, dry coolers while aboard the vessel. Once preserved with 7 to 10 percent buffered formalin, infauna samples were stored at ambient temperature pending shipment to the analytical laboratory.

4.1.3 | BENTHIC VIDEO AND SEAFLOOR IMAGERY

A drop/tow camera system with an estimated 11.8 ft^2 (1.1 m^2) field of view at 3.3 ft (1 m) altitude was used to collect real-time video (and optional opportunistic still images) to generally characterize the benthic habitats at all foundation stations. The video camera and lights mounted on the imaging system were positioned to collect forward-looking video imagery directed at an oblique angle from a tow altitude of approximately 3.3 ft (1 m) above the seafloor. The system was deployed and lowered to an appropriate altitude off the seafloor. The system was then maneuvered on a controlled drift for 5 to 15 minutes at relatively low speed of <1 knot, as dictated by the vessel's DP. The system instrument cable conveyed standard-definition real-time video for on-board observations while high-definition video was recorded and logged by the camera. Logged high-definition imagery data was downloaded from the camera between stations and time-synchronized with the navigational systems to ensure positional accuracy.

Seafloor photographs and video were also acquired at all sediment stations with a Williamson & Associates SOLO Series X autonomous high-definition camera.

The SOLO Series camera was equipped with an underwater 5,000 lumens LED light. The camera system was mounted onto the frame of the Smith McIntyre grab sampler and turned on just prior to deployment providing continuous recording of visual data during the within-station deployment. The camera's visual detection begins at approximately 3.3 ft (1 m) above the seafloor due to light penetration within the water column.

4.1.4| SEDIMENT PROFILE AND PLAN VIEW IMAGING (SPI/PV)

The SPI/PV camera system was deployed and recovered using a dedicated oceanographic winch and dropped to the seafloor three times within 66 ft (20 m) of each target station coordinates following the procedures below and in (Attachment D|).

The SPI/PV camera system was slowly lowered through the water column with the winch cable under tension; plan view images were collected just before the SPI camera touched the seafloor, using a weighted cable-bounce trigger that extends over 3.3 to 6.6 ft (1 to 2 m) below the frame (cable length was determined by local water clarity conditions). Once the cable weight touched bottom, it triggered the plan view camera to take an image.

1. The SPI camera system frame touched the seafloor right after the PV image was taken.
2. The winch operator continued to pay off the winch cable until the cable became noticeably slack and the SPI camera prism penetrated into the sediment at a slow rate.
3. The system remained in place with payout of the winch wire as needed for a minimum of 20 seconds to ensure the SPI camera prism reached the maximum penetration into the seafloor and one sediment profile image was taken. During this time the winch operator awaited confirmation that the ultra-short baseline (USBL) acoustic positioning target was recorded prior to raising the SPI system.
4. Once confirmation of a successful USBL target was received, the SPI camera system was raised approximately 33 ft (10 m) above the seafloor with the system suspended in the water column with deployment cable under tension.
5. The vessel repositioned (typically 33 to 49 ft [10 to 15 m]) within the target area to obtain the next replicate image thus avoiding dropping the SPI system too close to the area that had been disturbed by the previous drop. This increased the likelihood that the next PV image was free of obstructing suspended solids in the water column.
6. After the 3rd drop, the SPI camera system was recovered on deck, images were downloaded into a computer and the SPI system was readied for the next station deployment. If the minimum required images acquired were acceptable, the vessel then moved to the next station.

4.2| LABORATORY METHODS

4.2.1| SEDIMENT SAMPLING PARAMETERS

Table 13 summarizes the analytical methods and laboratory-specified method detection limits for sediment sampling parameters, and the accredited laboratory used for sample analysis.

Table 13 Analytical parameters, analysis methods, and reporting units of quantification for the marine benthic survey.

Parameter/Analyte	Analytical Method	Quantification Limit	Units	Analytical Laboratory
Grain size	Wentworth classification	0.1	mm or percent	Alpha Analytical
Total organic carbon	USEPA Method 9060	0.01	percent	
Macroinfauna	Taxonomy, abundance, and biomass (wet weight)	LPIL; Class level (Biomass)	N/A	Barry Vittor and Associates, Inc.

LPIL = lowest practical identification level; N/A = not applicable; USEPA = U.S. Environmental Protection Agency.

PARTICLE SIZE ANALYSIS (GRAIN SIZE) AND CHEMICAL ANALYSIS (TOC)

The sediment samples were sent to Alpha Analytical for sediment grain size (ASTM D6913 and ASTM D7928) and TOC analysis. The reports received from Alpha Analytical are provided in Attachment B|. Grain size data was provided using the Wentworth (1922) classification (Table 14).

Table 14 Major and individual sediment grain size classes and corresponding particle size ranges used in the reporting of the grain size analysis (from Wentworth, 1922).

Grain Size Class		**Particle Size Range (mm)**
Major	**Individual**	
Gravel (≥2mm)	Boulder	256 to <4,096
	Cobbles	64 to <256
	Pebble	4 to <64
	Granule	2 to <4
Sand (0.0625 to <2 mm)	Very Coarse Sand	1 to <2
	Coarse Sand	0.5 to <1
	Medium Sand	0.25 to <0.5
	Fine Sand	0.125 to <0.25
	Very Fine Sand	0.0625 to <0.125
Mud (<0.0625 mm)	Silt	0.004 to <0.0625
	Clay/Colloid	<0.004

4.2.2| BIOLOGICAL ANALYSIS (BENTHIC INFAUNA)

Barry A. Vittor & Associates, Inc. (BVA) conducted the macrofauna analyses (identification, counts and biomass) on the 44 stations selected as priority. Specimens were sorted, counted, and identified to the lowest practical identification level. A voucher collection of representative specimens was developed by the taxonomic laboratory.

Identifications were performed using relevant keys and literature, as determined by the analytical laboratory (Abbott, 1974; Bousfield, 1973; Day, 1973; Gardiner, 1975; Kensley, 1997; King and Cawood, 2007; LeCroy, 1991; Pettibone, 1963, unpublished; Robbins, 1993; San Martin,1992; Uebelacker and Johnson, 1984; Watling, 1979; Williams, 1984). Specimens would have been sent to outside taxonomic specialists for identification, if required, however it was not. Infauna samples were transferred from the formalin preservative to 70 percent denatured alcohol for archival. Upon arrival to the lab, rose bengal solution was added to each sample and left for 48 hours before rinsing. Rose bengal is a staining agent that dyes the proteins of the infauna to help with efficiency of sorting and can also aid with identifications by making taxonomic features more easily visible under the microscope.

Species and their abundances were entered into a spreadsheet for each site. A tabulated list of taxa abundance observed for faunal samples at all stations is provided in Attachment C|.

The remaining non-priority infauna samples were archived in climate-controlled storage should they be needed for further future assessment. Refer to Figure 3 for priority foundation stations and foundation stations that were archived.

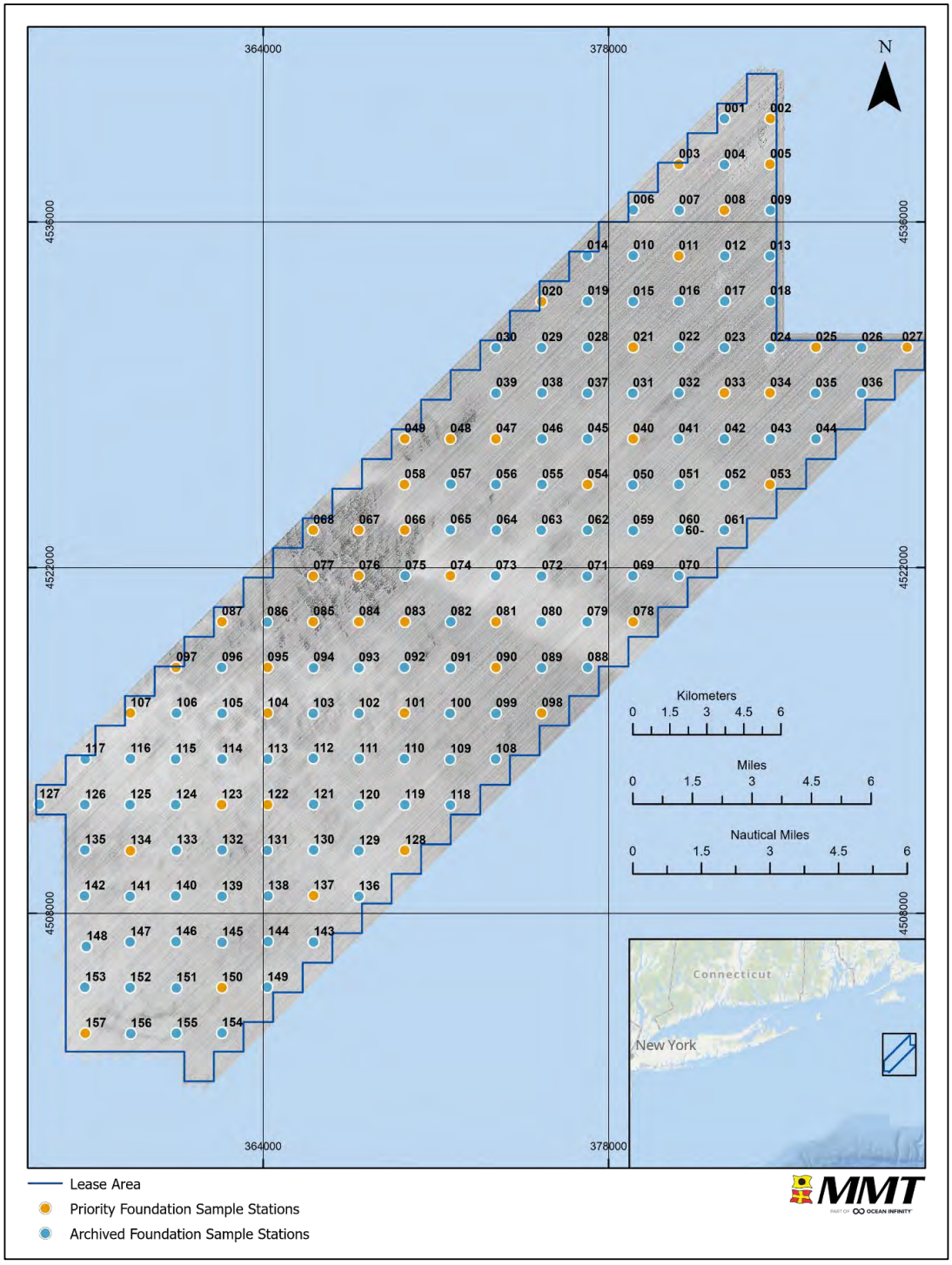

Figure 3 Priority and archived benthic infauna foundation stations.

4.3| DATA ANALYSES

4.3.1| BENTHIC VIDEO

A post-survey review of video obtained from the drop camera system, as well as select still images obtained from the grab-mounted camera systems was conducted. This analysis included a description of visually detectable and discernable benthic flora and fauna, demersal fish, and habitat features as provided in Attachment E|. The summary of the seafloor imagery described any major observations with specific images. Visually discernable organisms, due primarily to distinguishing color and shade contrast, large size, and motion were identified to lowest practical taxonomic level based on the orientation of organisms within the video and overall video quality.

Classifications of Geoform and biotic habitats derived from the video and image analysis aligned with the Coastal and Marine Ecological Standard (CMECS; FGDC, 2012).

4.3.2| SEDIMENT PROFILE AND PLAN VIEW IMAGING (SPI/PV)

SPI ANALYSIS

Several parameters were measured directly from the digital SPI images by an analyst using computer image analysis software (Attachment D|). Two of the three SPI images were analyzed at each station and included:

- Grain size major mode and sediment type;
- Prism penetration depth;
- Small scale surface boundary roughness;
- Depositional layers;
- aRPD depth;
- Organic loading, methane, and thiophilic bacterial colonies; and
- Detectable features of the infauna community including successional stages and the presence/absence of feeding voids.

Data were edited and verified by a senior-level scientist before final data synthesis, statistical analysis, and interpretation. Interpretation included combining the above parameters to derive an Organism Sediment Index (OSI). The OSI calculation was used to generally assess the overall health of the benthic community.

PLAN VIEW IMAGE ANALYSIS

Surface features from PV images were evaluated visually from each image and compiled by type and frequency of occurrence (Attachment D|). Two of the three PV images collected were analyzed at each station and were evaluated for the following physical and biological features:

- Macrofauna and macroflora;
- Surficial features (e.g., presence of topographic irregularities, bioturbation and biogenic material);
- The presence of certain surface features that are indicative of the overall nature of a habitat (e.g., bed forms that are typically associated with physically dominated habitats); and
- Non-indigenous species.

4.3.3 | PARTICLE SIZE ANALYSIS AND CHEMICAL ANALYSIS

Grain size data from each sampling site was initially received from the analytical laboratory reported as percentage by weight in each of the Wentworth fractional component categories. CSA used these data to classify each sampled site according to the Coastal and Marine Ecological Classification Standard (CMECS; FGDC 2012) and NMFS-modified CMECS classifications (as defined in NMFS, 2021).

The TOC concentrations were compared to previously reported concentrations from the area.

4.3.4 | BIOLOGICAL ANALYSIS (BENTHIC INFAUNA)

Infauna assemblage structure in the study area was assessed with univariate summary statistics, diversity indices, and multivariate analysis of species composition. Biomass was calculated at the level of taxonomic class for all organisms collected in the 44 priority foundation station samples. All other univariate and multivariate analyses described below were based only on organisms identified to species.

UNIVARIATE STATISTICAL ANALYSES

Four diversity indices that capture different aspects of species-abundance relationships were used to analyze the samples. The indices differ in how they use the number of species (S) and the number of individuals (N) in their calculation. Margalef's richness index (d) is a measure of diversity that uses only S and N to estimate species richness independent of sample size. Fisher's alpha uses the ratio of N/S to estimate the number of species expected to be represented by a single individual. The Shannon-Wiener diversity index (H') emphasizes species in the middle (not common or rare) of the species rank abundance sequence and accounts for both abundance and evenness of the species present. The greater the H' value, the greater the diversity and evenness of the sample; the values are generally between 1.5 and 3.5 with the index rarely greater than 4. Pielou's evenness index (J') measures how evenly the number of individuals are distributed among the species. J' ranges between 0 and 1; a lower J' value indicates less evenness in community structure and possible presence of a dominant species, while a higher J' value indicates more evenness.

Margalef's richness index (d) was calculated using:

$$d = \frac{(S-1)}{lnN}$$

where *S* is the total number of taxa in the sample, and N is the number of individuals in the sample.

Shannon-Wiener diversity index (H') was calculated as follows:

$$H' = -\sum_{S}^{i=1} p_i\left(lnp_i\right)$$

where *S* is the number of taxa in the sample, *I* is the *i*th taxa in the sample, and p_I is the number of individuals of the *i*th taxa divided by (N) the total number of individuals in the sample.

Pielou's evenness index (**"=**) was calculated with Pielou's (1966) index of evenness:

$$J' = \frac{\mathrm{H}'}{\ln \mathrm{S}}$$

Fisher's alpha (α) is determined from the summation of the logarithmic series relating S, N, and α as follows:

$$S = \alpha ln[1 + N/\alpha]$$

Where S=number of species, N=number of individuals. Alpha defines the relationship between S and N independent of sample size or population density.

MULTIVARIATE STATISTICAL ANALYSES

Multivariate analyses were used to determine patterns of individual taxa across all stations. These analyses are based on among-sample compositional similarities. A sample similarity matrix was constructed from the samples-by-species raw data table using the Bray Curtis similarity index (Bray and Curtis, 1957). Raw data were fourth root transformed to reduce the influence of high and low abundance values when calculating the similarity indices. The resulting similarity matrix was then analyzed using a normal cluster analysis and MDS to define potential infauna groupings based on taxonomic composition.

The cluster analysis produces a dendrogram displaying samples based on similarity of infauna composition. An inverse cluster analysis was also performed to determine if individual species grouped together over the samples. To examine how individual taxa are distributed among and between the samples a second similarity matrix, the inverse of the sample similarity matrix, was constructed using Whitaker's index of association (Clarke and Gorley, 2015).

Only the 40 most abundant taxa, which accounted for over 90 percent of the overall abundance, were used in constructing this inverse matrix which was clustered in the same way as the sample similarity matrix. To identify groups of samples with statistically similar species composition we used the similarity profiles routine (SIMPROF). This procedure works sequentially (hierarchically) down the dendrogram comparing randomly generated similarity profiles with the observed data at each cluster node. The test statistic "π" measures departure of the real profile from the mean of the random profiles. A large "π" indicates significance (if it exceeds all but 50 of the 1000 random profiles, then homogeneity of the assemblages in this group would be rejected at p<5 percent (Clarke and Gorley, 2015). SIMPROF-identified groups were used to order the raw data matrix into a two-way display with species ordered by the inverse cluster analysis to help visualize patterns and identify species responsible for sample clusters.

The same sample similarity matrix analyzed by cluster analysis was also analyzed with non-metric multidimensional scaling (NMDS). NMDS is an ordination technique that provides a scatter plot of inter-sample relationships. Samples that are most similar in terms of species composition and abundance will cluster near one another in a two-dimensional ordination diagram. NMDS provides another view of patterns in the data using a numerical procedure that differs from cluster analysis. Agreement of results from NMDS and cluster analysis indicates patterns are real and not spurious.

The influence of environmental variables (sediment grain size composition and TOC was assessed with envfit routine (Oksanen et al., 2020) to visualize relationships among environmental variables and the NMDS ordination. Envfit is a multiple linear regression where NMDS axes 1 and 2 are independent variables and percent sand, percent gravel, TOC, and Northing (from station coordinates) are dependent variables. The graphic output of envfit is vectors (arrows) superimposed on the NMDS plot. The length and direction of the arrows indicates strength and direction of the correlation with NMDS axes and environmental factors.

Similarity calculations as well as cluster analyses, SIMPROF tests were performed with PRIMER 7 (Clarke and Gorley, 2015). NMDS ordinations and plots (envfit) were produced using the vegan package in R (Oksanen et al., 2020).

4.4 | HABITAT CLASSIFICATION

Habitat classification was based on CMECS. Three CMECS components were classified in the current study; Geoform, Substrate, and Biotic Components.

The CMECS Geoform component was derived from the benthic drop/tow camera footage.

The grain size results (single sample per station) were used to classify each sampled station according to CMECS and NMFS-modified CMECS Substrate classifications to satisfy alignment of the marine sediment grain size data with National Marine Fisheries Service (NMFS) recommendations for mapping fish habitat (NMFS, 2021). SPI and PV imagery was also used to derive CMECS substrate classifications.

The CMECS Biotic component was largely informed by the benthic drop/tow camera footage, with data from macroinfaunal analysis used to supplement the analysis where applicable. The Biotic component was classified to the lowest practical taxonomical unit. PV imagery (from SPI/PV deployments) was also used to derive CMECS Biotic classifications.

5| RESULTS

A total of 157 foundation sample stations were selected for benthic video, grab sampling, and SPI/PV in the Lease Area. These sample stations are labeled with the format WTG-###. A further 218 stations along the interarray cable layout were sampled using SPI/PV and are labeled with the format IAC-###. Analysis and results of the SPI/PV are presented as Attachment D|. An overview of the foundation and interarray cable stations are provided in Figure 4 with coordinates presented in Attachment A|.

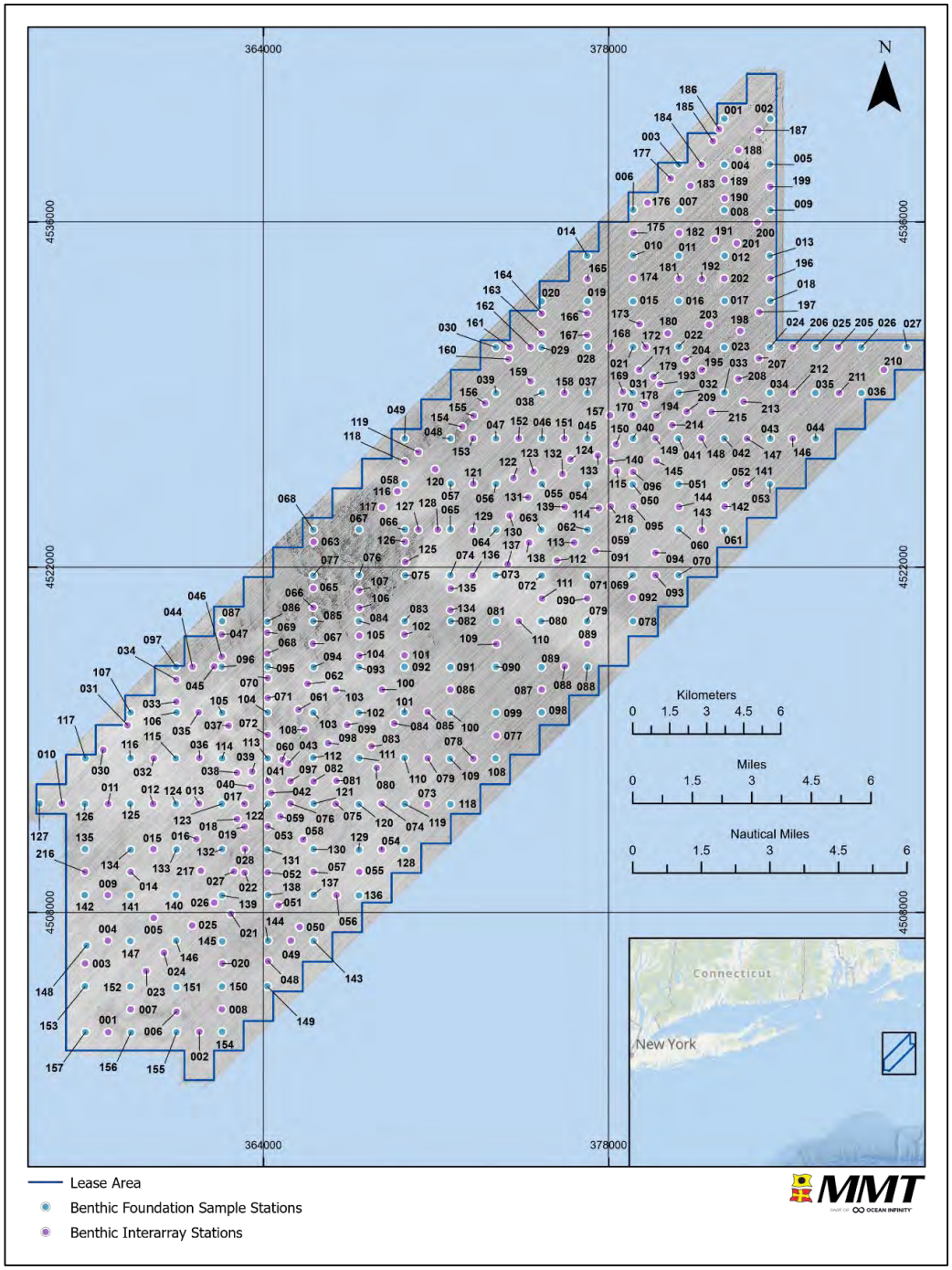

Figure 4 Foundation and interarray cable benthic sample stations. Note that the SPI/PV results for the foundation and interarray stations are provided in Attachment D|.

5.1| SEDIMENT OBSERVATIONS

Visual sediment sample and *in situ* aRPD observations for the Lease Area is provided in Attachment E|. Fourteen of the 157 benthic samples collected had a distinctive odor and are provided in Table 15 with the other noted visual observations. Note that the foundation station names are formatted as WTG-###. The distinctive odor detected in some samples are the results of some anoxic sediment with subtle pungency differences due to composition of the sediment primarily the amount of organic material; please note that description of odor and degree of pungency is rather subjective. No benthic grabs had the presence of anthropogenic debris. Successful grab samples were full, with penetration adequate to sample fauna to a depth of ≥2.8 in (7 cm).

Several grabs (98 of 157) were observed to contain polychaete and amphipod tubes (Attachment E|; Image 4) and others were observed to have sand dollars and sea stars (*Astropecten* spp.) (Image 5 and Image 6).

Table 15 Sediment grabs from the foundation stations with distinctive odor and visual observations.

Station	aRPD DEPTH (mm)	Color (Munsell)	Texture	Odor	Surficial Features
WTG-015	85	Gray; 10 YR 5/1	muddy sand	Fishy smell	Polychaete and amphipod tubes, small depressions
WTG-016	50	Light brownish grey; 10 YR 6/2	fine sand/mud	Mild anoxic	Polychaete and amphipod tubes
WTG-034	70	Greyish brown; 10 YR 5/2	soft muddy silt with some sand	Earth, anoxic	Polychaete and amphipod tubes
WTG-044	42	Pale Brown; 10yr 6/3	sandy mud with organic debris	Mild anoxic	Polychaete and amphipod tubes, spheroid tunicates
WTG-047	68	Dark greyish brown; 10 YR 4/2	sandy mud with some clay deep	Anoxic	Polychaete and amphipod tubes
WTG-048	None	Dark greyish brown; 10 YR 4/2	muddy sand	Decomposing organic material	Polychaete and amphipod tubes, burrows
WTG-054	123	Dark grey; 10 YR 4/1	sandy mud, some clay deep	Earthy, anoxic	Polychaete and amphipod tubes, organic materials
WTG-058	None	Gray; 10 YR 5/1	muddy sand	Earthy smell	None
WTG-079	34	Gray; 10 YR 6/1	mud with organic debris	Mild anoxic	Polychaete and amphipod tubes
WTG-082	40	Greyish brown; 10 YR 5/2	sandy mud	Mild anoxic	Polychaete and amphipod tubes
WTG-089	45	Light brownish grey; 10 YR 6/2	mud and clay	Mild anoxic	Polychaete and amphipod tubes
WTG-115	56	Pale brown; 10 yr 6/3	muddy clay with sand layer surface	Earthy, anoxic	Polychaete and amphipod tubes
WTG-130	40	Greyish brown; 10 YR 5/2	sandy mud with some clay and organic debris	Mild anoxic	Polychaete and amphipod tubes
WTG-156	45	Pale brown; 10 yr 6/3	muddy clay with sand	Fishy smell	Holothuroids, brittle stars, polychaete, and amphipod tubes



Image 4 Representative surficial grab image from Station WTG-083 displaying polychaete/amphipod tubes.



Image 5 Representative surficial grab image from Station WTG-002 displaying sand dollars.



Image 6 Representative surficial grab image from Station WTG-154 displaying sea stars (Astropecten sp.).

5.2| BENTHIC VIDEO

The sampling video log is presented in Attachment E|. Representative images of the seabed benthic habitat are provided in Image 7, Image 8 and Image 9.



Image 7 Representative image displaying the seabed of the Lease Area with polychaete/amphipod tubes.



Image 8 Representative image displaying a skate (Rajidae).



Image 9 Representative image displaying sea stars (Asterias sp.) with a Jonah crab (Cancer borealis).

The Lease Area seabed was characterized by soft bottom substrates, primarily of finer particles that supported a relatively productive biological assemblage. Numerous burrows and bioturbation were observed as well as polychaete/amphipod tubes extending out from the seafloor surface and various macrobenthic taxa.

No consolidated hard substrates and only occasional anthropogenic debris (e.g., a bucket lid, soda can) were observed within the sampling area. Underwater conditions were generally adequate for collection of visual data with underwater near-bottom visibility delimited by suspended particles/invertebrates and amount of artificial light penetration of approximately 3.3 ft (1 m) within the water column.

Several macrobenthos taxa were observed throughout the Lease Area. Sea stars (*Asterias* sp. and *Astropecten* sp.) were more abundant in the southern portion of the sampling area but were observed throughout the Lease Area (45 of 157 stations). Sand dollars (probably *Echinarachnius parma*) were observed in the northwestern portion of the Lease Area being most visually abundant at 6 stations (Figure 5).

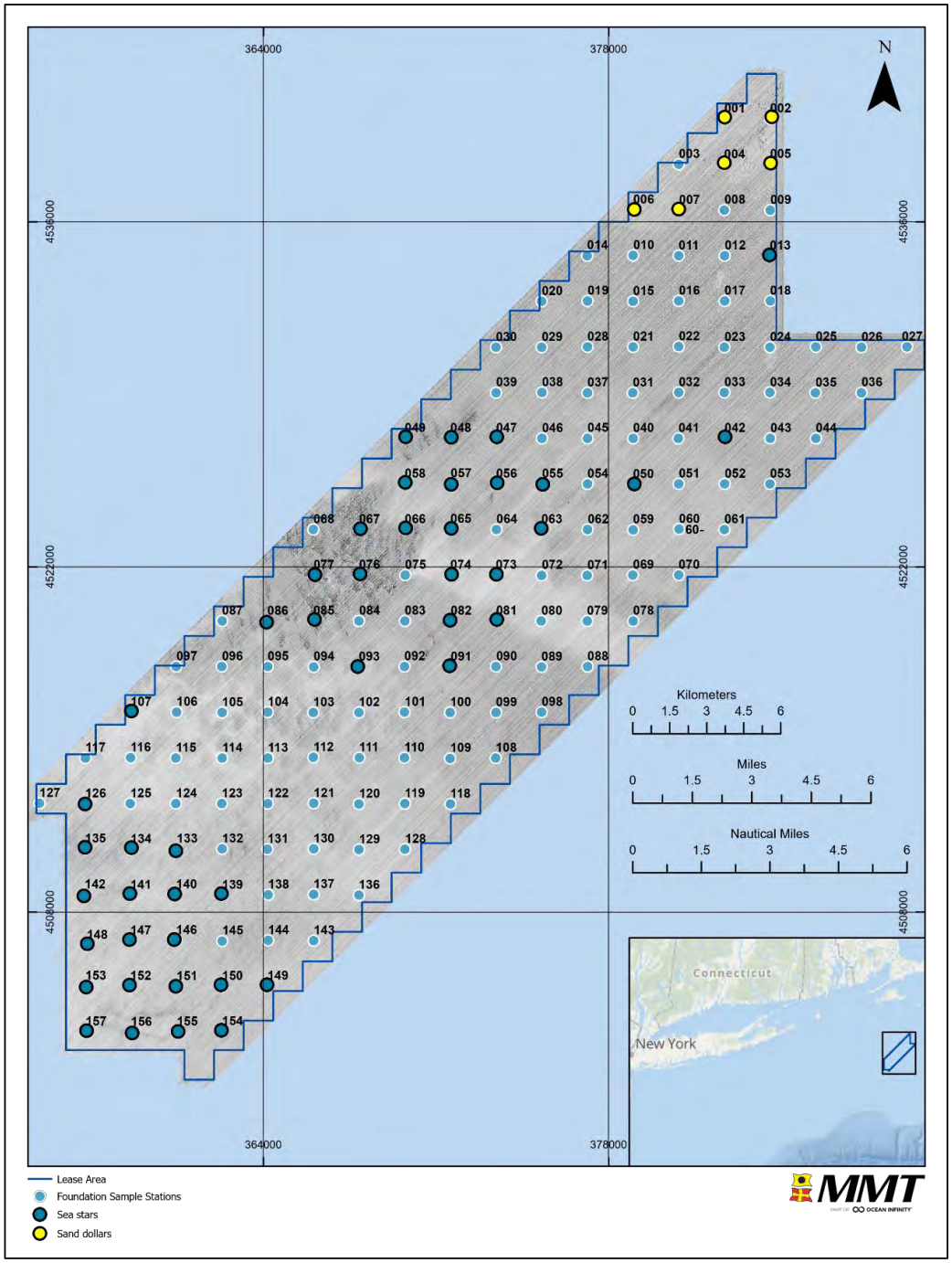

Figure 5 Sea star and sand dollar concentrations observed with the benthic video at the foundation stations. Note that the SPI/PV results for the foundation and interarray stations are provided in Attachment D|.

Numerous fish species were observed; there did not appear to be any distinct local distributional patterns associated with these observed fish. Skates were observed at 30 stations (Rajidae, winter skate [*Leucoraja ocellata*], thorny skate [*Amblyraja radiata*], little skate [*Leucoraja erinacea*]).

Other species included hake at 82 stations (merluccid hakes [Merluccidae], silver hake [*Merluccius bilinearis*], phycid hakes [Phycidae], red hake [*Urophycis chuss*], spotted hake [*Urophycis regia*]), butterfish at 14 stations (Stromateidae, *Peprilus triacanthus*), and flounder at 14 stations (sand flounder [Paralichthyidae], fourspot flounder [*Paralichthys oblongus*], summer flounder [*Paralichthys dentatus*]). The most frequently observed macrobenthic crustacean was the Jonah crab (*Cancer borealis*) at 110 of the 157 stations.

Essential Fish Habitat (EFH) is defined as "*those waters and substrate necessary to fish for spawning, breeding, feeding, and growth to maturity*" (NMFS, 1997). Under the Magnuson-Stevens Fishery Conservation and Management Act, as amended, federal agencies are required to consult on activities that may adversely affect EFH designated in Fishery Management Plans developed by the regional Fishery Management Councils. Several of the species observed are managed by NMFS in collaboration with the New England Fishery Management Council, Mid-Atlantic Fishery Management Council, and/or the Atlantic States Marine Fisheries Commission (Table 16).

The EFH designation is also provided in Table 16 based on the National Oceanic and Atmospheric Administration's EFH Mapper[1].

Table 16 Managed fish and invertebrate species observed at the foundation stations.

Group	Habitat	Species (EFH life stage)	Management Council		
			NEFMC	MAFMC	ASMFC
Sharks and Rays	Demersal	Little skate (juvenile, adult)	X	--	--
Sharks and Rays	Demersal	Thorny skate	X	--	--
Sharks and Rays	Demersal	Winter skate (juvenile, adult)	X	--	--
Invertebrate	Demersal	Atlantic sea scallop (all)	X	--	--
Invertebrate	Demersal	American lobster	--	--	X
Invertebrate	Demersal	Jonah crab	--	--	X
Bony fish	Demersal	Monkfish (eggs/larvae, adult)	X	--	--
Bony fish	Demersal	Red hake (egg, larvae, juvenile, adult)	X	--	--
Bony fish	Demersal	Silver hake (eggs/larvae, juvenile)	X	--	--
Bony fish	Demersal	Summer flounder (eggs, larvae, adult)	--	X	--

-- = empty cell. EFH = Essential Fish Habitat, NEFMC = New England Fishery Management Council; MAFMC = Mid-Atlantic Fishery Management Council; ASMFC = Atlantic States Marine Fisheries Commission.

5.2.1 | CMECS GEOFORM AND BIOTIC COMPONENT

The CMECS Geoform component was derived from the benthic drop camera video with verification from the grab-mounted camera. Due to the sampling stations being less than 1-kilometer in size the smaller Geoform Level 2 component was used to determine the meso- and macro-habitats of the Lease Area.

1 https://www.habitat.noaa.gov/apps/efhmapper/?data_id=dataSource_12-17aa6db4a11-layer-7-EFH_1percent3A29&page=page_3

The Lease Area was characterized by two CMECS Geoform Level 2 categories (Geologic and Biogenic) (Table 17 and Figure 6). The Lease Area had a relatively smooth seafloor topography with a soft bottom substrate. The Geoform Level 2 Geologic category with a Flat Geoform classification was based on the general absence or minimal presence of burrows/bioturbation while the Biogenic category classified with the Burrow/Bioturbation Geoform had a visual predominance of these seafloor features.

Table 17 CMECS Geoform component for the foundation stations.

Tectonic Setting	Physiographic Setting	Geoform Level 2	Geoform	Stations
Passive Continental Margin	Continental Shelf	Geologic	Flat	WTG-001, WTG-002, WTG-004, WTG-007, WTG-009, WTG-010, WTG-012, WTG-016, WTG-017, WTG-018, WTG-019, WTG-020, WTG-022, WTG-023, WTG-026, WTG-033, WTG-034, WTG-035, WTG-036, WTG-037, WTG-039, WTG-040, WTG-041, WTG-042, WTG-043, WTG-044, WTG-051, WTG-052, WTG-053, WTG-054, WTG-056, WTG-058, WTG-059, WTG-061, WTG-064, WTG-065, WTG-067, WTG-068, WTG-069, WTG-070, WTG-072, WTG-073, WTG-074, WTG-075, WTG-076, WTG-077, WTG-078, WTG-080, WTG-081, WTG-082, WTG-083, WTG-084, WTG-085, WTG-086, WTG-088, WTG-089, WTG-090, WTG-091, WTG-092, WTG-093, WTG-095, WTG-096, WTG-097, WTG-098, WTG-101, WTG-102, WTG-103, WTG-105, WTG-108, WTG-109, WTG-112, WTG-119, WTG-120, WTG-121, WTG-123, WTG-124, WTG-126, WTG-128, WTG-129, WTG-130, WTG-133, WTG-134, WTG-135, WTG-136, WTG-137, WTG-138, WTG-140, WTG-141, WTG-142, WTG-143, WTG-144, WTG-145, WTG-146, WTG-149, WTG-150, WTG-151, WTG-152, WTG-153, WTG-154, WTG-155, WTG-156, WTG-157.
Passive Continental Margin	Continental Shelf	Biogenic	Burrows/ Bioturbation	WTG-003, WTG-005, WTG-006, WTG-008, WTG-011, WTG-013, WTG-014, WTG-015, WTG-021, WTG-024, WTG-025, WTG-027, WTG-028, WTG-029, WTG-030, WTG-031, WTG-032, WTG-038, WTG-045, WTG-046, WTG-047, WTG-048, WTG-049, WTG-050, WTG-055, WTG-057, WTG-060, WTG-062, WTG-063, WTG-066, WTG-071, WTG-079, WTG-087, WTG-094, WTG-099, WTG-100, WTG-104, WTG-106, WTG-110, WTG-111, WTG-113, WTG-114, WTG-115, WTG-116, WTG-117, WTG-118, WTG-122, WTG-125, WTG-127, WTG-131, WTG-132, WTG-139, WTG-147, WTG-148.

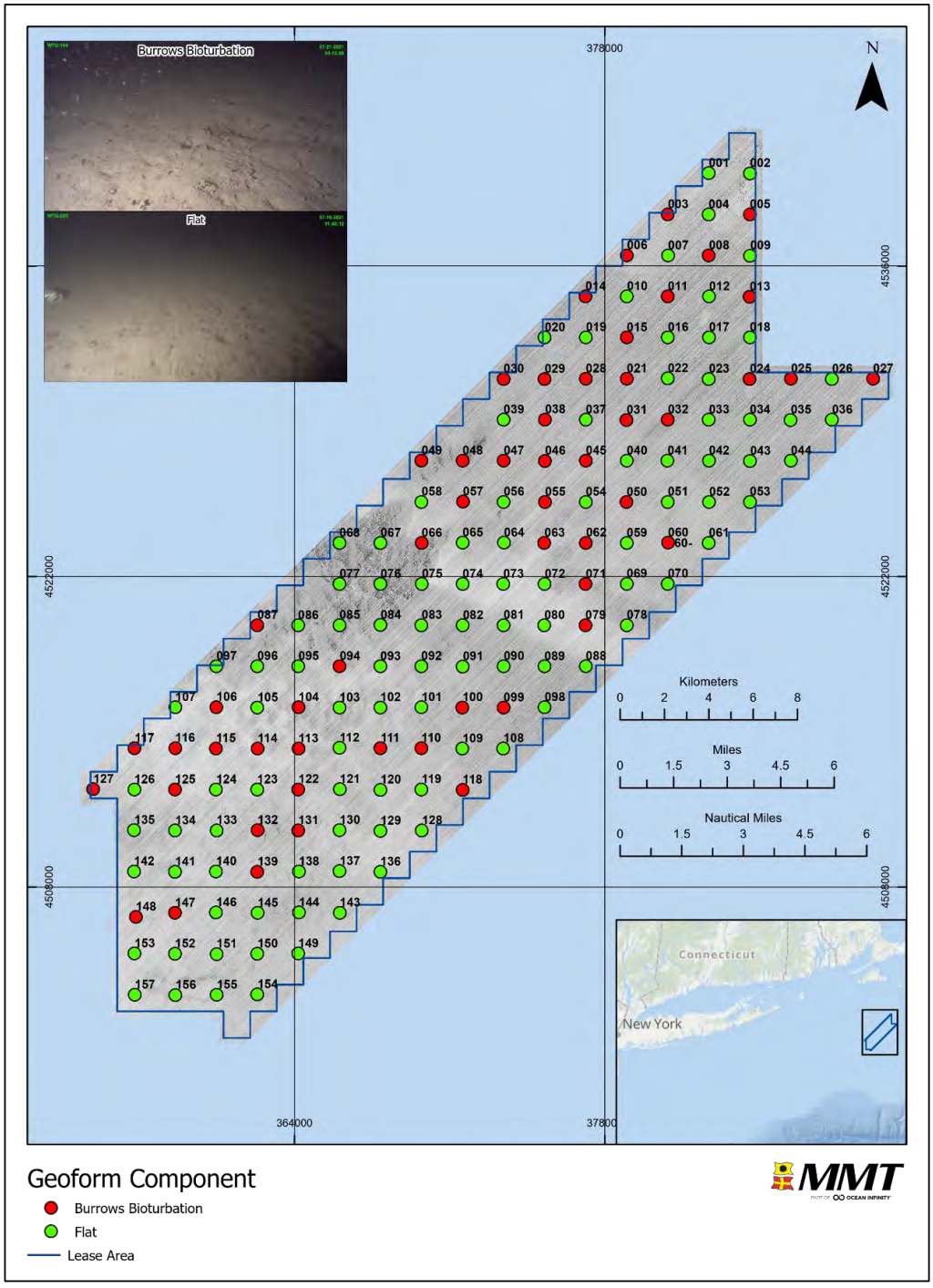

Figure 6 Overview of classified CMECS Geoform Component at the foundation stations. Note that the SPI/PV results for the foundation and interarray stations are provided in Attachment D|.

The CMECS Biotic Component was classified to the lowest practical taxonomical unit based on the drop camera benthic video with verification from the grab camera and faunal analyses (Table 18 and Figure 7). The entire Lease Area had Biotic Setting, Biotic Class, and Biotic Subclass classifications of Benthic/Attached Biota, Faunal Bed, and Soft Sediment Fauna, respectively.

A majority of the Lease Area was further classified into the Biotic Group of Small Tube Building Fauna. The infauna data was used to further delineate some of the Small Tube Building Fauna-classified stations into the Thin *Ampelisca* Bed Biotic Community based on the prominent species (e.g., *Ampelisca vadorum*). Other Biotic Groups within the Lease Area included Clam Bed, Sand Dollar Bed, and Seastar Bed. The more southern stations displayed a classification grouping of Starfish Bed (based on dominant presence of *Asterias* spp. and/or *Astropecten* spp.) whereas six of the nine northernmost stations in the Lease Area displayed a classification grouping of Sand Dollar Bed.

There were three regionally separate stations in the northern portion of the Lease Area with a classification grouping of Clam Bed that were designated as *Nucula* Bed Biotic Community based on the presence of this small non-commercial bivalve, *Nucula proxima,* from the infauna samples.

Table 18 CMECS Biotic Component for the foundation stations.

Biotic Setting	Biotic Class	Biotic Subclass	Biotic Group	Biotic Community	Stations
Benthic/ Attached Biota	Faunal Bed	Soft Sediment Fauna	Small Tube Building Fauna	--	WTG-008, WTG-009, WTG-010, WTG-011, WTG-012, WTG-013, WTG-014, WTG-015, WTG-016, WTG-017, WTG-018, WTG-019, WTG-020, WTG-022, WTG-023, WTG-024, WTG-025, WTG-026, WTG-028, WTG-029, WTG-031, WTG-032, WTG-033, WTG-034, WTG-035, WTG-037, WTG-038, WTG-039, WTG-041, WTG-042, WTG-043, WTG-044, WTG-045, WTG-046, WTG-047, WTG-048, WTG-050, WTG-051, WTG-052, WTG-054, WTG-055, WTG-056, WTG-057, WTG-058, WTG-059, WTG-060, WTG-061, WTG-062, WTG-063, WTG-064, WTG-065, WTG-069, WTG-070, WTG-071, WTG-072, WTG-073, WTG-074, WTG-075, WTG-076, WTG-078, WTG-079, WTG-080, WTG-082, WTG-083, WTG-084, WTG-085, WTG-086, WTG-087, WTG-088, WTG-089, WTG-090, WTG-091, WTG-092, WTG-093, WTG-094, WTG-095, WTG-096, WTG-097, WTG-099, WTG-100, WTG-103, WTG-104, WTG-107, WTG-108, WTG-109, WTG-110, WTG-111, WTG-113, WTG-114, WTG-115, WTG-116, WTG-119, WTG-120, WTG-121, WTG-122, WTG-123, WTG-124, WTG-129, WTG-130, WTG-131, WTG-132, WTG-133, WTG-134, WTG-135, WTG-136, WTG-138, WTG-144, WTG-145
				Thin *Ampelisca* Bed*	WTG-021, WTG-053, WTG-066, WTG-081, WTG-098, WTG-128, WTG-137
			Clam Beds	*Nucula* Bed*	WTG-003, WTG-027, WTG-040
			Sand Dollar Bed	--	WTG-001, WTG-002, WTG-004, WTG-005, WTG-006, WTG-007
			Starfish Bed		WTG-126, WTG-139, WTG-141, WTG-142, WTG-146, WTG-147, WTG-149, WTG-153, WTG-155, WTG-157 WTG-150, WTG-151, WTG-152, WTG-154, WTG-156
			--	--	WTG-030, WTG-036, WTG-049, WTG-067, WTG-068, WTG-077, WTG-101, WTG-102, WTG-105, WTG-106, WTG-112, WTG-117, WTG-118, WTG-125, WTG-127, WTG-140, WTG-143, WTG-148

* = based on infauna data. -- = empty cell.

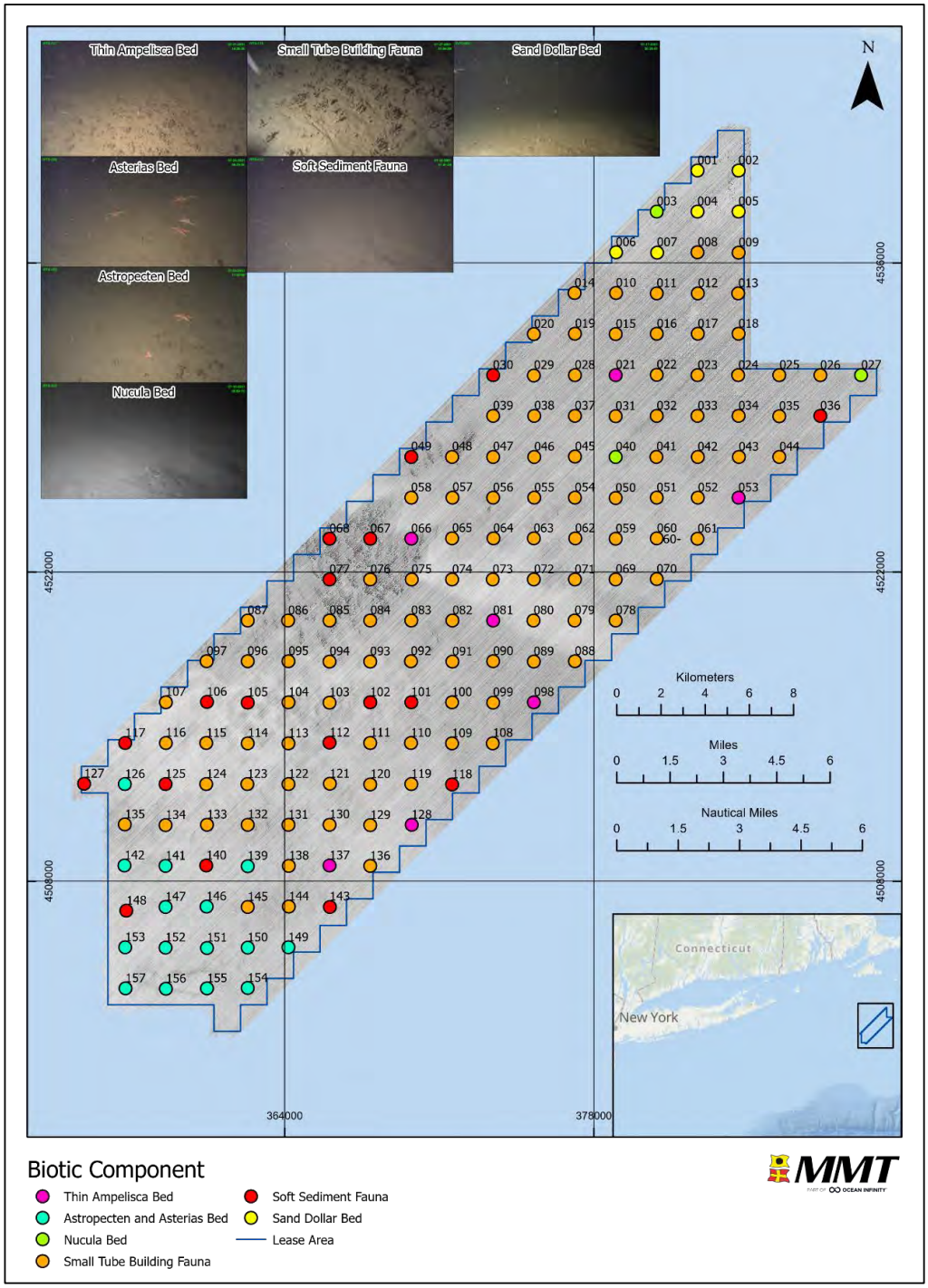

Figure 7 Overview of classified CMECS Biotic Component at the foundation stations. Note that the SPI/PV results for the foundation and interarray stations are provided in Attachment D|.

5.3 | PARTICLE SIZE DISTRIBUTION

The particle size distribution data based on the Wentworth (1922) is presented in Table 22 for the Lease Area. Based on the Wentworth classification, the Lease Area mainly consisted of finer grained particles that included Very Fine Sand (0.125 to 0.0625 mm) and Silt (0.0625 to 0.0039 mm).

No Boulder (256 to 4,096 mm) or Cobbles (64 to 256 mm) were observed in the Lease Area samples and only 42 samples had Pebbles (4 to 64 mm). Fifteen samples did not contain any particles greater than 2.0 mm with the majority of these stations located in the northern portion of the Lease Block.

In order to aid in the NMFS-modified CMECS classification, the total gravel, total sand, and silt/clay was calculated and are presented in Figure 8. The Lease Area is predominately sand in the shallower, more northerly portions with an increase of the silt/clay fraction at stations in the deeper, more southerly portion. Figure 8 introduces TOC results, as more thoroughly presented in Section 5.4, relative to the percentage of total gravel, total sand, and silt/clay. As would be expected, there is a general trend of a direct correlation between TOC levels and percent fine (silt/clay) fraction.

Table 19 Percentages of grain size classes according to Wentworth (1922) for the foundation stations.

Station	Grain Size (percent)											
	Pebble	Granule	Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Total Sand	Silt	Clay	Silt + Clay
WTG-001	ND	0.2	0.2	1.3	5.2	9.4	58.4	10.3	84.6	13.0	2.2	15.2
WTG-002	ND	0.2	0.2	0.3	3.4	16.7	55.3	3.3	79.0	17.8	3.0	20.8
WTG-003	ND	0.1	0.1	0.6	2.7	6.1	66.2	11.4	87.0	11.0	1.9	12.9
WTG-004	ND	0.2	0.2	1.3	6.1	10.0	58.5	5.7	81.6	15.5	2.7	18.2
WTG-005	ND	0.2	0.2	0.4	3.9	11.1	74.9	6.0	96.3	3.0	0.5	3.5
WTG-006	ND	0.6	0.6	0.7	2.9	8.9	63.4	8.8	84.7	12.8	1.9	14.7
WTG-007	0.1	0.5	0.6	0.5	3.0	11.0	66.5	9.6	90.6	7.2	1.6	8.8
WTG-008	ND	0.1	0.1	0.2	1.7	10.9	70.4	9.3	92.5	6.2	1.2	7.4
WTG-009	ND	1.7	1.7	0.7	4.5	12.0	50.4	16.2	83.8	11.8	2.7	14.5
WTG-009-QC	0.2	0.4	0.6	0.4	4.2	11.7	51.1	16.3	83.7	12.4	3.3	15.7
WTG-010	0.1	0.2	0.3	0.6	2.8	10.9	65.3	11.4	91.0	7.5	1.2	8.7
WTG-010-QC	ND	0.6	0.6	0.5	2.1	9.3	66.8	12.1	90.8	7.2	1.4	8.6
WTG-011	ND	1.0	1.0	2.8	5.6	12.3	55.3	9.6	85.6	11.4	2.0	13.4
WTG-012	ND	0.9	0.9	0.2	1.7	10.6	57.6	16.5	86.6	10.5	2.0	12.5
WTG-013	0.5	0.4	0.9	1.4	5.8	11.9	57.5	13.1	89.7	7.7	1.7	9.4
WTG-014	ND	0.2	0.2	0.4	3.4	12.7	65.0	10.5	92.0	6.3	1.5	7.8
WTG-015	ND	ND	0.0	0.4	3.6	12.3	52.7	12.3	81.3	15.6	3.1	18.7
WTG-016	ND	0.6	0.6	0.3	1.4	9.7	65.8	14.4	91.6	6.3	1.5	7.8
WTG-017	ND	0.5	0.5	1.3	4.5	12.2	46.7	12.4	77.1	19.6	2.8	22.4
WTG-018	5.5	1.3	6.8	1.9	4.3	10.8	45.8	13.4	76.2	13.7	3.3	17.0
WTG-019	ND	ND	0.0	0.2	1.5	9.5	65.5	14.9	91.6	7.4	1.0	8.4
WTG-020	ND	0.1	0.1	0.3	1.9	9.0	61.4	17.2	89.8	8.7	1.4	10.1
WTG-020-QC	ND	ND	0.0	0.3	1.7	9.0	62.7	16.8	90.5	8.2	1.3	9.5
WTG-021	ND	ND	0.0	0.3	1.6	4.6	55.7	24.7	86.9	11.3	1.8	13.1
WTG-022	ND	0.1	0.1	0.7	2.5	6.3	64.1	16.9	90.5	7.8	1.6	9.4
WTG-023	ND	ND	0.0	0.2	1.7	8.1	61.9	16.3	88.2	10.2	1.6	11.8
WTG-024	ND	0.1	0.1	0.2	2.5	13.1	63.9	10.3	90.0	8.4	1.5	9.9
WTG-025	ND	0.1	0.1	0.6	2.2	9.4	58.7	17.4	88.3	10.3	1.3	11.6
WTG-026	ND	0.1	0.1	0.3	1.8	10.4	58.0	19.2	89.7	8.8	1.4	10.2
WTG-027	0.2	0.1	0.3	0.5	2.3	9.2	50.7	26.6	89.3	9.0	1.4	10.4
WTG-028	ND	0.1	0.1	0.5	2.3	9.2	44.7	26.5	83.2	14.5	2.2	16.7
WTG-029	ND	0.4	0.4	1.1	4.0	9.5	42.0	20.5	77.1	19.7	2.8	22.5
WTG-030	ND	ND	0.0	0.5	2.6	12.1	51.8	20.5	87.5	11.0	1.5	12.5
WTG-031	ND	ND	0.0	0.2	11.0	12.4	44.4	21.1	89.1	9.7	1.2	10.9
WTG-032	ND	0.1	0.1	0.6	2.6	9.1	41.5	21.5	75.3	21.5	3.1	24.6
WTG-033	ND	0.3	0.3	0.5	3.9	7.3	53.2	21.5	86.4	11.5	1.8	13.3
WTG-034	ND	0.1	0.1	0.5	2.2	7.5	55.7	20.2	86.1	12.2	1.6	13.8
WTG-035	0.5	0.4	0.9	0.3	1.6	8.0	56.5	21.5	87.9	9.8	1.4	11.2
WTG-036	0.6	0.2	0.8	0.5	1.5	6.9	47.2	24.1	80.2	16.6	2.4	19.0
WTG-037	ND	0.1	0.1	0.6	2.5	11.1	45.2	20.1	79.5	17.7	2.7	20.4
WTG-038	ND	0.1	0.1	0.2	0.9	2.0	33.0	43.2	79.3	17.4	3.2	20.6
WTG-039	ND	ND	0.0	0.3	0.9	3.1	29.3	33.6	67.2	28.0	4.8	32.8
WTG-040	ND	0.1	0.1	0.2	1.6	3.7	25.2	44.5	75.2	20.3	4.4	24.7
WTG-040-QC	ND	0.2	0.2	0.4	1.7	4.4	26.2	44.5	77.2	19.3	3.3	22.6
WTG-041	ND	0.1	0.1	1.0	6.4	5.8	33.9	35.0	82.1	15.0	2.8	17.8
WTG-042	ND	0.1	0.1	0.7	4.7	10.7	37.8	13.9	67.8	27.4	4.7	32.1
WTG-043	ND	ND	0.0	0.2	0.9	3.9	44.6	31.9	81.5	15.7	2.8	18.5
WTG-044	ND	0.1	0.1	0.5	4.9	6.3	42.2	31.5	85.4	11.9	2.6	14.5
WTG-045	ND	0.3	0.3	0.3	0.8	2.8	23.2	43.9	71.0	24.0	4.7	28.7
WTG-046	ND	0.2	0.2	1.1	2.7	3.1	24.7	44.8	76.4	19.4	4.0	23.4
WTG-047	ND	0.5	0.5	0.4	1.6	2.1	26.3	46.5	76.9	18.9	3.7	22.6
WTG-048	ND	0.1	0.1	1.3	10.3	17.5	30.0	23.3	82.4	15.5	2.0	17.5
WTG-049	ND	0.1	0.1	0.8	10.2	15.7	28.6	19.8	75.1	21.3	3.5	24.8

Station	Grain Size (percent)											
	Pebble	Granule	Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Total Sand	Silt	Clay	Silt + Clay
WTG-050	ND	0.1	0.1	0.1	0.9	2.7	19.5	55.0	78.2	18.7	3.0	21.7
WTG-050-QC	ND	ND	0.0	0.2	0.9	2.4	19.6	54.1	77.2	19.7	3.1	22.8
WTG-051	ND	0.1	0.1	0.6	3.2	10.6	33.9	38.3	86.6	10.8	2.5	13.3
WTG-052	ND	0.3	0.3	0.8	1.6	1.1	19.6	51.6	74.7	21.8	3.2	25.0
WTG-053	0.1	0.1	0.2	0.2	2.5	8.9	36.6	36.0	84.2	13.5	2.1	15.6
WTG-054	ND	0.1	0.1	0.4	4.3	6.4	29.9	36.2	77.2	19.6	3.1	22.7
WTG-055	ND	0.4	0.4	0.8	1.7	1.6	15.6	49.8	69.5	25.6	4.5	30.1
WTG-056	0.1	0.2	0.3	0.9	2.2	3.4	14.5	41.7	62.7	30.9	6.1	37.0
WTG-057	ND	0.1	0.1	0.7	4.1	7.3	18.1	43.5	73.7	22.6	3.6	26.2
WTG-058	ND	0.4	0.4	2.4	7.6	10.2	13.2	36.5	69.9	24.9	4.8	29.7
WTG-059	ND	0.2	0.2	0.7	2.0	13.1	15.2	48.6	79.6	16.5	3.7	20.2
WTG-060	ND	0.3	0.3	0.4	1.6	1.9	12.3	60.3	76.5	19.9	3.3	23.2
WTG-060-QC	ND	0.4	0.4	0.9	2.4	2.0	13.8	60.3	79.4	17.3	2.9	20.2
WTG-061	ND	0.2	0.2	0.3	1.5	2.0	9.6	50.3	63.7	30.1	6.0	36.1
WTG-062	ND	0.4	0.4	0.9	3.5	8.1	16.1	45.1	73.7	21.8	4.1	25.9
WTG-063	0.1	0.4	0.5	1.8	3.1	3.8	12.7	49.7	71.1	24.0	4.4	28.4
WTG-064	ND	0.5	0.5	1.6	4.6	10.7	19.0	36.2	72.1	22.2	5.2	27.4
WTG-065	ND	0.5	0.5	1.0	2.4	3.1	10.6	41.5	58.6	34.1	6.8	40.9
WTG-066	0.7	3.1	3.8	5.0	16.1	18.3	9.3	17.7	66.4	25.7	4.1	29.8
WTG-067	ND	0.4	0.4	1.2	19.6	52.4	7.4	0.5	81.1	15.9	2.6	18.5
WTG-068	ND	ND	0.0	3.4	38.8	41.3	6.3	0.4	90.2	8.5	1.3	9.8
WTG-069	ND	0.4	0.4	2.6	4.0	2.8	11.4	55.0	75.8	20.4	3.4	23.8
WTG-070	ND	0.2	0.2	2.1	6.5	7.4	12.8	48.5	77.3	19.2	3.3	22.5
WTG-070-QC	ND	0.2	0.2	2.2	6.5	7.1	12.8	49.2	77.8	19.0	3.0	22.0
WTG-071	ND	0.1	0.1	1.9	2.4	3.0	15.0	43.0	65.3	28.9	5.7	34.6
WTG-072	ND	0.7	0.7	1.2	3.4	4.9	25.1	34.7	69.3	25.0	5.0	30.0
WTG-073	ND	1.0	1.0	4.2	5.4	3.4	6.7	43.0	62.7	29.9	6.4	36.3
WTG-074	0.4	1.2	1.6	2.3	6.2	10.6	11.6	30.2	60.9	30.8	6.7	37.5
WTG-075	ND	0.3	0.3	0.2	4.2	14.8	26.8	12.7	58.7	35.1	5.9	41.0
WTG-076	0.4	1.3	1.7	3.3	14.0	22.4	29.7	9.6	79.0	16.2	3.1	19.3
WTG-077	ND	1.1	1.1	16.1	64.6	7.0	2.1	0.5	90.3	7.4	1.2	8.6
WTG-078	0.3	1.7	2.0	ND	3.3	3.9	17.1	41.5	65.8	27.4	4.8	32.2
WTG-079	ND	0.2	0.2	1.3	2.5	1.6	5.5	58.2	69.1	26.3	4.4	30.7
WTG-080	ND	0.3	0.3	1.7	3.0	2.5	6.4	50.0	63.6	30.0	6.1	36.1
WTG-080-QC	ND	1.4	1.4	1.7	1.6	1.6	5.3	47.1	57.3	33.8	7.5	41.3
WTG-081	ND	0.3	0.3	0.6	3.4	11.0	36.0	18.4	69.4	26.1	4.2	30.3
WTG-082	ND	0.1	0.1	1.1	4.8	15.7	44.7	17.8	84.1	12.4	3.4	15.8
WTG-083	ND	0.7	0.7	0.8	3.0	12.9	41.6	15.8	74.1	20.7	4.5	25.2
WTG-084	0.2	0.9	1.1	2.4	4.1	9.1	38.0	18.0	71.6	23.5	3.8	27.3
WTG-085	0.2	1.0	1.2	4.4	15.2	14.3	27.1	14.0	75.0	20.3	3.5	23.8
WTG-086	ND	0.4	0.4	0.4	3.4	11.7	26.8	15.5	57.8	35.7	6.1	41.8
WTG-087	0.3	2.0	2.3	2.3	6.1	9.8	24.4	21.2	63.8	28.9	5.0	33.9
WTG-088	ND	0.3	0.3	0.3	1.6	9.1	28.0	27.8	66.8	27.5	5.4	32.9
WTG-089	ND	0.4	0.4	2.2	5.0	11.7	33.9	28.8	81.6	15.5	2.5	18.0
WTG-090	0.2	0.3	0.5	1.1	3.7	9.0	39.2	19.1	72.1	22.5	4.9	27.4
WTG-090-QC	ND	1.0	1.0	0.9	3.4	8.9	36.9	18.1	68.2	24.7	6.1	30.8
WTG-091	ND	0.4	0.4	2.8	3.5	5.1	31.7	33.3	76.4	19.2	4.0	23.2
WTG-092	ND	0.2	0.2	1.3	0.7	2.3	8.0	52.7	65.0	29.0	5.8	34.8
WTG-093	ND	0.1	0.1	0.4	2.1	8.2	29.3	35.5	75.5	19.5	4.9	24.4
WTG-094	ND	0.1	0.1	0.6	3.8	15.0	37.8	16.3	73.5	22.5	3.9	26.4
WTG-095	ND	0.6	0.6	0.7	6.6	9.5	36.9	18.7	72.4	23.2	3.8	27.0
WTG-096	ND	ND	0.0	1.9	7.3	12.9	37.4	17.7	77.2	18.4	4.4	22.8
WTG-097	0.1	0.2	0.3	3.0	9.3	16.3	37.0	13.2	78.8	18.0	2.9	20.9

Station	Grain Size (percent)											
	Pebble	Granule	Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Total Sand	Silt	Clay	Silt + Clay
WTG-098	ND	1.3	1.3	0.4	4.7	13.4	21.9	23.6	64.0	28.5	6.2	34.7
WTG-099	ND	0.1	0.1	0.7	4.0	15.4	30.5	29.9	80.5	15.8	3.6	19.4
WTG-100	ND	0.1	0.1	0.2	2.4	13.9	34.5	28.2	79.2	16.8	3.9	20.7
WTG-100-QC	ND	0.1	0.1	0.3	2.3	13.9	34.2	28.4	79.1	16.7	4.1	20.8
WTG-101	0.6	1.6	2.2	1.2	4.6	14.2	22.4	23.1	65.5	27.7	4.6	32.3
WTG-102	ND	ND	0.0	0.3	2.3	9.1	28.1	33.1	72.9	20.8	6.3	27.1
WTG-103	ND	0.2	0.2	0.2	7.0	18.5	18.3	16.3	60.3	34.4	5.1	39.5
WTG-104	0.2	0.8	1.0	0.9	5.2	15.8	31.4	16.8	70.1	23.1	5.8	28.9
WTG-105	ND	0.7	0.7	0.7	2.4	6.2	20.6	18.5	48.4	44.5	6.4	50.9
WTG-106	ND	0.3	0.3	1.0	3.0	6.1	27.7	26.2	64.0	29.2	6.5	35.7
WTG-107	0.3	2.1	2.4	2.8	3.4	6.5	27.1	20.0	59.8	30.3	7.5	37.8
WTG-108	ND	0.6	0.6	0.8	2.8	11.2	17.3	30.9	63.0	31.0	5.4	36.4
WTG-109	ND	0.2	0.2	0.1	3.3	12.6	24.6	33.2	73.8	20.5	5.5	26.0
WTG-110	ND	0.1	0.1	0.7	2.9	5.3	19.2	43.3	71.4	21.4	7.1	28.5
WTG-110-QC	ND	0.3	0.3	0.5	2.0	4.6	17.4	38.6	63.1	30.0	6.6	36.6
WTG-111	ND	0.4	0.4	0.9	2.7	3.8	19.5	27.2	54.1	39.6	5.9	45.5
WTG-112	ND	0.4	0.4	0.8	2.7	8.5	30.8	26.6	69.4	24.6	5.6	30.2
WTG-113	0.1	0.9	1.0	0.2	2.4	3.5	15.8	35.7	57.6	33.3	8.1	41.4
WTG-114	ND	0.7	0.7	1.5	3.4	6.4	18.9	32.2	62.4	29.7	7.2	36.9
WTG-115	ND	0.3	0.3	0.8	2.2	4.1	25.3	19.9	52.3	40.4	7.0	47.4
WTG-116	ND	0.6	0.6	1.1	2.4	5.2	21.8	26.3	56.8	34.3	8.3	42.6
WTG-117	0.2	0.7	0.9	1.3	3.4	7.5	19.3	25.2	56.7	36.5	5.9	42.4
WTG-118	ND	0.5	0.5	0.5	1.9	5.0	11.2	38.2	56.8	35.2	7.5	42.7
WTG-119	ND	0.5	0.5	0.4	1.7	5.2	14.6	33.5	55.4	37.7	6.4	44.1
WTG-120	ND	0.3	0.3	0.1	2.1	7.8	12.8	36.5	59.3	32.2	8.2	40.4
WTG-120-QC	ND	0.3	0.3	0.4	1.9	5.0	14.8	38.4	60.5	30.1	9.1	39.2
WTG-121	ND	0.5	0.5	0.6	2.4	7.3	22.7	33.5	66.5	27.0	6.0	33.0
WTG-122	ND	0.3	0.3	1.1	1.8	5.7	16.4	27.6	52.6	41.1	6.0	47.1
WTG-123	ND	0.3	0.3	0.7	1.9	6.9	17.2	26.2	52.9	40.9	5.9	46.8
WTG-124	0.1	0.7	0.8	0.6	3.7	9.3	15.2	27.7	56.5	35.9	6.8	42.7
WTG-125	ND	0.6	0.6	1.5	2.4	5.7	12.2	29.6	51.4	39.6	8.4	48.0
WTG-126	ND	0.2	0.2	0.7	1.7	1.4	4.6	29.3	37.7	53.1	9.0	62.1
WTG-127	ND	0.2	0.2	0.9	5.1	13.9	12.5	20.8	53.2	38.8	7.8	46.6
WTG-128	ND	0.2	0.2	0.2	1.2	2.6	5.9	44.5	54.4	39.6	5.8	45.4
WTG-129	1.0	1.7	2.7	2.0	2.7	5.5	11.4	39.4	61.0	28.2	8.1	36.3
WTG-130	ND	0.8	0.8	1.4	4.8	9.0	9.1	35.7	60.0	30.1	9.1	39.2
WTG-130-QC	0.1	1.2	1.3	1.7	4.7	9.3	9.3	36.3	61.3	30.8	6.6	37.4
WTG-131	0.2	1.5	1.7	3.1	10.2	10.0	4.9	32.2	60.4	31.0	6.9	37.9
WTG-132	ND	0.7	0.7	0.9	7.0	22.7	18.1	23.0	71.7	22.4	5.2	27.6
WTG-133	ND	1.6	1.6	1.9	4.4	10.7	17.0	26.4	60.4	32.6	5.4	38.0
WTG-134	0.1	0.7	0.8	1.5	4.4	15.1	14.5	17.7	53.2	40.2	5.8	46.0
WTG-135	0.1	1.3	1.4	1.2	4.9	13.1	20.8	22.4	62.4	29.1	7.1	36.2
WTG-136	0.3	2.6	2.9	2.4	3.2	5.3	6.4	42.6	59.9	30.5	6.7	37.2
WTG-137	ND	1.3	1.3	1.5	2.7	6.8	9.0	34.1	54.1	37.1	7.5	44.6
WTG-138	ND	ND	0.0	2.0	4.4	8.4	9.8	33.3	57.9	34.4	7.7	42.1
WTG-139	0.9	4.4	5.3	4.8	4.7	5.7	10.0	28.3	53.5	33.4	7.8	41.2
WTG-140	0.2	0.6	0.8	1.8	6.0	12.0	12.1	27.7	59.6	30.0	9.6	39.6
WTG-140-QC	ND	0.1	0.1	1.1	5.1	11.1	11.4	27.7	56.4	34.1	9.4	43.5
WTG-141	0.7	1.2	1.9	2.1	5.7	11.3	16.2	20.7	56.0	34.0	8.1	42.1
WTG-142	ND	0.2	0.2	2.1	4.8	9.9	15.4	24.4	56.6	33.3	9.9	43.2
WTG-143	ND	0.1	0.1	0.8	5.6	14.2	9.2	30.9	60.7	31.9	7.3	39.2
WTG-144	0.3	1.2	1.5	0.7	8.6	20.8	14.2	24.8	69.1	24.4	5.0	29.4
WTG-145	ND	2.1	2.1	1.7	5.5	14.5	14.5	26.8	63.0	29.1	5.8	34.9

Station	Grain Size (percent)											
	Pebble	Granule	Total Gravel	Very Coarse Sand	Coarse Sand	Medium Sand	Fine Sand	Very Fine Sand	Total Sand	Silt	Clay	Silt + Clay
WTG-146	ND	0.1	0.1	1.3	6.3	12.4	11.4	25.9	57.3	34.8	7.8	42.6
WTG-147	0.6	2.7	3.3	2.5	4.7	6.7	15.2	25.8	54.9	35.5	6.3	41.8
WTG-148	0.9	2.8	3.7	0.7	6.4	8.9	12.5	25.6	54.1	34.2	8.0	42.2
WTG-149	0.1	1.3	1.4	0.5	4.6	9.8	9.8	30.6	55.3	35.1	8.2	43.3
WTG-150	ND	1.1	1.1	2.9	8.0	13.7	8.7	20.1	53.4	39.8	5.7	45.5
WTG-150-QC	ND	1.8	1.8	2.9	8.2	13.4	8.8	20.3	53.6	39.0	5.6	44.6
WTG-151	ND	ND	0.0	2.2	3.4	5.9	9.4	24.8	45.7	45.4	8.9	54.3
WTG-152	ND	0.1	0.1	0.7	3.6	10.1	13.9	24.7	53.0	36.9	10.0	46.9
WTG-153	0.7	4.1	4.8	2.7	4.5	8.1	6.9	22.5	44.7	41.0	9.5	50.5
WTG-154	0.5	3.6	4.1	0.3	10.5	20.1	11.2	23.6	65.7	25.4	4.8	30.2
WTG-155	ND	0.2	0.2	0.9	7.1	15.2	9.0	29.2	61.4	30.2	8.2	38.4
WTG-156	0.5	2.6	3.1	1.0	5.6	16.1	11.5	22.6	56.8	33.5	6.6	40.1
WTG-157	ND	1.4	1.4	2.2	4.2	9.7	10.6	21.0	47.7	42.4	8.5	50.9
WTG-157-QC	ND	1.2	1.2	2.9	3.3	7.9	8.9	22.0	45.0	47.0	6.8	53.8

ND = none detected.

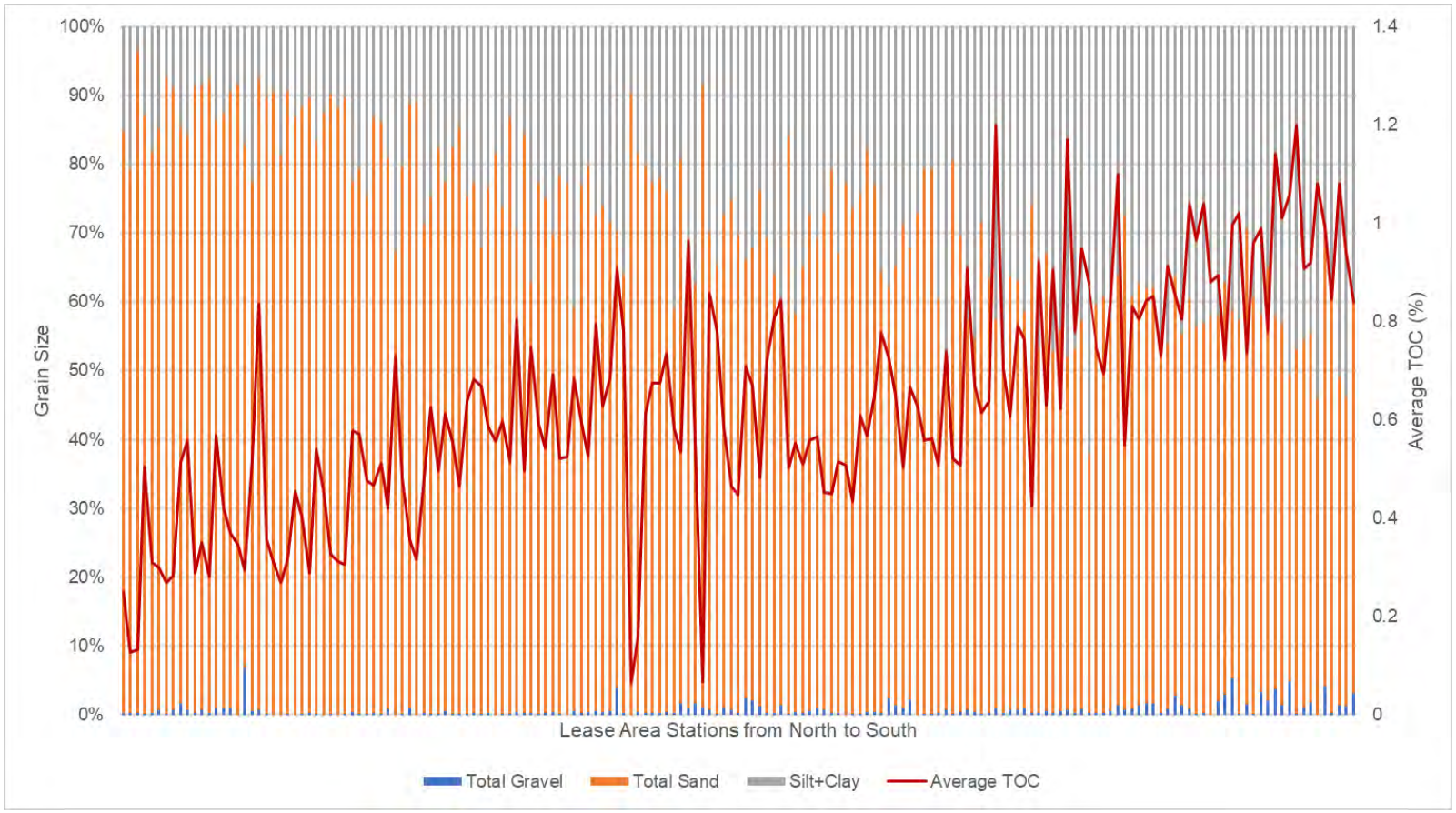

Figure 8 Percentages of total gravel, total sand and silt/clay fractions and total organic carbon (TOC) content in sediment samples from the foundation stations presented North to South (latitude decreases moving left to right).

5.3.1| CMECS AND NMFS MODIFIED CMECS SUBSTRATE COMPONENTS

Table 20, Figure 9 and Figure 10 display the CMECS and NMFS-modified CMECS classifications for the Lease Area sample stations based on the particle size data from Table 19.

The Lease Area consisted of fine unconsolidated substrate and the majority of the Lease area stations had sediment of the slightly gravelly muddy sand CMECS subgroup classification (n=128, exclusive of QC replicates) and the Muddy Sand modified NMFS classification (n=138, exclusive of QC replicates); please note these sediment composition groupings are based on two separate classification systems.

Stations WTG-018 and WTG-139 had sediment with greater than five (5) percent gravel and as a result were classified as Group: *Gravelly* per CMECS and NMFS-Modified CMECS classifications. It should be noted that these classifications are based on the analysis of a single sample and the gravel component of these samples were most likely of biogenic origin (e.g., shell fragments). The Median grain size for Station WTG-068 consisted of both medium and coarse sand components in near-equal proportions, and thus were categorized using a modification of the CMECS and NMFS-modified CMECS sand subgroups.

Stations WTG-020 and WTG-050 had a small amount of granule, a slightly lower sand content (approximately 0.7 percent and 1.0 percent) and a slightly higher silt content (0.6 percent and 1.1 percent) than the associated replicate QC samples collected from the same grabs (refer to Table 19). This resulted in the main sample and QC replicates to fall within different CMECS and/or NMFS-modified substrate subgroups (Table 20). All other homogenized split samples fell within the same substrate subgroup classification category as their QC replicate counterparts.

Table 20 Substrate Classifications for the foundation stations.

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group	Substrate Subgroup	Stations
Coastal and Marine Ecological Classification Standard (FDGC, 2012)					
Geologic Substrate	Unconsolidated Mineral Substrate	Fine Unconsolidated Substrate	Gravelly	Gravelly Muddy Sand	WTG-018, WTG-139
			Slightly Gravelly	Slightly Gravelly Muddy Sand	WTG-001, WTG-002, WTG-003, WTG-004, WTG-006, WTG-009, WTG-009-QC, WTG-011, WTG-012, WTG-017, WTG-020, WTG-025, WTG-026, WTG-027, WTG-028, WTG-029, WTG-032, WTG-033, WTG-034, WTG-035, WTG-036, WTG-037, WTG-038, WTG-040, WTG-040-QC, WTG-041, WTG-042, WTG-044, WTG-045, WTG-046, WTG-047, WTG-048, WTG-049, WTG-050, WTG-051, WTG-052, WTG-053, WTG-054, WTG-055, WTG-056, WTG-057, WTG-058, WTG-059, WTG-060, WTG-060-QC, WTG-061, WTG-062, WTG-063, WTG-064, WTG-065, WTG-066, WTG-067, WTG-069, WTG-070, WTG-070-QC, WTG-071, WTG-072, WTG-073, WTG-074, WTG-075, WTG-076, WTG-078, WTG-079, WTG-080, WTG-080-QC, WTG-081, WTG-082, WTG-083, WTG-084, WTG-085, WTG-086, WTG-087, WTG-088, WTG-089, WTG-090, WTG-090-QC, WTG-091, WTG-092, WTG-093, WTG-094, WTG-095, WTG-097, WTG-098, WTG-099, WTG-100, WTG-100-QC, WTG-101, WTG-103, WTG-104, WTG-106, WTG-107, WTG-108, WTG-109, WTG-110, WTG-110-QC, WTG-111, WTG-112, WTG-113, WTG-114, WTG-115, WTG-116, WTG-117, WTG-118, WTG-119, WTG-120, WTG-120-QC, WTG-121, WTG-122, WTG-123, WTG-124, WTG-125, WTG-127, WTG-128, WTG-129, WTG-130, WTG-130-QC, WTG-131, WTG-132, WTG-133, WTG-134, WTG-135, WTG-136, WTG-137, WTG-140, WTG-140-QC,WTG-141, WTG-142, WTG-143, WTG-144, WTG-145, WTG-146, WTG-147, WTG-148, WTG-149, WTG-150, WTG-150-QC, WTG-152, WTG-154, WTG-155, WTG-156
			Slightly Gravelly	Slightly Gravelly Sand	WTG-005, WTG-007, WTG-008, WTG-010, WTG-010-QC, WTG-013, WTG-014, WTG-016, WTG-022, WTG-024, WTG-077
			Slightly Gravelly	Slightly Gravelly Sandy Mud	WTG-105, WTG-126, WTG-153, WTG-157, WTG-157-QC
			Sand	Medium/Coarse Sand*	WTG-068
			Sand	Fine Sand	WTG-020-QC, WTG-019
			Muddy Sand	Silty Sand	WTG-015, WTG-021, WTG-023, WTG-030, WTG-031, WTG039, WTG-043, WTG-050-QC, WTG-096, WTG-102, WTG-138
			Sandy Mud	Sandy Silt	WTG-151

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group	Substrate Subgroup	Stations
National Marine Fisheries Service (2021)					
Not Applicable	Unconsolidated Mineral Substrate	Fine Unconsolidated Substrate	Gravelly	Gravelly Muddy Sand	WTG-018, WTG-139
			Muddy Sand	--	WTG-001, WTG-002, WTG-003, WTG-004, WTG-006, WTG-009, WTG-009-QC, WTG-011, WTG-012, WTG-015, WTG-017, WTG-020, WTG-021, WTG-023, WTG-025, WTG-026, WTG-027, WTG-028, WTG-029, WTG-030, WTG-031, WTG-032, WTG-033, WTG-034, WTG-035, WTG-036, WTG-037, WTG-038, WTG-039, WTG-040, WTG-040-QC, WTG-041, WTG-042, WTG-043, WTG-044, WTG-045, WTG-046, WTG-047, WTG-048, WTG-049, WTG-050, WTG-050-QC, WTG-051, WTG-052, WTG-053, WTG-054, WTG-055, WTG-056, WTG-057, WTG-058, WTG-059, WTG-060, WTG-060-QC, WTG-061, WTG-062, WTG-063, WTG-064, WTG-065, WTG-066, WTG-067, WTG-069, WTG-070, WTG-070-QC, WTG-071, WTG-072, WTG-073, WTG-074, WTG-075, WTG-076, WTG-078, WTG-079, WTG-080, WTG-080-QC, WTG-081, WTG-082, WTG-083, WTG-084, WTG-085, WTG-086, WTG-087, WTG-088, WTG-089, WTG-090, WTG-090-QC, WTG-091, WTG-092, WTG-093, WTG-094, WTG-095, WTG-096, WTG-097, WTG-098, WTG-099, WTG-100, WTG-100-QC, WTG-101, WTG-102, WTG-103, WTG-104, WTG-106, WTG-107, WTG-108, WTG-109, WTG-110, WTG-110-QC, WTG-111, WTG-112, WTG-113, WTG-114, WTG-115, WTG-116, WTG-117, WTG-118, WTG-119, WTG-120, WTG-120-QC, WTG-121, WTG-122, WTG-123, WTG-124, WTG-125, WTG-127, WTG-128, WTG-129, WTG-130, WTG-130-QC, WTG-131, WTG-132, WTG-133, WTG-134, WTG-135, WTG-136, WTG-137, WTG-138, WTG-140, WTG-140-QC, WTG-141, WTG-142, WTG-143, WTG-144, WTG-145, WTG-146, WTG-147, WTG-148, WTG-149, WTG-150, WTG-150-QC, WTG-152, WTG-154, WTG-155, WTG-156
			Sand	Coarse/Very Coarse Sand	WTG-077
			Sand	Medium/Coarse Sand*	WTG-068
			Sand	Fine/Very Fine Sand	WTG-005, WTG-007, WTG-008, WTG-010, WTG-010-QC, WTG-013, WTG-014, WTG-016, WTG-019, WTG-020-QC, WTG-022, WTG-024.
			Sandy Mud	--	WTG-105, WTG-126, WTG-151, WTG-153, WTG-157, WTG-157-QC

* station falls into two classification groups.

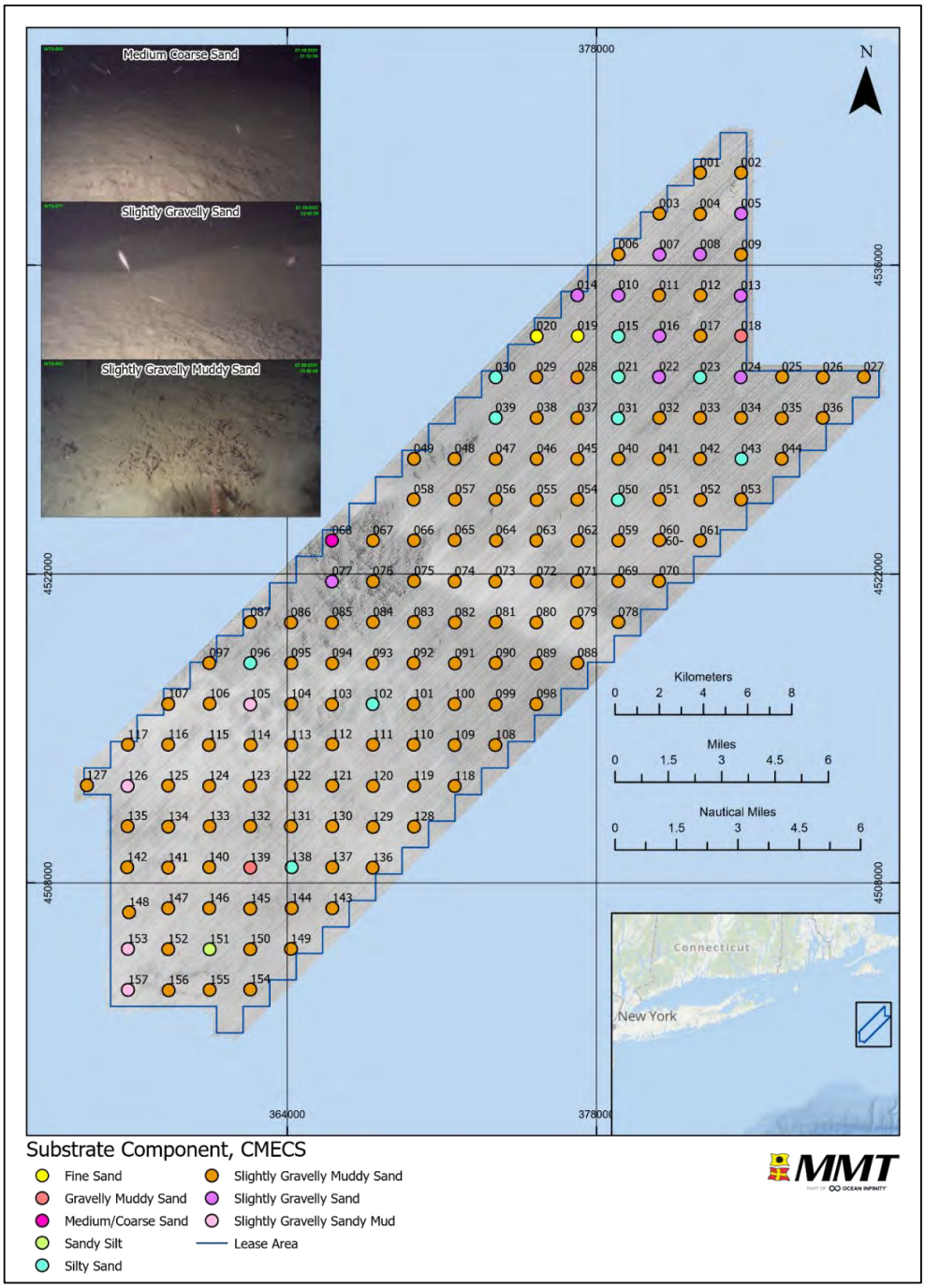

Figure 9 Overview of classified CMECS Substrate Component at the foundation stations with example images. The visual difference, concerning sediment surficial texture, in the Lease Area is minimal.

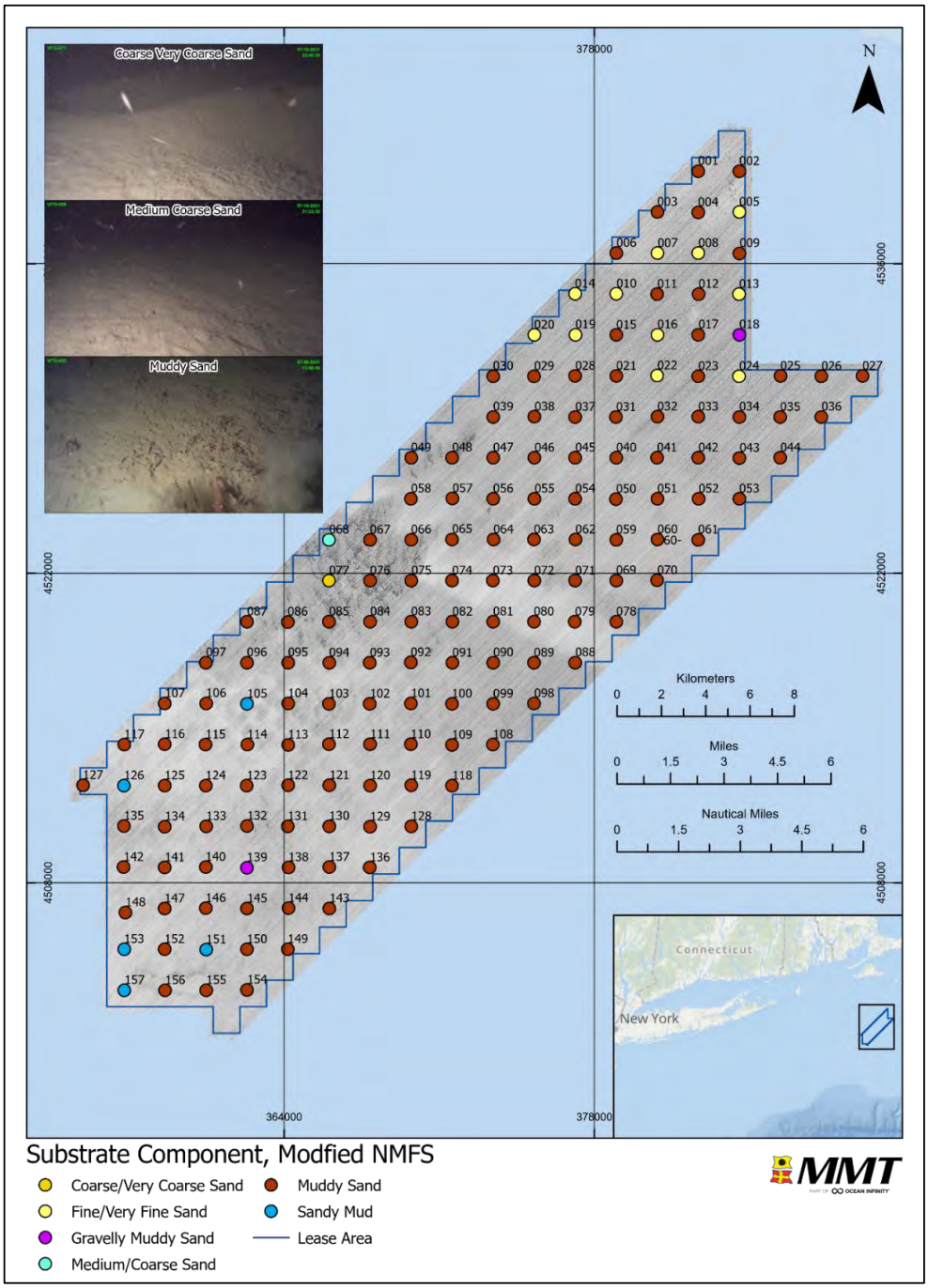

Figure 10 Overview of classified NMFS-modified CMECS Substrate Component at the foundation stations with example images. The visual difference, concerning sediment surficial texture, in the Lease Area is minimal.

5.4 | CHEMICAL ANALYSIS (TOTAL ORGANIC CARBON)

Total organic carbon in sediment is derived from the decomposition of organic matter or from anthropogenic sources. In the marine environment, TOC availability affects primary production of faunal communities (Dauwe et al., 1998). The level of TOC can also be used as a tool for estimating levels of contamination within an ecosystem as it can be correlated with potential organic contaminants (Avramidis et al., 2015). The TOC concentration for marine surficial sediments is estimated to be 0.5 percent in the deep ocean and 2 percent along the shallower continental margins (Seiter et al., 2004).

The TOC concentrations for the Lease Area are presented in Table 21. The average (of two analytical replicates per station) sediment TOC concentrations ranged from 0.064 to 1.200 percent. These TOC values are consistent with values reported by MMT (2020) during the EQ20903 Benthic Characterization Survey effort for the MetOcean facility locations (0.47 to 1.23 percent) and previous studies of marine sediments in the area (Boehm, 1984; Venkatesan, 1988).

TOC concentrations generally increased with decreasing latitude and increasing sediment fine fractions of silt/clay (Figure 8). Twelve stations located in the southern portion of the Lease Area and within similar depth ranges comprised the highest average TOC concentrations (1.01 to 1.20 percent). These stations also had high portions of finer particles (Table 21). The two stations (WTG-068 and WTG-077) that had higher coarse particles were located near each other along the Lease Area's mid-western boundary and contained the lowest TOC concentrations (0.064 and 0.067 percent, respectively).

Table 21 Summary of total organic carbon (TOC) concentrations for the foundation stations.

Station	TOC (percent)		
	REP 1	REP 2	Average
WTG-001	0.273	0.228	0.250
WTG-002	0.118	0.136	0.127
WTG-003	0.514	0.492	0.503
WTG-004	0.336	0.284	0.310
WTG-005	0.132	0.134	0.133
WTG-006	0.312	0.286	0.299
WTG-007	0.262	0.301	0.282
WTG-008	0.269	0.267	0.268
WTG-009	0.471	0.556	0.514
WTG-009 QC	0.577	0.538	0.558
WTG-010	0.268	0.310	0.289
WTG-010 QC	0.335	0.366	0.350
WTG-011	0.637	0.499	0.568
WTG-012	0.424	0.416	0.420
WTG-013	0.395	0.346	0.370
WTG-014	0.296	0.263	0.280
WTG-015	0.262	0.276	0.269
WTG-016	0.819	0.854	0.836
WTG-017	0.508	0.537	0.522
WTG-018	0.269	0.319	0.294
WTG-019	0.349	0.345	0.347
WTG-020	0.361	0.351	0.356
WTG-020 QC	0.279	0.343	0.311
WTG-021	0.431	0.481	0.456
WTG-022	0.332	0.298	0.315
WTG-023	0.329	0.296	0.312
WTG-024	0.335	0.319	0.327
WTG-025	0.402	0.401	0.402

Station	TOC (percent)		
	REP 1	REP 2	Average
WTG-026	0.319	0.291	0.305
WTG-027	0.303	0.272	0.288
WTG-028	0.557	0.522	0.540
WTG-029	0.589	0.566	0.578
WTG-030	0.446	0.457	0.452
WTG-031	0.307	0.326	0.316
WTG-032	0.475	0.477	0.476
WTG-033	0.435	0.499	0.467
WTG-034	0.456	0.568	0.512
WTG-035	0.358	0.353	0.356
WTG-036	0.399	0.442	0.420
WTG-037	0.453	0.513	0.483
WTG-038	0.563	0.582	0.572
WTG-039	0.728	0.730	0.729
WTG-040	0.632	0.645	0.638
WTG-040 QC	0.670	0.694	0.682
WTG-041	0.501	0.489	0.495
WTG-042	0.634	0.704	0.669
WTG-043	0.568	0.546	0.557
WTG-044	0.457	0.473	0.465
WTG-045	0.499	0.467	0.483
WTG-046	0.588	0.586	0.587
WTG-047	0.608	0.618	0.613
WTG-048	0.509	0.601	0.555
WTG-049	0.638	0.613	0.626
WTG-050	0.509	0.533	0.521
WTG-050 QC	0.510	0.540	0.525
WTG-051	0.500	0.533	0.516
WTG-052	0.557	0.528	0.542
WTG-053	0.523	0.470	0.496
WTG-054	0.597	0.587	0.592
WTG-055	0.741	0.645	0.693
WTG-056	0.740	0.753	0.746
WTG-057	0.601	0.591	0.596
WTG-058	0.811	0.798	0.804
WTG-059	0.630	0.596	0.613
WTG-060	0.592	0.594	0.593
WTG-060 QC	0.455	0.597	0.526
WTG-061	0.769	0.790	0.780
WTG-062	0.638	0.619	0.628
WTG-063	0.699	0.675	0.687
WTG-064	0.774	0.816	0.795
WTG-065	0.672	0.698	0.685
WTG-066	0.832	0.984	0.908
WTG-067	0.162	0.152	0.157
WTG-068	0.069	0.059	0.064
WTG-069	0.709	0.760	0.734
WTG-070	0.655	0.694	0.674
WTG-070 QC	0.673	0.675	0.674
WTG-071	0.794	0.766	0.780
WTG-072	0.864	0.850	0.857
WTG-073	0.935	0.993	0.964
WTG-074	0.630	0.483	0.556

Station	TOC (percent)		
	REP 1	REP 2	Average
WTG-075	0.570	0.592	0.581
WTG-076	0.515	0.552	0.534
WTG-077	0.075	0.059	0.067
WTG-078	0.668	0.672	0.670
WTG-079	0.735	0.706	0.720
WTG-080	0.817	0.798	0.808
WTG-080 QC	0.852	0.834	0.843
WTG-081	0.512	0.385	0.448
WTG-082	0.470	0.535	0.502
WTG-083	0.501	0.428	0.464
WTG-084	0.522	0.648	0.585
WTG-085	0.543	0.420	0.482
WTG-086	0.555	0.548	0.552
WTG-087	0.642	0.775	0.708
WTG-088	0.506	0.524	0.515
WTG-089	0.617	0.518	0.568
WTG-090	0.557	0.558	0.558
WTG-090 QC	0.589	0.544	0.566
WTG-091	0.659	0.642	0.650
WTG-092	0.508	0.512	0.510
WTG-093	0.563	0.653	0.608
WTG-094	0.416	0.452	0.434
WTG-095	0.473	0.435	0.454
WTG-096	0.550	0.466	0.508
WTG-097	0.498	0.402	0.450
WTG-098	0.681	0.618	0.650
WTG-099	0.510	0.532	0.521
WTG-100	0.578	0.538	0.558
WTR|100 QC	0.571	0.552	0.562
WTG-101	0.637	0.696	0.666
WTG-102	0.628	0.630	0.629
WTG-103	0.512	0.503	0.508
WTG-104	0.521	0.487	0.504
WTG-105	0.753	0.722	0.738
WTG-106	0.804	0.752	0.778
WTG-107	0.728	0.725	0.726
WTG-108	0.610	0.602	0.606
WTG-109	0.409	0.441	0.425
WTG-110	0.623	0.607	0.615
WTG-110 QC	0.652	0.625	0.638
WTG-111	0.659	0.677	0.668
WTG-112	0.507	0.509	0.508
WTG-113	0.794	0.734	0.764
WTG-114	0.771	0.814	0.792
WTG-115	0.683	0.725	0.704
WTG-116	0.893	0.922	0.908
WTG-117	1.220	1.170	1.20
WTG-118	0.814	0.856	0.835
WTG-119	0.607	0.637	0.622
WTG-120	0.732	0.762	0.747
WTG-120 QC	0.667	0.722	0.694
WTG-121	0.660	0.601	0.63
WTG-122	0.958	0.854	0.906

Station	TOC (percent)		
	REP 1	REP 2	Average
WTG-123	0.763	0.798	0.780
WTG-124	0.921	0.976	0.948
WTG-125	1.270	1.060	1.170
WTG-126	0.844	0.907	0.876
WTG-127	0.936	0.910	0.923
WTG-128	0.783	0.675	0.729
WTG-129	0.934	0.772	0.853
WTG-130	0.819	0.842	0.830
WTG-130 QC	0.841	0.769	0.805
WTG-131	0.865	0.839	0.852
WTG-132	0.556	0.542	0.549
WTG-133	0.881	0.806	0.844
WTG-134	0.949	0.880	0.914
WTG-135	1.180	1.010	1.100
WTG-136	0.655	0.794	0.724
WTG-137	0.790	0.819	0.804
WTG-138	0.893	0.869	0.881
WTG-139	0.983	1.010	0.998
WTG-140	1.08	1.010	1.040
WTG-140 QC	0.954	0.978	0.966
WTG-141	0.923	0.867	0.895
WTG-142	1.020	1.060	1.040
WTG-143	1.010	0.913	0.961
WTG-144	0.763	0.704	0.734
WTG-145	0.803	0.755	0.779
WTG-146	1.020	1.020	1.020
WTG-147	0.974	1.010	0.990
WTG-148	1.080	1.210	1.140
WTG-149	1.060	0.961	1.010
WTG-150	0.933	0.882	0.908
WTG-150 QC	0.879	0.959	0.919
WTG-151	0.990	1.170	1.080
WTG-152	1.240	1.170	1.200
WTG-153	1.170	0.955	1.060
WTG-154	1.100	0.885	0.992
WTG-155	0.870	0.823	0.846
WTG-156	0.860	0.821	0.840
WTG-157	1.050	1.120	1.080
WTG-157 QC	0.902	0.980	0.941

5.5| INFAUNA FROM GRAB SAMPLES

Non-colonial benthic fauna were identified to the lowest taxonomic level possible. The infauna and non-colonial epifauna were combined and analyzed together. No sessile colonial epifauna was identified in the grab samples nor the benthic video/images for the Lease Area.

Benthic infaunal data collected during the survey are presented in Attachment C|. These data were collected from 44 of the 157 foundation locations and prioritized for analysis (note infauna samples were collected at all 157 stations – refer to Figure 3). These 44 priority locations were selected based on review of the HRG side scan sonar and sub-bottom profiling to obtain information across the Lease Area where HRG data suggested sediments features may be differing and variable. The infauna samples from the remaining 113

stations were archived should analysis be needed at a later date for comparison with post-construction assessment.

The 44 prioritized stations sampled from the Lease Area yielded 20,895 individuals and 156 total infauna taxa from nine phyla: Annelida, Arthropoda, Chordata, Cnidaria, Echinodermata, Mollusca, Nemertea, Platyhelminthes, and Sipuncula.

Taxonomic diversity varied among phyla, Echinodermata and Nemertea were both represented by three taxa. Chordata, Cnidaria, Sipuncula and Platyhelminthes were each represented by a single taxon. Annelids were mostly polychaete worms from the orders Phyllodocida, Sabellida, Scolecida, Terebellida, Spionidam and Eunicida. Arthropods of the class Malacostraca (crustaceans) contributed taxa from the orders Amphipoda, Isopoda, Decapoda, Cumacea, and Tanaidacea. The molluscan component, represented by 26 taxa, was composed mostly of bivalves and gastropods.

Annelids, arthropods, and mollusks contributed 40.2 percent, 39.6 percent, and 19.1 percent of the overall infauna abundance.

Annelids were also represented by the most taxa (79) followed by arthropods (41), and mollusks (26). Biomass was determined at the class level for all organisms in the samples. A comparison of percent biomass and numbers of individuals contributed by the 14 taxonomic classes found in the samples is presented in Figure 11.

Eighty-six of the 157 total taxa were identified to species level which were used for all infauna analyses. Infauna biomass calculations were conducted using all taxa at the Class level. Species level identifications included 17,321 individuals or 77.2 percent of the 20,895 total. Only these taxa identified to the species level plus the polychaete taxon *Polygordius* spp., were used for diversity and similarity analyses presented in the following sections. Using species level organisms in the analyses meets assumptions of the diversity indices and avoids redundancy introduced by using higher taxa in these calculations.

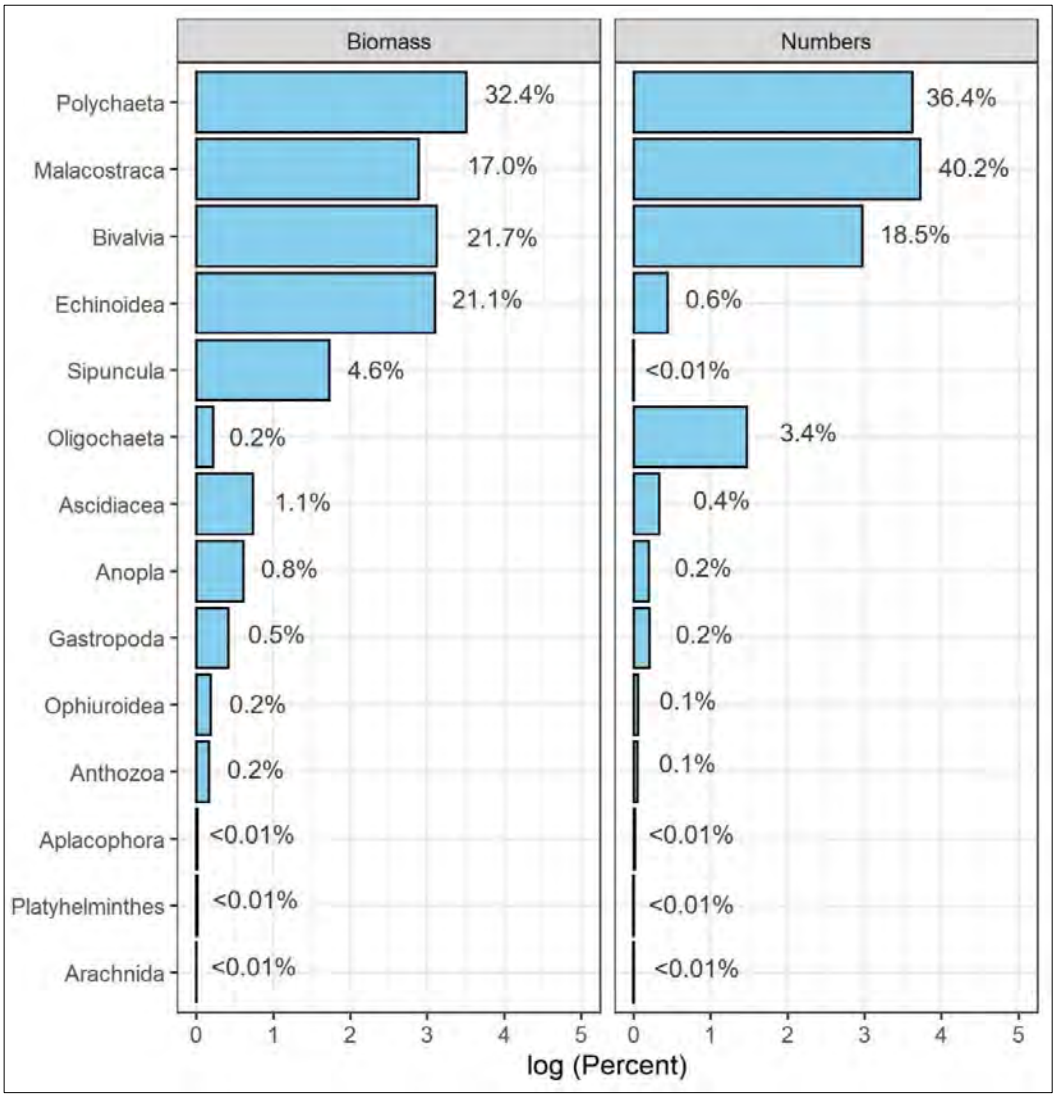

Figure 11 Percent biomass and numbers (transformed to natural logarithms) of infauna organisms, ranked in descending order, by Class collected from priority foundation stations (note natural logs of 1, 2, and 3 equal 2.7, 7.4, and 20.0 percent, respectively). It should be noted that Sipuncula biomass is represented by a single, large individual.

5.5.1 | BIOMASS

Biomass was measured for the 14 taxonomic classes of infauna present in the samples. These classes are listed along with summary statistics for the survey grid in Table 22. Total infauna biomass for the 44 sampling stations was 197.0 g. The mean biomass per station was (4.5 g ± 5.9 SD).

Five of the 14 classes including Polychaeta, Malacostraca, Bivalvia, Echinoidea, and Sipuncula collectively accounted for 97 percent of the total infauna biomass in the samples. Spatial distribution of biomass for these classes as well as total biomass are plotted in Figure 12.

Polychaeta and Malacostraca biomass exhibited similar, uniform patterns over stations of the survey grid with no observed aggregation. Bivalves were clustered at one station (WTG-084) but otherwise show a uniform pattern over the survey grid.

These three classes were represented by small-bodied (size range in mm), abundant (Polychaeta [N=7577], Malacostraca [N=8391], and Bivalvia [N=3867]) individuals which collectively accounted for 75.3 percent of the overall infauna biomass. The echinoids (sand dollars) also show a clustered biomass pattern concentrated on the northernmost stations (Figure 12). Sipuncula biomass, clustered at a single station (WTG-049), was a single individual sipunculid worm weighing 9.1 g and accounting for 4.6 percent of the total infauna biomass.

Table 22 Summary statistics for infauna biomass collected from the priority foundation stations .

Class	Common Name	Total	Percent	Mean	SD
Polychaeta	Polychaete worms	63.79	32.38	1.45	0.94
Bivalvia	Clams and mussels	42.83	21.74	0.97	2.32
Echinoidea	Sea urchins and sand dollars	41.62	21.13	0.95	5.09
Malacostraca	Crustaceans	33.51	17.01	0.76	0.57
Sipuncula	Peanut worms	9.11	4.62	0.21	1.37
Ascidiacea	Tunicates	2.14	1.09	0.05	0.10
Anopla	Ribbon worms	1.67	0.85	0.04	0.09
Gastropoda	Snails	1.02	0.52	0.02	0.10
Oligochaeta	Oligochaete worms	0.48	0.25	0.01	0.06
Ophiuroidea	Brittle starfish	0.41	0.21	0.01	0.06
Anthozoa	Anemones	0.36	0.18	0.01	0.03
Platyhelminthes	Flatworms	0.03	0.02	0.00	0.00
Aplacophora	Aplachophorans	0.03	0.01	0.00	0.00
Arachnida	Spiders	0.00	0.00	0.00	0.00
Total		**197.00**	**100.00**	**4.48**	**5.93**

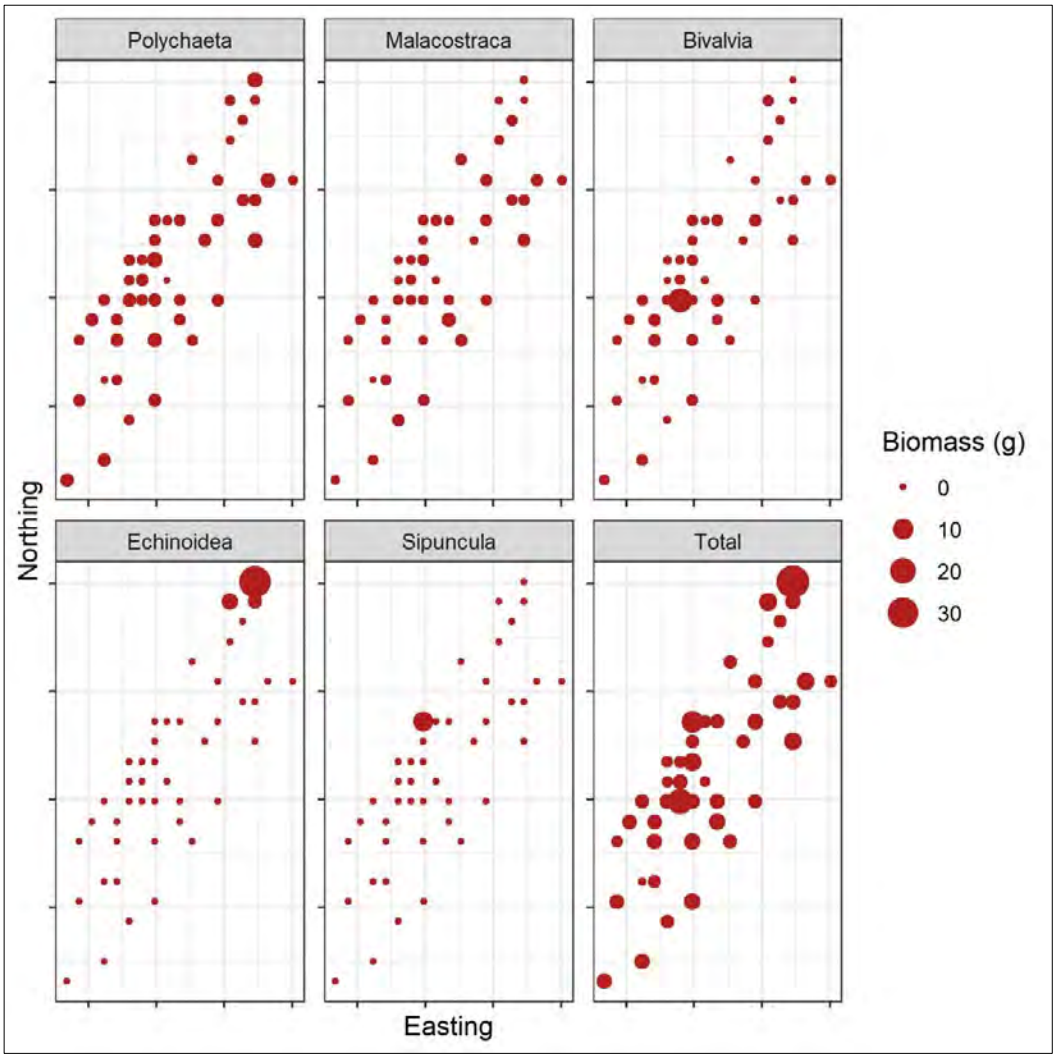

Figure 12 Biomass (g) of infauna organisms for the Classes Polychaeta, Malacostraca, Bivalvia, Echinoidea, and Sipuncula plotted on the priority foundation stations.

5.5.2 | UNIVARIATE STATISTICAL ANALYSES

The following univariate metrics were calculated for the priority stations: number of species (S), number of individuals (N), species richness (d), evenness (J'), Fisher's alpha (α), and diversity (H') are presented in Table 23. Station-level values are shown in Figure 13. Number of species per sample averaged 24.9 and ranged from 7 to 36. The species richness (d) values ranged from 1.9 to 5.9; diversity (H') ranged 1.1 to 2.7; Fisher's alpha ranged from 3.2 to 10.5. Evenness measured with Pielou's J' was moderate across all stations averaging 0.653 and ranging from 0.339 to 0.877.

Table 23 Summary statistics for number of species (S), number of individuals (N), species richness (d), evenness (J'), Fisher's alpha (α), and diversity (H') calculated for the priority foundation stations.

Statistics	N	S	Species Richness (d)	Fisher's Alpha (α)	H'	J'
Mean	391.6	24.9	4.1	6.455	2.073	0.654
Standard Deviation	248.6	6.2	0.8	1.607	0.368	0.102
Minimum	25	7.0	1.9	3.228	1.120	0.340
Maximum	1488	36.0	5.9	10.502	2.747	0.877

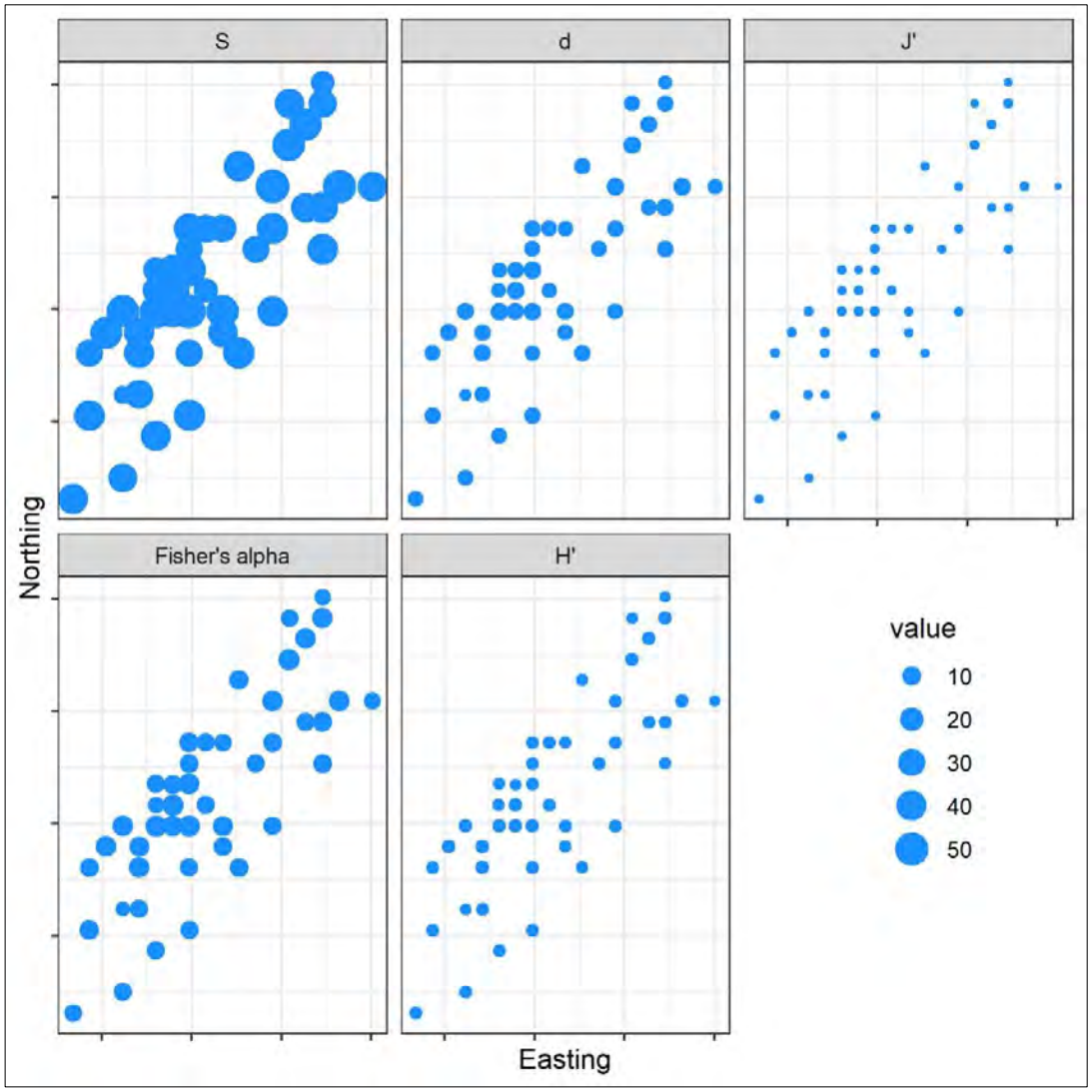

Figure 13 Number of taxa (S), species richness (d), Fisher's α, evenness (J'), and species diversity (H') plotted on the priority foundation stations.

The ten most abundant species sampled are shown in Table 24. These species collectively account for 83.1 percent of the infauna abundance recorded during the survey. Numerically dominant species include four polychaete annelids, four arthropods, and two mollusks. The most abundant species, *Ampelisca vadorum* (amphipod), *Nucula proxima* (bivalve mollusk), *Levinsenia gracilis* (polychaete worm) accounted for 28.9 percent, 17.0 percent, and 11.9 percent of the 17,321 individuals, respectively. With the exception of *Polygordius* spp. which occurred at 12 stations, these species occurred in 34 or more of the 44 (77 percent) stations sampled. Figure 14 depicts the spatial pattern of the top 10 most abundant of the species over the priority stations in the Lease Area. Station level abundances were similar among all but two of these numerically dominant species. The polychaete complex of *Polygordius* spp. exhibited the patchiest distribution among stations with aggregations in the central and northern portions of the Lease Area. The polychaete *Terebellides stroemi* also seemed to be less abundant at the northern stations than other species. The Lease Area appears to support a relatively homogeneous infauna assemblage.

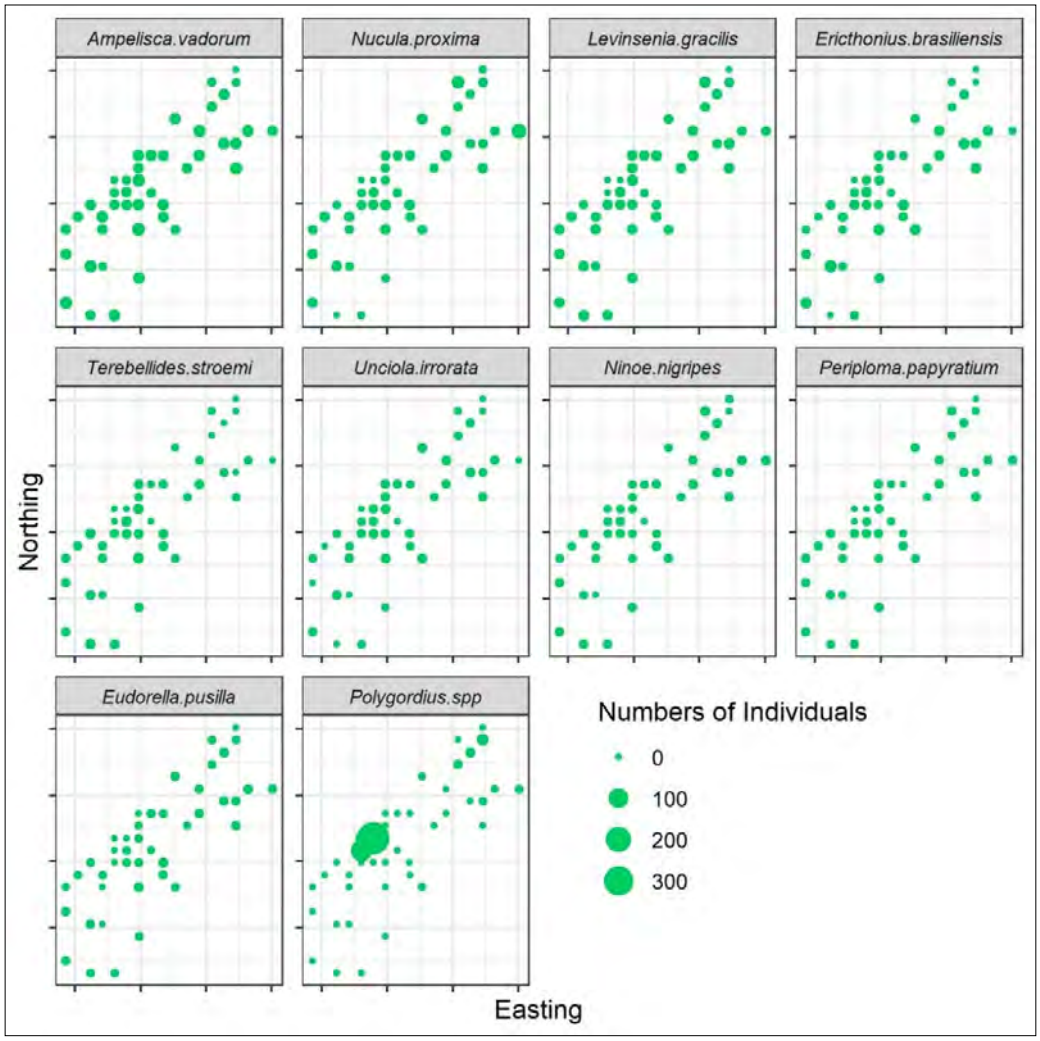

Figure 14 Numbers of individuals of the ten most abundant species in the samples plotted on the priority foundation stations.

Table 24 Numerically dominant species in the grab samples from the priority foundation stations.

Phylum	Species	Number	Percent	Occurrence
Arthropoda	*Ampelisca vadorum*	4,973	28.9	43
Mollusca	*Nucula proxima*	2,931	17.0	41
Annelida	*Levinsenia gracilis*	2,055	11.9	40
Arthropoda	*Ericthonius brasiliensis*	1,423	8.3	39
Annelida	*Terebellides stroemi*	613	3.6	34
Annelida	*Polygordius* spp.	562	3.3	12
Arthropoda	*Unciola irrorata*	439	2.5	34
Annelida	*Ninoe nigripes*	434	2.5	41
Mollusca	*Periploma papyratium*	291	1.7	39
Arthropoda	*Eudorella pusilla*	287	1.7	36

5.5.3 | MULTIVARIATE STATISTICAL ANALYSES

Patterns of infauna similarity among the 44 priority stations were examined with cluster analysis and NMDS ordination. When examined over all stations, normal cluster analysis followed by the SIMPROF tests produced 13 groups of stations (designated a through m) that were similar with respect to species composition and relative abundance (Figure 15).

Figure 16 displays the geographic distribution of the 44 priority stations as grouped by normal analysis. The distribution of groups shows a spatial pattern with some overlap.

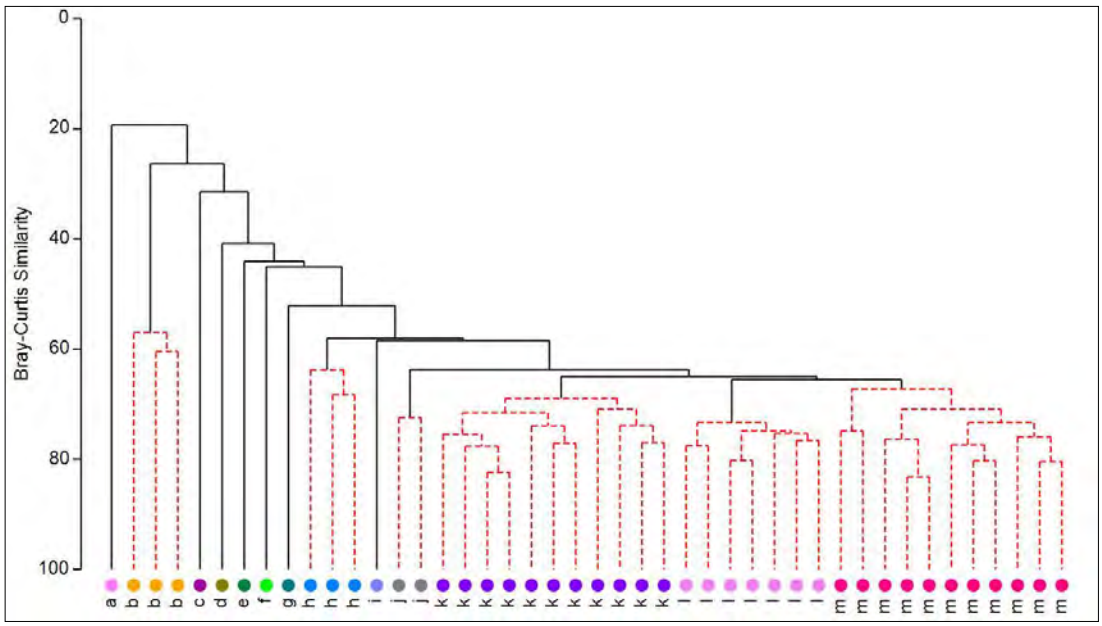

Figure 15 Results of normal cluster analysis of the priority foundation stations from Bray-Curtis similarity matrix. Statistically similar groups (plotted as letters a to m) were determined using similarity profiles (SIMPROF) analyses.

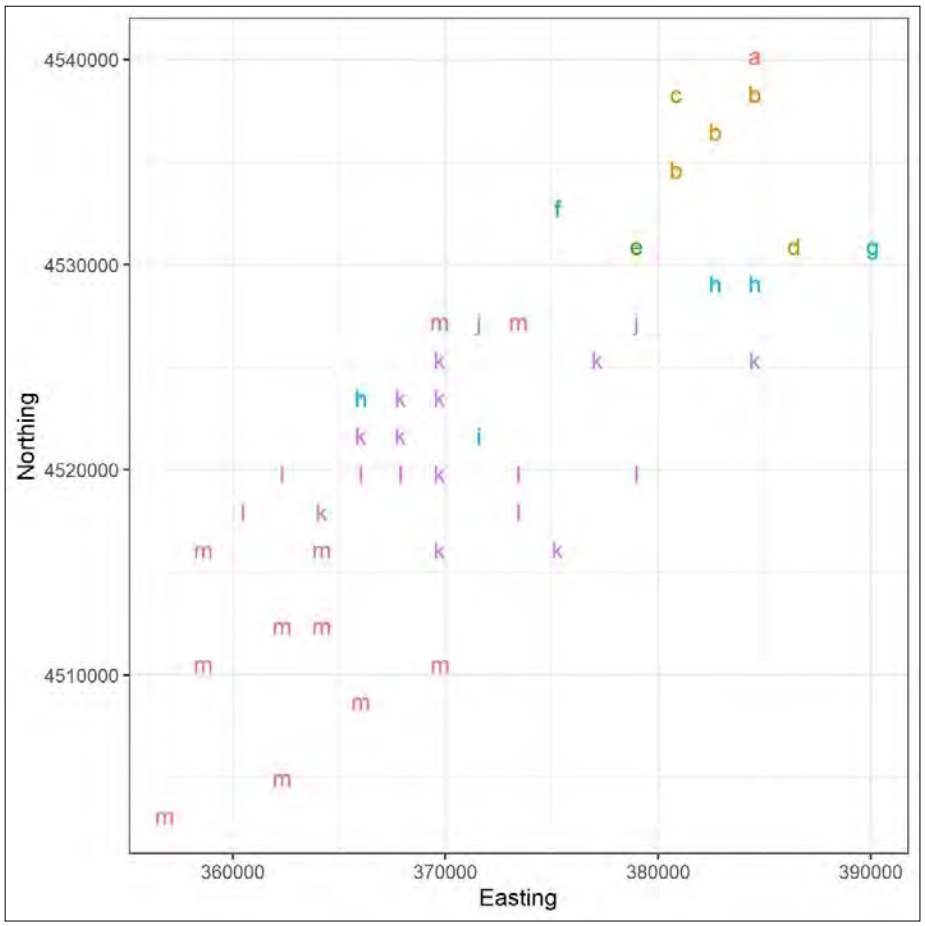

Figure 16 Cluster groups labelled by letters a through m (see Figure 15) superimposed on the priority foundation stations in the Lease Area.

The normal analysis generated 13 station groups a to m, of these, seven (a, c, d, e, f, g, and i) were represented by just one station. Groups b, h, j, k, l, and m consisted of two or more stations (Figure 15). An inverse analysis was performed on the species, data revealed several groups of species that co-occurred in the samples.

A stations-by-species data table was ordered based on cluster analyses of stations and species respectively (Figure 17); taxa include the most abundant 40 (>95 % abundance) of the 86 individual taxa. The cluster analysis of stations coupled with the SIMPROF routine identified multiple groups of stations with significantly similar species compositions (Figure 19).

Seven of these groups were single stations showing no affinity with any other groups. When plotted on the geographical grid of stations a spatial pattern is evident among some of the groups (Figure 17). For example, Group b stations were adjacent to one another in the northwest portion of the station grid.

Groups k, l, and m with 11, 7, and 11 stations respectively, overlap to some extent in the middle portion of the survey grid. Although overlapping with Group k and l stations, Group m stations cover the south-eastern

portion of the survey grid. The infauna assemblage from most of the priority stations (groups g through m) have a Bray Curtis Similarity of greater than 50 percent which is indicative of a relatively homogenous community composition. These three groups of stations (k, l, and m) were characterized by the ubiquitous species *Ampelisca vadorum*, *Nucula proxima*, and *Levinsenia gracilis* but differed from each other and other station groups due to presence or abundance of other species (Figure 17). Groups m and l had higher numbers of common polychaete species such as *Cossura soyeri* than the station Groups k, h, and b. Station Group b supported higher numbers of the *Polygordius* complex of polychaetes and the amphipod *Byblis serrata*.

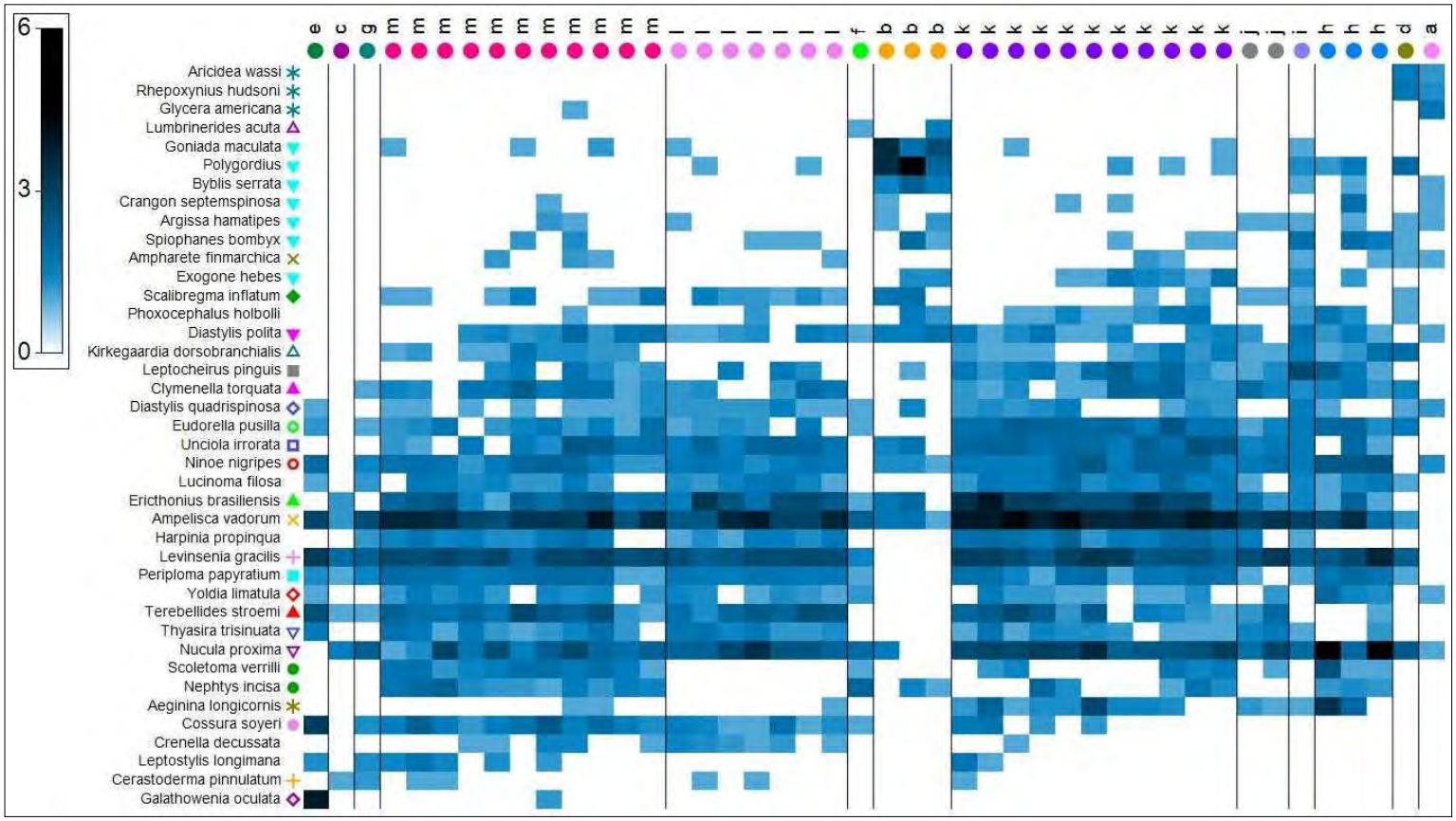

Figure 17 Two-way analysis of priority foundation stations and species ordered by normal and inverse cluster analyses respectively. Species shown represent the 40 most abundant in the data set. Color scale represents the fourth-root number of individuals.

5.5.4 | ENVIRONMENTAL INFLUENCE ON INFAUNAL COMMUNITIES

Environmental factors such as sediment grain size and TOC measured from the samples differed among stations (Table 19).

For example, Figure 18, depicts the grain size composition (percent Gravel, percent Sand, percent Fines [silt + clay]) of the stations reordered into the SIMPROF cluster groups (see Figure 16) for a spatial perspective of the cluster groups). Stations WTG-067, WTG-068, and WTG-077 formed a distinctive Group (b) in the cluster analysis which also has the highest proportion of sand among all stations.

The remaining, with the exception of Station WTG-005, samples were relatively similar with respect to grain size composition. To illustrate patterns of correlation, the NMDS plot was overlain with vectors (arrows) generated by multiple regression for TOC, percent gravel, percent sand, and northing is shown in Figure 19

Correlation with TOC increased from left to right along the NMDS1 axis of the plot (percent of sediment fine fractions were directly correlated with TOC, thus were dropped from the analysis). Correlation with percent sand increased with negative segment the of NMDS1 axis. Northing was correlated with increasing values along NMDS axis 2 Most (34) of the 44 priority stations (~77 percent) were relatively constant with respect to the TOC, grain size, and Northing. This fact is shown by the relatively tight cluster of stations near the origin (0,0 point) of the plot. The analyses indicate that the infauna assemblage at the majority of the priority stations is not strongly influenced by the correlations. The outlying stations in the NMDS plot (Figure 19) appear to be most influential in the resulting correlations and most strongly associated with TOC, sand, and Northing; there was no notable correlation with gravel, The NMDS analysis corroborates the patterns shown in the cluster analysis.

Spatial patterns were observed (Figure 16) but the range of variation in environmental factors (including water depth) across stations was not great enough to cause appreciable change in the infauna species composition within the Lease Area.

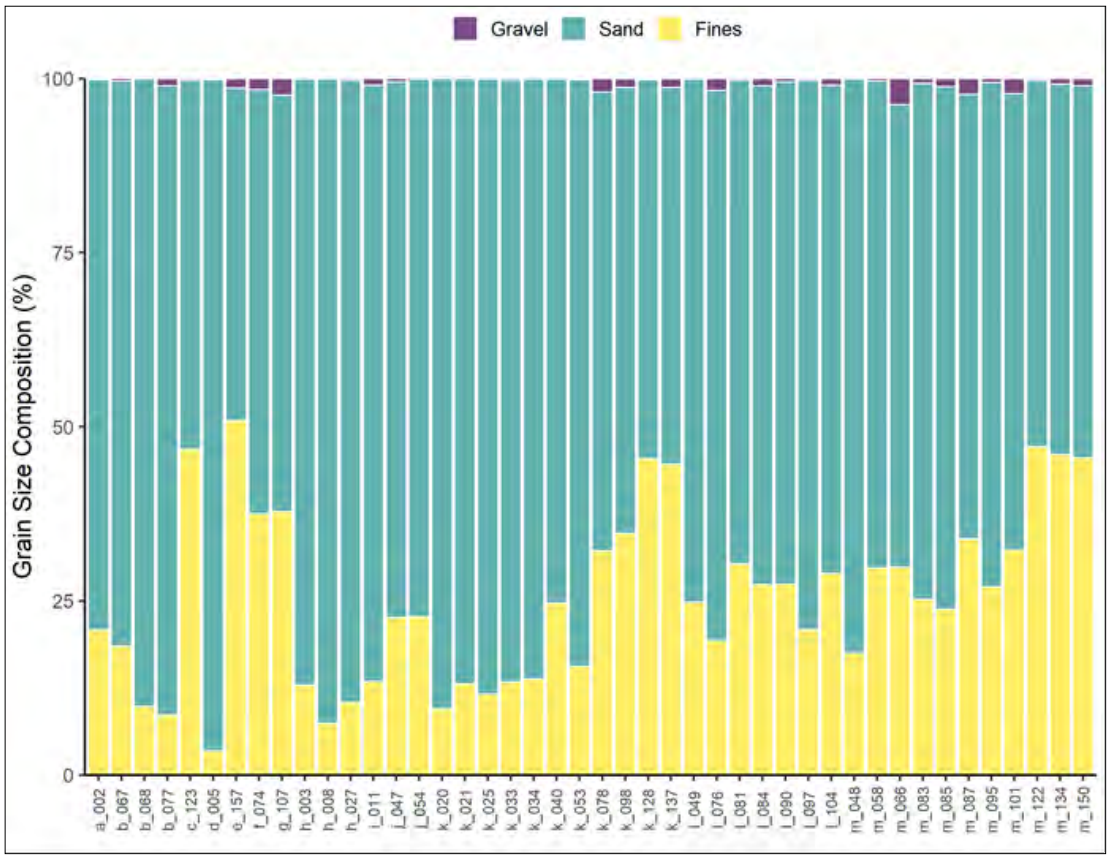

Figure 18 Grain size composition (percent Gravel, percent Sand, and percent Fines) for the priority foundation stations ordered by normal cluster analysis results and SIMPROF groups.

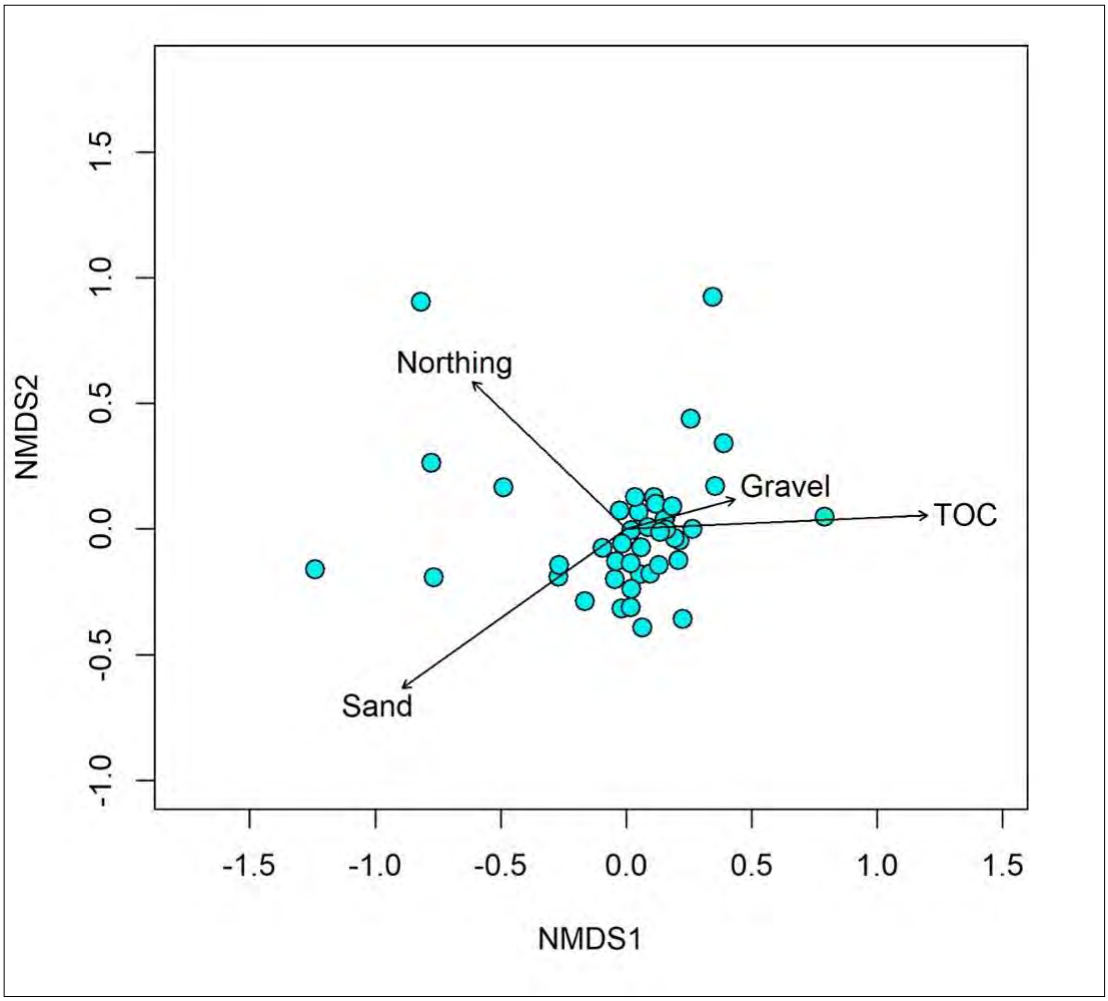

Figure 19 Non-Metric Multidimensional Scaling (NMDS) ordination biplot of the priority foundation stations with arrows representing correlation between NMDS axes and total organic carbon (TOC), percent sand, percent gravel, and Northing values for the samples.

5.5.5 | CMECS AND NMFS-MODIFIED CMECS SUBSTRATE COMPONENTS

When station grain size data from the 44 priority stations where macroinfaunal analysis was conducted are categorized according to CMECS unconsolidated substrate classification, 37 of the 44 priority stations (85 percent) were Slightly Muddy Gravelly Sand. Three samples were classified as Slightly Gravelly Sand, two samples as Slightly Gravelly Sandy Mud, and one sample each were classified as Silt and Sand (Table 25).

The NMFS substrate classification of the sampling stations is contrasted with CMECS in Table 25 for the 13 SIMPROF-derived station groups (a through m). This scheme identifies 38 samples as Muddy Sand, 4 as Sand, and two as Sandy Mud. Again, most of the stations within the Priority samples of the Lease Area were similar in substrate characteristics.

As stated in Section 5.2.1|, the CMECS biotic subclass represented by the 44 Priority stations from the Lease Area is Soft Bottom Fauna. The CMECS defined Biotic groups within the Soft Bottom Fauna subclass, consisted of Small Tube-Building Fauna (e.g., *Ampelisca vadorum*) and non-commercial Clam Beds (e.g., *Nucula proxima*).

Table 25 Classification of samples within cluster groups based on Coastal and Marine Ecological Classification Standard (CMECS) and National Marine Fisheries Service (NMFS) unconsolidated substrate designations.

Classification	SIMPROF groups													Total	Percent
	a	b	c	d	e	f	g	h	i	j	k	l	m		
CMECS															
Sand	--	1	--	--	--	--	--	--	--	--	--	--	--	1	2.3
Silty Sand	--	--	--	--	--	--	--	--	--	--	1	--	--	1	2.3
Slightly Gravelly Muddy Sand	1	1	1	--	--	1	1	2	1	2	10	7	10	37	84.1
Slightly Gravelly Sand	--	1	--	1	--	--	--	1	--	--	--	--	--	3	6.8
Slightly Gravelly Sandy Mud	--	--	--	--	1	--	--	--	--	--	--	--	1	2	4.5
NMFS															
Muddy Sand	1	1	1	--	--	1	1	2	1	2	11	7	10	38	86.4
Sand	--	2		1	--	--	--	1	--	--	--	--	--	4	9.1
Sandy Mud	--	--	--	--	1	--	--	--	--	--	--	--	1	2	4.5
Total Samples	**1**	**1**	**3**	**1**	**1**	**1**	**1**	**1**	**3**	**1**	**2**	**11**	**7**	**11**	**44**

"--" = empty cell.

5.6| POTENTIAL ECOSYSTEM SERVICES

Ecosystem services are the conditions and processes through which natural ecosystems, and the species within those systems, sustain and fulfill human life (Dailey, 1997). For the project area, these services are best summarized as indirect, and would consist of the benthic infauna and epifauna living in and on the soft sediments, that serve as prey for a host of different fish species and higher trophic invertebrates.

It is also worth noting that no hard bottom or rocky habitats or any listed species of concern were identified during benthic grabs and drop videos at the foundation stations.

Two stations (WTG-018 and WTG-139) contained greater than 5 percent gravel (mostly likely of biogenic origin) and were thus classified as *Substrate Group: Gravelly* in both the CMECS and NMFS-modified CMECS classification schemes. These stations with sediment with greater than 5 percent gravel are considered complex habitat per the definition in NMFS 2021. Both stations considered to be complex habitat had sediment with gravel marginally elevated above the 5 percent threshold with an appearance, based on seafloor topography and structural features, that contrasts with what should be considered complex habitat.

Review of the benthic video at these stations did not reveal any indication of complex surficial habitat, nor the presence of larger sediment components (i.e., gravel) (Image 10 and Image 11).



Image 10 Representative image of Station WTG-018 seabed substrate.



Image 11 Representative image of Station WTG-139 seabed substrate.

6 | CONCLUSIONS

The objectives of the benthic survey were to characterize the seabed within the Lease Area. In total, 157 foundation sampling stations were surveyed for assessing the aRPD, grain size, TOC, and infauna (noting that for the infauna, 44 of the 157 foundation stations were prioritized based upon review of HRG survey results and interpretation). Video data were collected to enable description of the habitat at the sampling stations. These data indicated the Lease Area to be characterized by soft bottom substrates supporting homogeneous infauna and epifauna assemblages. SPI and PV imagery were collected to further describe the habitats within the Lease Area. The complete SPI/PV report is provided as Attachment D| to this Benthic Report.

The collective imagery showed a seabed characterized by soft bottom substrate composed primarily of sand and finer particle sizes. No hard bottom substrates, sensitive seafloor communities, or species of concern were identified in the Lease Area. The video imagery showed a relatively diverse epifauna assemblage consisting of burrows, bioturbation, polychaete/amphipod tubes, and other visually conspicuous invertebrates and fishes. Numerous fish species were observed however there did not appear to be any distinct local distributional patterns. Several macrobenthos taxa were observed throughout the Lease Area. Sea stars (i.e., *Astropecten* spp. and *Asterias* sp.) were more abundant in the southern portion of the sampling area but were observed throughout the Lease Area. Sand dollars (probably *Echinarachnius parma*) were observed in the northwestern portion of the Lease Area. The most frequently observed macrobenthic crustacean was the Jonah crab (*Cancer borealis*), present at a majority of the stations.

The infauna assemblage documented in the study area was composed of crustaceans, mollusks, polychaetes, and other invertebrate groups expected for the region, water depth and sedimentary environment (e.g., Chang et al 1992; Theroux and Wigley, 1998). Ten of the 87 infauna species comprising the assemblages accounted for the 81 percent of the overall abundance. Distribution and abundance of these species dictated observed spatial patterns. Similarity analyses produced 13 groups of stations with statistically similar species composition and relative abundances. These groups indicated smaller scale patterns driven by the spatial distribution and abundance of the numerically dominant species and partially related to location (Northing) or grain size composition of sampling stations. Biomass of infaunal organisms (aggregated by taxonomic Class) was also evenly distributed over the 44 priority stations for Polychaeta, Malacostraca (crustaceans), and Bivalvia but did show clusters for Echinoidea (sand dollars) and sipunculid worms. Both clusters were related to the collection of a few animals with large biomass. In general, the composition, relative abundance, biomass, richness, evenness, and diversity of species did not vary greatly over the Lease Area.

Although some of the numerically dominant species such as the bivalve *Nucula proxima*, the polychaete worms *Levinsenia gracilis* and *Periploma papyratium*, have been identified as insensitive to contamination and potential indicators of degraded conditions (e.g., Chang et al., 1992 and Vitaliano et al., 2007), there was no evidence of pollution or degradation in the Lease Area. In addition, amphipods (*Ampelisca vadorum*) were abundant and other crustaceans which are less tolerant of nutrient enrichment or other forms of sediment pollution (Chang et al., 1992). No invasive species were found among the samples.

The Lease Area was categorized into two Geoform Level 2 classifications, Geologic-Flat or Biogenic-Burrows/Bioturbation and one Biotic subclass. Soft Sediment Fauna with further delineation into four biotic groups where applicable (Small Tube Building Fauna, Clam Bed, Sand Dollar, Bed, and Starfish Bed).

There were two stations with sediment with greater than 5 percent gravel, considered complex habitat according to the definition in NMFS 2021. However, based on visual seafloor features these stations were not classified as complex habitat.

7 | REFERENCES

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ATTACHMENT A | SAMPLE POSITION LIST

Attachment A Lease Area Sample Position List

											Second attempt			Third Attempt					
Station Name	**Data Collection Method**	**Latitude**	**Longitude**	**UTM_X coord WGS84**	**UTM_Y coord WGS84**	**Drop/Tow Start X**	**Drop/Tow Start Y**	**Drop Tow End X**	**Drop/Tow End Y**	**Grab X**	**Grab Y**	**SPI/PV 1 X**	**SPI/PV 1 Y**	**SPI/PV 2 X**	**SPI/PV 2 Y**	**SPI/PV 3 X**	**SPI/PV 3 Y**
IAC-###	Interarray Cable SPI/PV	See Attachment D, Addendum B for all SPI/PV locations															
WTG-001	Second Tier WTG Benthic Grab, video, SPI/PV	41.0044	-70.3949	382694.00	4540184.00	382698.79	4540242.95	382687.69	4540182.82	382690.57	4540183.39	382692.85	4540193.34	382704.64	4540184.59	382695.99	4540174.21
WTG-002	First Tier WTG Benthic Grab, video, SPI/PV	41.0047	-70.3729	384546.00	4540184.00	384606.86	4540257.00	384532.76	4540173.28	384547.83	4540179.78	384551.33	4540191.48	384543.90	4540197.28	384536.65	4540189.83
WTG-003	First Tier WTG Benthic Grab, video, SPI/PV	40.9875	-70.4165	380842.00	4538332.00	380874.67	4538388.66	380831.19	4538337.35	380844.52	4538329.68	380831.79	4538337.93	380850.38	4538329.57	380839.99	4538322.34
WTG-004	Second Tier WTG Benthic Grab, video, SPI/PV	40.9877	-70.3945	382694.00	4538332.00	382689.94	4538391.80	382677.34	4538325.95	382684.78	4538319.78	382677.59	4538330.29	382683.13	4538340.86	382692.42	4538345.37
WTG-005	First Tier WTG Benthic Grab, video, SPI/PV	40.9880	-70.3725	384546.00	4538332.00	384570.04	4538388.07	384524.58	4538293.55	384544.43	4538330.87	380848.77	4534631.39	380835.38	4534631.91	380835.86	4534621.71
WTG-006	Second Tier WTG Benthic Grab, video, SPI/PV	40.9705	-70.4382	378990.00	4536480.00	379044.05	4536508.89	378985.97	4536482.16	378993.52	4536481.92	378987.68	4536490.17	378980.83	4536477.72	378992.28	4536468.04
WTG-007	Third Tier WTG Benthic Grab, video, SPI/PV	40.9708	-70.4162	380842.00	4536480.00	380837.31	4536521.91	380869.90	4536465.19	380855.04	4536470.84	380840.96	4536464.88	380833.23	4536469.32	380826.71	4536477.11
WTG-008	First Tier WTG Benthic Grab, video, SPI/PV	40.9711	-70.3942	382694.00	4536480.00	382715.21	4536542.08	382675.45	4536433.04	382692.11	4536479.66	382697.08	4536486.23	382702.66	4536477.35	382693.80	4536471.70
WTG-009	Third Tier WTG Benthic Grab, video, SPI/PV	40.9713	-70.3722	384546.00	4536480.00	384497.22	4536488.06	384558.28	4536459.03	384554.76	4536469.68	384543.18	4536465.36	384534.69	4536471.05	384532.79	4536481.11
WTG-010	Third Tier WTG Benthic Grab, video, SPI/PV	40.9538	-70.4378	378990.00	4534628.00	378953.77	4534651.59	379000.63	4534594.54	378999.99	4534636.64	379005.59	4534626.84	379003.47	4534617.39	378994.91	4534612.36
WTG-011	First Tier WTG Benthic Grab, video, SPI/PV	40.9541	-70.4158	380842.00	4534628.00	380862.09	4534687.00	380830.60	4534599.85	380841.01	4534625.50	380848.77	4534631.39	380835.38	4534631.91	380835.86	4534621.71
WTG-012	Third Tier WTG Benthic Grab, video, SPI/PV	40.9544	-70.3938	382694.00	4534628.00	382673.86	4534673.32	382715.23	4534626.80	382707.34	4534623.60	382698.71	4534613.02	382688.63	4534614.08	382680.88	4534620.73
WTG-013	Third Tier WTG Benthic Grab, video, SPI/PV	40.9546	-70.3718	384546.00	4534628.00	384514.71	4534655.34	384570.10	4534634.85	384535.70	4534617.73	384544.25	4534610.62	384553.18	4534615.00	384560.56	4534621.69
WTG-014	Third Tier WTG Benthic Grab, video, SPI/PV	40.9536	-70.4598	377138.00	4534628.00	377159.63	4534667.62	377150.84	4534597.53	377126.53	4534631.29	377124.49	4534622.88	377128.96	4534614.18	377138.92	4534613.06
WTG-015	Second Tier WTG Benthic Grab, video, SPI/PV	40.9372	-70.4375	378990.00	4532776.00	379039.97	4532799.95	378982.52	4532780.81	378990.14	4532776.28	378990.15	4532787.89	378981.10	4532776.15	378989.68	4532766.13
WTG-016	Third Tier WTG Benthic Grab, video, SPI/PV	40.9374	-70.4155	380842.00	4532776.00	380797.70	4532784.91	380858.23	4532756.95	380846.57	4532787.95	380853.82	4532778.61	380854.82	4532769.24	380847.41	4532762.62
WTG-017	Second Tier WTG Benthic Grab, video, SPI/PV	40.9377	-70.3935	382694.00	4532776.00	382708.18	4532836.74	382706.92	4532753.55	382699.34	4532788.05	382708.04	4532781.25	382707.87	4532771.37	382702.03	4532763.43
WTG-018	Third Tier WTG Benthic Grab, video, SPI/PV	40.9380	-70.3715	384546.00	4532776.00	384502.89	4532773.41	384559.30	4532758.96	384545.43	4532788.13	384556.23	4532783.95	384561.15	4532775.37	384558.60	4532765.90
WTG-019	Third Tier WTG Benthic Grab, video, SPI/PV	40.9369	-70.4595	377138.00	4532776.00	377103.49	4532796.50	377151.26	4532747.73	377147.51	4532788.18	377151.25	4532775.16	377149.56	4532765.24	377142.81	4532759.23
WTG-020	First Tier WTG Benthic Grab, video, SPI/PV	40.9366	-70.4815	375286.00	4532776.00	375310.89	4532833.39	375265.92	4532748.87	375287.15	4532776.44	375291.03	4532789.34	375281.66	4532784.58	375279.55	4532776.98
WTG-021	First Tier WTG Benthic Grab, video, SPI/PV	40.9205	-70.4371	378990.00	4530924.00	379017.84	4530980.87	378964.45	4530875.65	378990.31	4530923.83	378987.56	4530934.81	378980.17	4530925.25	378984.05	4530912.12
WTG-022	Third Tier WTG Benthic Grab, video, SPI/PV	40.9208	-70.4151	380842.00	4530924.00	380812.27	4530891.61	380838.10	4530959.43	380841.33	4530936.54	380854.12	4530930.59	380856.18	4530921.14	380851.45	4530911.91
WTG-023	Third Tier WTG Benthic Grab, video, SPI/PV	40.9210	-70.3931	382694.00	4530924.00	382714.25	4530944.04	382694.67	4530883.06	382694.93	4530910.30	382682.93	4530915.81	382680.05	4530925.10	382683.60	4530933.80
WTG-024	Third Tier WTG Benthic Grab, video, SPI/PV	40.9213	-70.3711	384546.00	4530924.00	384588.11	4530937.90	384528.40	4530888.70	384538.68	4530911.17	384532.06	4530923.95	384536.57	4530932.94	384546.00	4530936.51
WTG-025	First Tier WTG Benthic Grab, video, SPI/PV	40.9215	-70.3492	386398.00	4530924.00	386437.27	4530982.23	386385.46	4530903.12	386399.32	4530923.74	386401.19	4530935.08	386389.80	4530927.76	386389.21	4530916.38
WTG-026	Third Tier WTG Benthic Grab, video, SPI/PV	40.9218	-70.3272	388250.00	4530924.00	388272.27	4530963.84	388245.30	4530843.46	388249.83	4530909.90	388237.12	4530916.67	388236.51	4530926.22	388240.29	4530936.11
WTG-027	First Tier WTG Benthic Grab, video, SPI/PV	40.9221	-70.3052	390102.00	4530924.00	390131.47	4530978.26	390071.13	4530881.51	390101.14	4530922.62	390102.49	4530932.36	390113.10	4530927.81	390112.78	4530917.36
WTG-028	Third Tier WTG Benthic Grab, video, SPI/PV	40.9202	-70.4591	377138.00	4530924.00	377139.63	4530890.25	377154.29	4530932.48	377139.78	4530922.37	377133.78	4530913.36	377126.62	4530919.51	377130.12	4530929.01
WTG-029	Second Tier WTG Benthic Grab, video, SPI/PV	40.9199	-70.4811	375286.00	4530924.00	375235.08	4530862.17	375270.96	4530936.21	375282.59	4530907.75	375294.13	4530912.86	375300.49	4530921.35	375297.59	4530930.76
WTG-030	Third Tier WTG Benthic Grab, video, SPI/PV	40.9196	-70.5031	373434.00	4530924.00	373398.09	4530900.30	373439.55	4530970.45	373431.37	4530911.52	373444.17	4530913.34	373447.43	4530922.21	373446.34	4530931.67
WTG-031	Third Tier WTG Benthic Grab, video, SPI/PV	40.9038	-70.4367	378990.00	4529072.00	378963.95	4529026.07	379006.68	4529073.79	378981.08	4529060.92	378978.60	4529072.11	378980.97	4529082.50	378989.91	4529084.31
WTG-032	Second Tier WTG Benthic Grab, video, SPI/PV	40.9041	-70.4148	380842.00	4529072.00	380896.86	4529097.97	380834.35	4529078.59	380843.79	4529074.60	380843.35	4529084.05	380852.13	4529071.31	380845.39	4529060.57
WTG-033	First Tier WTG Benthic Grab, video, SPI/PV	40.9043	-70.3928	382694.00	4529072.00	382710.35	4529130.71	382659.60	4528996.37	382692.41	4529073.76	382687.52	4529067.01	382681.95	4529075.81	382692.18	4529081.96
WTG-034	First Tier WTG Benthic Grab, video, SPI/PV	40.9046	-70.3708	384546.00	4529072.00	384573.29	4529122.69	384512.49	4529025.80	384543.91	4529072.70	384547.47	4529082.47	384554.71	4529072.67	384550.94	4529063.60
WTG-035	Third Tier WTG Benthic Grab, video, SPI/PV	40.9049	-70.3488	386398.00	4529072.00	386410.31	4529116.48	386376.89	4529058.38	386388.31	4529062.30	386384.58	4529073.52	386388.43	4529083.13	386398.11	4529085.93
WTG-036	Second Tier WTG Benthic Grab, video, SPI/PV	40.9051	-70.3268	388250.00	4529072.00	388251.31	4529138.72	388251.42	4529052.86	388251.44	4529071.53	388246.90	4529081.35	388239.14	4529074.37	388241.26	4529064.55
WTG-037	Second Tier WTG Benthic Grab, video, SPI/PV	40.9035	-70.4587	377138.00	4529072.00	377145.82	4529003.05	377143.95	4529072.44	377138.92	4529069.51	377150.05	4529069.49	377146.03	4529078.29	377136.47	4529078.75
WTG-038	Third Tier WTG Benthic Grab, video, SPI/PV	40.9032	-70.4807	375286.00	4529072.00	375323.38	4529050.13	375254.21	4529062.53	375298.70	4529079.28	375290.57	4529087.20	375281.88	4529085.64	375274.40	4529078.76
WTG-039	Second Tier WTG Benthic Grab, video, SPI/PV	40.9030	-70.5027	373434.00	4529072.00	373479.44	4529114.06	373410.07	4529067.15	373433.85	4529071.20	373441.35	4529078.70	373431.79	4529082.27	373424.88	4529075.46
WTG-040	First Tier WTG Benthic Grab, video, SPI/PV	40.8871	-70.4364	378990.00	4527220.00	379018.65	4527280.20	378953.54	4527164.40	378991.26	4527219.66	378984.02	4527226.06	378981.44	4527216.05	378992.00	4527212.25
WTG-041	Third Tier WTG Benthic Grab, video, SPI/PV	40.8874	-70.4144	380842.00	4527220.00	380795.13	4527207.38	380866.48	4527209.02	380830.51	4527220.51	380833.79	4527230.32	380844.03	4527231.87	380852.94	4527228.64
WTG-042	Second Tier WTG Benthic Grab, video, SPI/PV	40.8877	-70.3924	382694.00	4527220.00	382724.64	4527281.89	382684.04	4527212.45	382696.40	4527219.51	382696.53	4527232.38	382688.51	4527226.13	382685.01	4527216.79
WTG-043	Third Tier WTG Benthic Grab, video, SPI/PV	40.8879	-70.3705	384546.00	4527220.00	384544.69	4527279.03	384560.00	4527217.79	384556.94	4527210.39	384557.47	4527225.99	384550.47	4527232.91	384540.82	4527232.87
WTG-044	Third Tier WTG Benthic Grab, video, SPI/PV	40.8882	-70.3485	386398.00	4527220.00	386403.78	4527269.57	386389.94	4527202.93	386397.02	4527219.95	386393.89	4527231.25	386403.10	4527228.11	386411.24	4527222.64
WTG-045	Second Tier WTG Benthic Grab, video, SPI/PV	40.8868	-70.4584	377138.00	4527220.00	377199.16	4527239.71	377139.16	4527218.67	377142.05	4527223.79	377137.07	4527233.29	377130.99	4527219.23	377141.17	4527209.46
WTG-046	Third Tier WTG Benthic Grab, video, SPI/PV	40.8866	-70.4803	375286.00	4527220.00	375327.36	4527192.21	375276.38	4527204.18	375298.06	4527216.68	375289.81	4527206.27	375279.64	4527206.85	375273.92	4527215.08
WTG-047	First Tier WTG Benthic Grab, video, SPI/PV	40.8863	-70.5023	373434.00	4527220.00	373469.66	4527271.26	373369.97	4527135.25	373434.25	4527220.45	373432.86	4527229.78	373426.13	4527219.67	373435.17	4527210.47
WTG-048	First Tier WTG Benthic Grab, video, SPI/PV	40.8860	-70.5243	371582.00	4527220.00	371615.75	4527270.14	371540.19	4527168.35	371580.78	4527220.44	371582.97	4527226.90	371592.09	4527219.48	371585.77	4527211.52
WTG-049	First Tier WTG Benthic Grab, video, SPI/PV	40.8857	-70.5463	369730.00	4527220.00	369761.65	4527276.83	369694.54	4527164.10	369729.67	4527221.06	369731.36	4527232.30	369739.95	4527226.54	369742.45	4527217.14
WTG-050	Third Tier WTG Benthic Grab, video, SPI/PV	40.8704	-70.4360	378990.00	4525368.00	379043.71	4525370.01	378978.25	4525348.32	378982.88	4525354.22	378976.66	4525365.10	378979.55	4525375.59	378985.59	4525383.64
WTG-051	Second Tier WTG Benthic Grab, video, SPI/PV	40.8707	-70.4141	380842.00	4525368.00	380871.07	4525428.70	380800.26	4525320.04	380841.89	4525370.28	380843.44	4525381.59	380834.00	4525377.64	380832.34	4525367.69
WTG-052	Third Tier WTG Benthic Grab, video, SPI/PV	40.8710	-70.3921	382694.00	4525368.00	382641.31	4525365.13	382734.66	4525348.58	382707.76	4525364.85	382701.40	4525351.40	382691.34	4525353.50	382683.86	4525359.86
WTG-053	First Tier WTG Benthic Grab, video, SPI/PV	40.8712	-70.3701	384546.00	4525368.00	384582.78	4525419.22	384515.46	4525326.63	384543.34	4525368.50	384546.99	4525379.93	384555.77	4525370.86	384555.40	4525359.09
WTG-054	First Tier WTG Benthic Grab, video, SPI/PV	40.8702	-70.4580	377138.00	4525368.00	377160.24	4525428.08	377124.05	4525326.77	377138.68	4525366.43	377137.87	4525377.02	377146.89	4525372.20	377144.72	4525361.16
WTG-055	Third Tier WTG Benthic Grab, video, SPI/PV	40.8699	-70.4800	375286.00	4525368.00	375332.28	4525359.55	375284.07	4525349.61	375299.42	4525363.93	375287.99	4525356.46	375278.20	4525357.37	375273.96	4525366.38
WTG-056	Second Tier WTG Benthic Grab, video, SPI/PV	40.8696	-70.5019	373434.00	4525368.00	373482.01	4525409.24	373392.20	4525332.31	373435.16	4525368.00	373440.42	4525377.98	373431.13	4525375.23	373426.44	4525366.27
WTG-057	Third Tier WTG Benthic Grab, video, SPI/PV	40.8693	-70.5239	371582.00	4525368.00	371623.69	4525357.12	371575.24	4525352.08	371595.84	4525377.71	371585.81	4525383.05	371576.33	4525380.31	371568.67	4525373.85

Attachment A Lease Area Sample Position List

											Second attempt			Third Attempt			
Station Name	Data Collection Method	Latitude	Longitude	UTM_X coord WGS84	UTM_Y coord WGS84	Drop/Tow Start X	Drop/Tow Start Y	Drop Tow End X	Drop/Tow End Y	Grab X	Grab Y	SPI/PV 1 X	SPI/PV 1 Y	SPI/PV 2 X	SPI/PV 2 Y	SPI/PV 3 X	SPI/PV 3 Y
WTG-058	First Tier WTG Benthic Grab, video, SPI/PV	40.8690	-70.5459	369730.00	4525368.00	369757.08	4525423.32	369716.13	4525354.06	369728.93	4525369.50	369732.84	4525380.78	369739.05	4525372.62	369741.91	4525363.32
WTG-059	Second Tier WTG Benthic Grab, video, SPI/PV	40.8538	-70.4357	378990.00	4523516.00	378957.42	4523475.87	379006.66	4523533.10	378986.05	4523512.01	378980.69	4523503.01	378975.07	4523513.85	378979.18	4523523.13
WTG-060	Third Tier WTG Benthic Grab, video, SPI/PV	40.8540	-70.4137	380842.00	4523516.00	380842.77	4523476.90	380864.17	4523553.22	380849.23	4523528.61	380838.10	4523501.35	380829.44	4523507.64	380828.59	4523517.08
WTG-061	Second Tier WTG Benthic Grab, video, SPI/PV	40.8543	-70.3917	382694.00	4523516.00	382698.05	4523451.99	382690.97	4523541.49	382690.48	4523515.52	382696.23	4523506.37	382702.71	4523513.28	382701.09	4523523.06
WTG-062	Third Tier WTG Benthic Grab, video, SPI/PV	40.8535	-70.4576	377138.00	4523516.00	377121.27	4523556.94	377133.11	4523483.93	377150.06	4523521.15	377153.34	4523511.15	377146.48	4523503.50	377137.72	4523501.06
WTG-063	Third Tier WTG Benthic Grab, video, SPI/PV	40.8532	-70.4796	375286.00	4523516.00	375266.90	4523563.09	375276.26	4523498.47	375272.86	4523519.96	375272.65	4523509.98	375279.52	4523503.81	375290.22	4523503.55
WTG-064	Third Tier WTG Benthic Grab, video, SPI/PV	40.8529	-70.5016	373434.00	4523516.00	373408.89	4523550.31	373435.58	4523477.52	373447.27	4523524.18	373447.55	4523512.68	373444.43	4523504.52	373434.99	4523501.94
WTG-065	Second Tier WTG Benthic Grab, video, SPI/PV	40.8526	-70.5235	371582.00	4523516.00	371618.99	4523569.49	371555.79	4523510.42	371581.58	4523531.21	371569.41	4523527.70	371568.56	4523517.95	371569.36	4523507.76
WTG-066	First Tier WTG Benthic Grab, video, SPI/PV	40.8523	-70.5455	369730.00	4523516.00	369767.68	4523575.64	369719.26	4523498.56	369731.89	4523515.83	369732.96	4523528.17	369721.46	4523519.10	369726.24	4523509.57
WTG-067	First Tier WTG Benthic Grab, video, SPI/PV	40.8521	-70.5675	367878.00	4523516.00	367937.71	4523547.52	367852.98	4523497.88	367879.46	4523514.05	367871.77	4523506.50	367883.47	4523503.99	367874.06	4523499.50
WTG-068	First Tier WTG Benthic Grab, video, SPI/PV	40.8518	-70.5894	366026.00	4523516.00	366079.18	4523548.91	365964.25	4523471.27	366020.60	4523514.72	366039.10	4523513.18	366033.87	4523504.91	366024.09	4523503.56
WTG-069	Third Tier WTG Benthic Grab, video, SPI/PV	40.8371	-70.4353	378990.00	4521664.00	379012.39	4521625.45	378989.48	4521690.89	378985.35	4521674.89	378977.00	4521663.73	378978.80	4521653.36	378986.48	4521649.72
WTG-070	Third Tier WTG Benthic Grab, video, SPI/PV	40.8374	-70.4133	380842.00	4521664.00	380851.33	4521620.89	380844.55	4521711.29	380840.96	4521676.02	380852.57	4521671.84	380860.18	4521664.85	380852.53	4521657.11
WTG-071	Second Tier WTG Benthic Grab, video, SPI/PV	40.8368	-70.4573	377138.00	4521664.00	377148.13	4521602.57	377136.21	4521673.48	377136.03	4521659.82	377138.52	4521673.87	377147.51	4521672.04	377127.87	4521670.23
WTG-072	Second Tier WTG Benthic Grab, video, SPI/PV	40.8365	-70.4792	375286.00	4521664.00	375302.44	4521595.00	375289.13	4521685.30	375285.97	4521662.02	375299.08	4521661.69	375288.92	4521652.75	375278.03	4521658.96
WTG-073	Third Tier WTG Benthic Grab, video, SPI/PV	40.8363	-70.5012	373434.00	4521664.00	373444.17	4521697.66	373459.67	4521620.42	373419.45	4521666.77	373421.98	4521655.82	373431.30	4521651.66	373440.43	4521653.11
WTG-074	First Tier WTG Benthic Grab, video, SPI/PV	40.8360	-70.5231	371582.00	4521664.00	371629.99	4521706.86	371524.78	4521623.29	371581.56	4521664.80	371572.73	4521663.22	371582.62	4521654.36	371592.82	4521663.32
WTG-075	Second Tier WTG Benthic Grab, video, SPI/PV	40.8357	-70.5451	369730.00	4521664.00	369775.93	4521717.31	369714.69	4521666.62	369745.06	4521672.79	369743.72	4521663.64	369740.36	4521654.47	369731.31	4521650.87
WTG-076	First Tier WTG Benthic Grab, video, SPI/PV	40.8354	-70.5671	367878.00	4521664.00	367918.56	4521712.33	367831.45	4521614.37	367878.31	4521666.88	367869.71	4521661.35	367878.15	4521654.09	367887.70	4521662.83
WTG-077	First Tier WTG Benthic Grab, video, SPI/PV	40.8351	-70.5890	366026.00	4521664.00	366084.29	4521691.47	366080.23	4521688.73	366029.55	4521662.03	366024.24	4521674.34	366020.49	4521662.84	366026.74	4521654.44
WTG-078	First Tier WTG Benthic Grab, video, SPI/PV	40.8204	-70.4349	378990.00	4519812.00	379019.20	4519872.20	378965.07	4519759.51	378989.44	4519810.28	378990.57	4519819.49	378998.92	4519810.56	378990.85	4519801.40
WTG-079	Third Tier WTG Benthic Grab, video, SPI/PV	40.8201	-70.4569	377138.00	4519812.00	377180.13	4519844.83	377105.35	4519809.43	377124.08	4519809.20	377127.02	4519821.81	377136.22	4519825.96	377145.45	4519822.46
WTG-080	Third Tier WTG Benthic Grab, video, SPI/PV	40.8199	-70.4789	375286.00	4519812.00	375331.50	4519776.83	375269.19	4519802.81	375270.58	4519808.04	375273.91	4519822.64	375283.65	4519824.69	375293.61	4519823.85
WTG-081	First Tier WTG Benthic Grab, video, SPI/PV	40.8196	-70.5008	373434.00	4519812.00	373457.79	4519874.69	373415.22	4519762.82	373433.66	4519811.94	373434.31	4519820.66	373444.09	4519813.47	373437.15	4519803.07
WTG-082	Third Tier WTG Benthic Grab, video, SPI/PV	40.8193	-70.5228	371582.00	4519812.00	371576.77	4519836.87	371615.17	4519790.43	371594.17	4519802.55	371567.30	4519815.81	371570.64	4519806.35	371578.34	4519800.16
WTG-083	First Tier WTG Benthic Grab, video, SPI/PV	40.8190	-70.5447	369730.00	4519812.00	369761.04	4519870.70	369706.32	4519788.21	369730.94	4519812.09	369731.82	4519822.27	369723.33	4519818.12	369721.29	4519808.37
WTG-084	First Tier WTG Benthic Grab, video, SPI/PV	40.8187	-70.5667	367878.00	4519812.00	367915.05	4519867.22	367855.57	4519785.74	367880.97	4519812.48	367885.33	4519823.35	367875.61	4519820.35	367870.06	4519812.23
WTG-085	First Tier WTG Benthic Grab, video, SPI/PV	40.8184	-70.5886	366026.00	4519812.00	366065.43	4519866.87	366017.89	4519795.86	366028.30	4519809.98	366030.79	4519820.11	366021.60	4519816.50	366017.98	4519806.71
WTG-086	Second Tier WTG Benthic Grab, video, SPI/PV	40.8181	-70.6106	364174.00	4519812.00	364136.26	4519757.87	364181.43	4519805.19	364160.04	4519800.49	364188.20	4519810.35	364184.10	4519800.70	364171.48	4519798.36
WTG-087	First Tier WTG Benthic Grab, video, SPI/PV	40.8178	-70.6325	362322.00	4519812.00	362359.98	4519863.71	362310.53	4519791.82	362323.67	4519811.39	362325.79	4519822.72	362316.54	4519817.32	362314.56	4519807.78
WTG-088	Second Tier WTG Benthic Grab, video, SPI/PV	40.8035	-70.4565	377138.00	4517960.00	377152.85	4517897.93	377142.01	4517962.47	377140.45	4517958.26	377140.33	4517951.87	377129.36	4517957.14	377138.76	4517967.99
WTG-089	Third Tier WTG Benthic Grab, video, SPI/PV	40.8032	-70.4785	375286.00	4517960.00	375305.18	4517999.48	375255.90	4517936.42	375274.86	4517948.90	375271.93	4517961.26	375277.24	4517969.52	375286.51	4517973.48
WTG-090	First Tier WTG Benthic Grab, video, SPI/PV	40.8029	-70.5004	373434.00	4517960.00	373458.59	4518021.96	373408.71	4517901.24	373437.16	4517960.21	373432.60	4517967.18	373425.88	4517961.18	373434.49	4517952.22
WTG-091	Third Tier WTG Benthic Grab, video, SPI/PV	40.8026	-70.5224	371582.00	4517960.00	371553.73	4517993.99	371599.33	4517927.17	371592.44	4517947.25	371578.13	4517946.34	371570.57	4517952.67	371569.08	4517961.83
WTG-092	Second Tier WTG Benthic Grab, video, SPI/PV	40.8023	-70.5443	369730.00	4517960.00	369674.73	4517990.69	369756.39	4517957.33	369715.48	4517962.13	369719.06	4517950.06	369728.21	4517945.56	369737.30	4517948.51
WTG-093	Third Tier WTG Benthic Grab, video, SPI/PV	40.8020	-70.5663	367878.00	4517960.00	367829.29	4517965.63	367876.46	4517947.76	367870.22	4517949.51	367877.80	4517944.78	367888.14	4517946.33	367890.15	4517956.99
WTG-094	Second Tier WTG Benthic Grab, video, SPI/PV	40.8017	-70.5882	366026.00	4517960.00	366021.76	4517894.01	366008.92	4517958.78	366034.00	4517952.06	366013.47	4517963.14	366015.83	4517950.91	366026.52	4517945.55
WTG-095	First Tier WTG Benthic Grab, video, SPI/PV	40.8014	-70.6102	364174.00	4517960.00	364205.36	4518011.14	364151.52	4517940.03	364173.32	4517959.88	364175.11	4517971.52	364186.30	4517958.77	364175.03	4517951.04
WTG-096	Third Tier WTG Benthic Grab, video, SPI/PV	40.8011	-70.6321	362322.00	4517960.00	362251.92	4517954.61	362335.71	4517953.68	362320.30	4517958.18	362318.18	4517945.49	362311.89	4517952.77	362310.88	4517964.19
WTG-097	First Tier WTG Benthic Grab, video, SPI/PV	40.8008	-70.6541	360470.00	4517960.00	360503.30	4518009.44	360452.61	4517943.63	360471.45	4517959.00	360474.32	4517969.07	360464.93	4517966.22	360461.83	4517956.82
WTG-098	First Tier WTG Benthic Grab, video, SPI/PV	40.7865	-70.4781	375286.00	4516108.00	375318.23	4516163.13	375248.28	4516046.35	375285.07	4516108.50	375285.35	4516117.01	375294.11	4516108.05	375287.58	4516097.88
WTG-099	Third Tier WTG Benthic Grab, video, SPI/PV	40.7862	-70.5001	373434.00	4516108.00	373440.39	4516150.91	373423.32	4516088.98	373433.10	4516092.71	373443.21	4516097.36	373447.42	4516106.03	373447.04	4516116.44
WTG-100	Third Tier WTG Benthic Grab, video, SPI/PV	40.7859	-70.5220	371582.00	4516108.00	371571.98	4516079.91	371601.47	4516120.65	371572.50	4516098.99	371569.84	4516110.63	371574.29	4516119.25	371584.69	4516119.72
WTG-101	First Tier WTG Benthic Grab, video, SPI/PV	40.7856	-70.5439	369730.00	4516108.00	369765.31	4516160.78	369709.33	4516084.90	369728.72	4516106.75	369730.56	4516117.94	369721.87	4516112.82	369721.22	4516103.02
WTG-102	Third Tier WTG Benthic Grab, video, SPI/PV	40.7853	-70.5659	367878.00	4516108.00	367844.64	4516111.24	367889.59	4516124.46	367869.02	4516099.29	367879.66	4516095.18	367887.60	4516100.33	367891.45	4516108.76
WTG-103	Second Tier WTG Benthic Grab, video, SPI/PV	40.7850	-70.5878	366026.00	4516108.00	366076.20	4516138.30	366021.37	4516076.86	366024.51	4516094.18	366030.77	4516119.29	366039.96	4516110.27	366036.95	4516098.65
WTG-104	First Tier WTG Benthic Grab, video, SPI/PV	40.7847	-70.6098	364174.00	4516108.00	364208.60	4516163.29	364167.65	4516108.63	364173.73	4516108.02	364174.68	4516116.15	364182.58	4516106.78	364176.39	4516099.49
WTG-105	Second Tier WTG Benthic Grab, video, SPI/PV	40.7844	-70.6317	362322.00	4516108.00	362330.20	4516116.36	362216.01	4516161.28	362324.18	4516094.04	362310.07	4516117.42	362309.06	4516107.61	362312.49	4516097.87
WTG-106	Third Tier WTG Benthic Grab, video, SPI/PV	40.7841	-70.6536	360470.00	4516108.00	360441.34	4516040.09	360481.90	4516108.64	360478.21	4516117.48	360465.31	4516119.63	360456.72	4516113.69	360456.00	4516104.42
WTG-107	First Tier WTG Benthic Grab, video, SPI/PV	40.7838	-70.6756	358618.00	4516108.00	358652.15	4516158.04	358598.35	4516089.55	358615.59	4516109.75	358606.57	4516105.28	358619.15	4516099.88	358628.52	4516106.88
WTG-108	Second Tier WTG Benthic Grab, video, SPI/PV	40.7695	-70.4997	373434.00	4514256.00	373434.82	4514187.28	373423.78	4514251.36	373420.85	4514251.56	373429.20	4514244.76	373441.98	4514242.68	373444.76	4514250.45
WTG-109	Third Tier WTG Benthic Grab, video, SPI/PV	40.7693	-70.5216	371582.00	4514256.00	371553.27	4514234.49	371575.83	4514273.76	371576.75	4514240.37	371588.12	4514243.95	371592.67	4514251.94	371593.34	4514261.92
WTG-110	Third Tier WTG Benthic Grab, video, SPI/PV	40.7690	-70.5436	369730.00	4514256.00	369706.90	4514285.23	369721.59	4514242.66	369716.77	4514265.31	369716.44	4514254.52	369721.41	4514246.45	369729.83	4514241.89
WTG-111	Second Tier WTG Benthic Grab, video, SPI/PV	40.7687	-70.5655	367878.00	4514256.00	367898.77	4514192.96	367886.36	4514273.28	367881.44	4514267.48	367892.98	4514262.85	367894.49	4514253.58	367890.88	4514244.08
WTG-112	Third Tier WTG Benthic Grab, video, SPI/PV	40.7684	-70.5874	366026.00	4514256.00	366013.89	4514322.55	366014.46	4514272.90	366030.43	4514272.51	366039.04	4514264.53	366040.95	4514254.84	366035.97	4514246.14
WTG-113	Third Tier WTG Benthic Grab, video, SPI/PV	40.7681	-70.6094	364174.00	4514256.00	364136.61	4514307.09	364169.84	4514236.69	364177.89	4514242.69	364186.06	4514249.36	364187.52	4514259.21	364181.54	4514267.16
WTG-114	Third Tier WTG Benthic Grab, video, SPI/PV	40.7678	-70.6313	362322.00	4514256.00	362256.73	4514263.17	362328.94	4514222.90	362332.57	4514249.78	362333.65	4514261.77	362326.08	4514268.53	362313.89	4514261.37
WTG-115	Second Tier WTG Benthic Grab, video, SPI/PV	40.7674	-70.6532	360470.00	4514256.00	360406.33	4514274.03	360484.02	4514236.60	360453.86	4514253.41	360477.42	4514241.73	360467.58	4514241.91	360458.83	4514247.09

Attachment A Lease Area Sample Position List

Second attempt | Third Attempt

Station Name	Data Collection Method	Latitude	Longitude	UTM_X coord WGS84	UTM_Y coord WGS84	Drop/Tow Start X	Drop/Tow Start Y	Drop Tow End X	Drop/Tow End Y	Grab X	Grab Y	SPI/PV 1 X	SPI/PV 1 Y	SPI/PV 2 X	SPI/PV 2 Y	SPI/PV 3 X	SPI/PV 3 Y
WTG-116	Third Tier WTG Benthic Grab, video, SPI/PV	40.7671	-70.6752	358618.00	4514256.00	358579.47	4514214.71	358624.28	4514286.82	358616.26	4514268.50	358626.81	4514265.31	358620.78	4514244.19	358611.04	4514245.65
WTG-117	Third Tier WTG Benthic Grab, video, SPI/PV	40.7668	-70.6971	356766.00	4514256.00	356803.97	4514280.86	356779.64	4514242.89	356782.39	4514256.53	356754.34	4514257.12	356752.94	4514246.82	356760.72	4514273.80
WTG-118	Third Tier WTG Benthic Grab, video, SPI/PV	40.7526	-70.5212	371582.00	4512404.00	371549.04	4512372.58	371565.77	4512406.07	371580.02	4512388.47	371591.47	4512392.92	371595.30	4512401.23	371593.23	4512412.75
WTG-119	Second Tier WTG Benthic Grab, video, SPI/PV	40.7523	-70.5432	369730.00	4512404.00	369737.60	4512340.81	369725.79	4512423.19	369730.44	4512404.35	369740.43	4512400.00	369732.30	4512393.93	369723.61	4512398.99
WTG-120	Third Tier WTG Benthic Grab, video, SPI/PV	40.7520	-70.5651	367878.00	4512404.00	367910.13	4512422.58	367852.23	4512343.83	367879.86	4512390.08	367866.96	4512392.03	367864.16	4512401.59	367866.53	4512411.67
WTG-121	Third Tier WTG Benthic Grab, video, SPI/PV	40.7517	-70.5870	366026.00	4512404.00	366021.22	4512368.74	366058.49	4512405.79	366039.60	4512409.40	366040.99	4512397.01	366034.09	4512390.78	366025.65	4512386.93
WTG-122	First Tier WTG Benthic Grab, video, SPI/PV	40.7514	-70.6090	364174.00	4512404.00	364171.90	4512404.99	364112.36	4512330.09	364173.48	4512404.47	364173.22	4512411.45	364181.63	4512406.70	364180.41	4512398.10
WTG-123	First Tier WTG Benthic Grab, video, SPI/PV	40.7511	-70.6309	362322.00	4512404.00	362348.00	4512467.02	362310.43	4512405.42	362312.37	4512395.25	362308.09	4512405.85	362332.36	4512412.74	362337.43	4512403.29
WTG-124	Third Tier WTG Benthic Grab, video, SPI/PV	40.7508	-70.6528	360470.00	4512404.00	360409.08	4512382.89	360464.80	4512429.24	360458.04	4512394.82	360471.31	4512389.01	360479.14	4512393.08	360484.36	4512402.14
WTG-125	Third Tier WTG Benthic Grab, video, SPI/PV	40.7504	-70.6748	358618.00	4512404.00	358576.57	4512354.57	358614.13	4512414.48	358604.46	4512396.66	358603.43	4512407.92	358610.04	4512415.08	358620.40	4512416.54
WTG-126	Second Tier WTG Benthic Grab, video, SPI/PV	40.7501	-70.6967	356766.00	4512404.00	356764.30	4512381.61	356825.69	4512350.81	356770.29	4512393.06	356780.98	4512396.21	356776.33	4512387.00	356766.42	4512385.42
WTG-127	Third Tier WTG Benthic Grab, video, SPI/PV	40.7498	-70.7186	354914.00	4512404.00	354931.34	4512454.58	354906.53	4512416.34	354919.50	4512416.18	354906.71	4512417.20	354901.58	4512409.15	354900.62	4512400.42
WTG-128	First Tier WTG Benthic Grab, video, SPI/PV	40.7356	-70.5428	369730.00	4510552.00	369741.01	4510606.21	369704.57	4510534.35	369744.25	4510551.45	369737.88	4510563.12	369728.67	4510566.21	369719.63	4510560.75
WTG-129	Third Tier WTG Benthic Grab, video, SPI/PV	40.7353	-70.5647	367878.00	4510552.00	367921.55	4510590.27	367872.85	4510523.18	367879.57	4510536.25	367866.94	4510541.88	367863.27	4510550.77	367865.10	4510561.49
WTG-130	Third Tier WTG Benthic Grab, video, SPI/PV	40.7350	-70.5866	366026.00	4510552.00	366010.28	4510485.69	366036.29	4510557.35	366033.53	4510562.61	366040.79	4510551.74	366039.66	4510542.67	366031.42	4510537.33
WTG-131	Second Tier WTG Benthic Grab, video, SPI/PV	40.7347	-70.6086	364174.00	4510552.00	364238.59	4510563.37	364162.86	4510565.01	364162.35	4510556.67	364161.66	4510546.44	364171.12	4510538.49	364183.47	4510543.29
WTG-132	Third Tier WTG Benthic Grab, video, SPI/PV	40.7344	-70.6305	362322.00	4510552.00	362309.34	4510507.45	362365.91	4510623.43	362328.82	4510565.15	362336.92	4510553.28	362333.79	4510544.01	362326.63	4510536.65
WTG-133	Third Tier WTG Benthic Grab, video, SPI/PV	40.7341	-70.6524	360470.00	4510552.00	360447.78	4510497.25	360535.63	4510600.04	360483.13	4510558.24	360485.28	4510545.91	360478.25	4510538.04	360469.21	4510538.43
WTG-134	First Tier WTG Benthic Grab, video, SPI/PV	40.7338	-70.6743	358618.00	4510552.00	358648.99	4510610.87	358615.41	4510564.41	358613.95	4510544.36	358607.69	4510553.38	358616.32	4510561.46	358628.03	4510552.40
WTG-135	Third Tier WTG Benthic Grab, video, SPI/PV	40.7335	-70.6963	356766.00	4510552.00	356762.21	4510623.37	356754.17	4510581.69	356767.52	4510565.35	356750.55	4510562.26	356751.65	4510552.40	356755.52	4510543.18
WTG-136	Third Tier WTG Benthic Grab, video, SPI/PV	40.7186	-70.5643	367878.00	4508700.00	367900.80	4508753.37	367852.04	4508683.30	367868.98	4508689.28	367864.16	4508698.78	367866.09	4508709.17	367874.79	4508713.97
WTG-137	First Tier WTG Benthic Grab, video, SPI/PV	40.7183	-70.5862	366026.00	4508700.00	366028.52	4508766.87	366010.54	4508706.22	366033.94	4508713.65	366019.60	4508713.38	366013.95	4508705.25	366012.88	4508695.58
WTG-138	Third Tier WTG Benthic Grab, video, SPI/PV	40.7180	-70.6082	364174.00	4508700.00	364232.86	4508749.69	364193.60	4508698.58	364192.12	4508702.02	364189.30	4508692.37	364179.06	4508687.26	364170.34	4508687.04
WTG-139	Third Tier WTG Benthic Grab, video, SPI/PV	40.7177	-70.6301	362322.00	4508700.00	362295.69	4508753.53	362312.79	4508684.38	362323.01	4508686.89	362310.74	4508689.66	362307.57	4508700.57	362312.11	4508708.85
WTG-140	Second Tier WTG Benthic Grab, video, SPI/PV	40.7174	-70.6520	360470.00	4508700.00	360400.45	4508735.13	360462.24	4508688.60	360457.59	4508708.85	360455.30	4508696.10	360461.16	4508689.67	360470.07	4508685.07
WTG-141	Third Tier WTG Benthic Grab, video, SPI/PV	40.7171	-70.6739	358618.00	4508700.00	358582.12	4508751.86	358594.45	4508694.51	358608.57	4508689.98	358602.46	4508699.47	358606.27	4508707.98	358614.32	4508714.92
WTG-142	Second Tier WTG Benthic Grab, video, SPI/PV	40.7168	-70.6958	356766.00	4508700.00	356719.31	4508650.71	356770.74	4508685.16	356751.99	4508706.46	356770.57	4508681.18	356780.07	4508689.00	356780.77	4508698.15
WTG-143	Second Tier WTG Benthic Grab, video, SPI/PV	40.7017	-70.5858	366026.00	4506848.00	366086.63	4506879.94	366027.12	4506832.40	366041.16	4506843.74	366032.63	4506834.27	366022.54	4506834.12	366014.76	4506840.41
WTG-144	Third Tier WTG Benthic Grab, video, SPI/PV	40.7014	-70.6078	364174.00	4506848.00	364198.33	4506852.50	364175.77	4506830.42	364190.65	4506851.16	364184.50	4506842.59	364176.21	4506836.76	364166.73	4506837.32
WTG-145	Third Tier WTG Benthic Grab, video, SPI/PV	40.7010	-70.6297	362322.00	4506848.00	362313.58	4506920.47	362301.10	4506850.31	362330.39	4506833.02	362334.88	4506842.36	362335.99	4506853.53	362329.27	4506860.12
WTG-146	Second Tier WTG Benthic Grab, video, SPI/PV	40.7007	-70.6516	360470.00	4506848.00	360395.85	4506883.08	360459.09	4506824.89	360459.08	4506855.45	360455.79	4506841.39	360461.20	4506832.19	360470.52	4506831.30
WTG-147	Third Tier WTG Benthic Grab, video, SPI/PV	40.7004	-70.6735	358618.00	4506848.00	358568.64	4506891.79	358598.49	4506841.80	358604.34	4506840.31	358614.37	4506832.39	358623.63	4506836.71	358631.62	4506842.54
WTG-148 - new site	Third Tier WTG Benthic Grab, video, SPI/PV	40.7001	-70.6954	356766.00	4506848.00	356858.45	4506723.08	356841.27	4506677.43	356837.16	4506660.98	356836.97	4506672.24	356828.31	4506667.60	356828.13	4506657.27
WTG-149	Third Tier WTG Benthic Grab, video, SPI/PV	40.6847	-70.6074	364174.00	4504996.00	364142.67	4505060.10	364166.22	4504974.42	364163.40	4505001.85	364161.80	4504991.23	364168.45	4504984.62	364178.75	4504983.53
WTG-150	First Tier WTG Benthic Grab, video, SPI/PV	40.6844	-70.6293	362322.00	4504996.00	362285.85	4505053.20	362324.10	4504984.40	362323.13	4504996.59	362314.65	4505003.49	362324.39	4505004.14	362332.67	4504998.92
WTG-151	Third Tier WTG Benthic Grab, video, SPI/PV	40.6841	-70.6512	360470.00	4504996.00	360457.59	4504988.41	360506.20	4504936.23	360479.50	4504983.89	360468.66	4504982.83	360459.01	4504987.94	360457.55	4504998.75
WTG-152	Second Tier WTG Benthic Grab, video, SPI/PV	40.6837	-70.6731	358618.00	4504996.00	358576.50	4505041.07	358614.58	4504979.48	358600.96	4504997.57	358602.50	4504985.21	358612.85	4504982.84	358622.53	4504983.18
WTG-153	Third Tier WTG Benthic Grab, video, SPI/PV	40.6834	-70.6950	356766.00	4504996.00	356816.31	4504958.71	356773.88	4505002.95	356776.77	4505001.72	356780.30	4504993.66	356776.83	4504985.42	356767.57	4504980.85
WTG-154	Third Tier WTG Benthic Grab, video, SPI/PV	40.6677	-70.6289	362322.00	4503144.00	362306.04	4503201.34	362345.22	4503131.26	362324.97	4503159.31	362329.84	4503152.12	362336.49	4503143.78	362331.84	4503135.42
WTG-155	Second Tier WTG Benthic Grab, video, SPI/PV	40.6674	-70.6508	360470.00	4503144.00	360536.86	4503163.58	360483.91	4503131.80	360487.61	4503144.20	360482.88	4503134.00	360473.78	4503129.91	360463.69	4503130.01
WTG-156	Third Tier WTG Benthic Grab, video, SPI/PV	40.6671	-70.6727	358618.00	4503144.00	358678.31	4503102.03	358636.84	4503142.39	358628.78	4503134.01	358616.19	4503128.35	358606.70	4503134.04	358605.00	4503143.39
WTG-157	First Tier WTG Benthic Grab, video, SPI/PV	40.6667	-70.6946	356766.00	4503144.00	356837.16	4503190.98	356790.96	4503132.01	356791.30	4503144.10	356787.66	4503131.01	356781.15	4503123.13	356771.82	4503120.49

ATTACHMENT B | SEDIMENT SAMPLING ANALYSIS RESULTS - LABORATORY REPORTS

ANALYTICAL REPORT

Lab Number:	L2140919
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	08/18/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

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Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140919
Report Date: 08/18/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140919-01	3664|2021|WTG|002|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/17/21 00:00	07/30/21
L2140919-02	3664|2021|WTG|003|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-03	3664|2021|WTG|005|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-04	3664|2021|WTG|008|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-05	3664|2021|WTG|011|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-06	3664|2021|WTG|020|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-07	3664|2021|WTG|020|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-08	3664|2021|WTG|021|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-09	3664|2021|WTG|025|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-10	3664|2021|WTG|027|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140919-11	3664|2021|WTG|033|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-12	3664|2021|WTG|034|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-13	3664|2021|WTG|040|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-14	3664|2021|WTG|040|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-15	3664|2021|WTG|047|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-16	3664|2021|WTG|048|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-17	3664|2021|WTG|049|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140919-18	3664|2021|WTG|053|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-19	3664|2021|WTG|054|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140919-20	3664|2021|WTG|058|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140919
Project Number:	3664	**Report Date:**	08/18/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140919
Project Number:	3664	**Report Date:**	08/18/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2140919-01 through -20: The samples were frozen upon receipt in order to arrest the holding time.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Susan E O'Neil Susan O' Neil

Title: Technical Director/Representative Date: 08/18/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-01
Client ID: 3664|2021|WTG|002|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/17/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.118		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.136		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.127		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-02
Client ID: 3664|2021|WTG|003|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.514		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.492		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.503		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-03
Client ID: 3664|2021|WTG|005|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.132		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.134		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.133		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-04
Client ID: 3664|2021|WTG|008|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.269		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.267		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.268		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-05
Client ID: 3664|2021|WTG|011|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.637		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.499		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.568		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-06
Client ID: 3664|2021|WTG|020|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.361		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.351		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.356		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-07
Client ID: 3664|2021|WTG|020|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.279		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.343		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.311		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-08
Client ID: 3664|2021|WTG|021|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.431		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.481		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.456		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-09
Client ID: 3664|2021|WTG|025|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.402		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.401		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.402		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-10
Client ID: 3664|2021|WTG|027|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.303		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.272		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.288		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-11
Client ID: 3664|2021|WTG|033|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.435		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.499		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.467		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-12
Client ID: 3664|2021|WTG|034|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.456		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	0.568		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	0.512		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-13
Client ID: 3664|2021|WTG|040|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.632		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.645		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.638		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-14
Client ID: 3664|2021|WTG|040|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.670		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.694		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.682		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-15
Client ID: 3664|2021|WTG|047|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.608		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.618		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.613		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-16
Client ID: 3664|2021|WTG|048|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.509		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.601		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.555		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-17
Client ID: 3664|2021|WTG|049|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.638		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.613		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.626		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-18
Client ID: 3664|2021|WTG|053|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.523		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.470		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.496		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-19
Client ID: 3664|2021|WTG|054|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.597		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.587		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.592		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

SAMPLE RESULTS

Lab ID: L2140919-20
Client ID: 3664|2021|WTG|058|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.811		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	0.798		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	0.804		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140919
Report Date: 08/18/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-12 Batch: WG1536184-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/17/21 10:35	1,9060A	SM
Total Organic Carbon - Mansfield Lab for sample(s): 13-20 Batch: WG1536552-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/17/21 10:38	1,9060A	SM

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140919
Report Date: 08/18/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-12 Batch: WG1536184-2								
Total Organic Carbon (Rep1)	109		-		75-125	-		25
Total Organic Carbon (Rep2)	116		-		75-125	-		25
Total Organic Carbon (Average)	112		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 13-20 Batch: WG1536552-2								
Total Organic Carbon (Rep1)	120		-		75-125	-		25
Total Organic Carbon (Rep2)	125		-		75-125	-		25
Total Organic Carbon (Average)	122		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140919
Report Date: 08/18/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG1536184-4 WG1536184-5 QC Sample: L2137871-08 Client ID: MS Sample												
Total Organic Carbon (Rep1)	0.306	1.12	1.42	99		1.40	96		75-125	1		25
Total Organic Carbon (Rep2)	0.230	1.18	1.41	100		1.71	106		75-125	19		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140919
Report Date: 08/18/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG1536184-3 QC Sample: L2137871-08 Client ID: DUP Sample						
Total Organic Carbon (Rep1)	0.306	0.218	%	**34**	Q	25
Total Organic Carbon (Rep2)	0.230	0.206	%	11		25
Total Organic Carbon (Average)	0.268	0.212	%	23		25

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140919
Report Date: 08/18/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent
B	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140919-01A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-02A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-03A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-04A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-05A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-06A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-07A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-08A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-09A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-10A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-11A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-12A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-13A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-14A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-15A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-16A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-17A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-18A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-19A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140919-20A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140919
Project Number:	3664	**Report Date:**	08/18/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140919
Project Number:	3664	**Report Date:**	08/18/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140919
Project Number:	3664	**Report Date:**	08/18/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140919
Project Number:	3664	**Report Date:**	08/18/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140919

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|002|Sed|TOC|01	7/17/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -01
3664|2021|WTG|003|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -02
3664|2021|WTG|005|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -03
3664|2021|WTG|008|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -04
3664|2021|WTG|011|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -05
3664|2021|WTG|020|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -06
3664|2021|WTG|020|Sed|TOC|02	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate -07
3664|2021|WTG|021|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -08
3664|2021|WTG|025|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -09
3664|2021|WTG|027|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -10
3664|2021|WTG|033|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -11
3664|2021|WTG|034|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -12
3664|2021|WTG|040|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -13
3664|2021|WTG|040|Sed|TOC|02	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate -14
3664|2021|WTG|047|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -15
3664|2021|WTG|048|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -16
3664|2021|WTG|049|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -17
3664|2021|WTG|053|Sed|TOC|01	7/18/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -18
3664|2021|WTG|054|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -19

Shipper: FEDEX UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21 RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hudson 7/30/21 1250 DATE/TIME: 7/30/21 RECEIVED BY: T. Hudson Harrison AMC DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

The chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable at the time of sample receipt. Note: Initials are not acceptable.

AMC1 - AA2 7/30/21 12:50

7/30/21

L21-0919

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|058|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|066|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|067|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|068|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|074|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|076|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|077|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|078|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|081|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|083|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|084|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|085|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|087|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|090|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|090|Sed|TOC|02	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate
3664|2021|WTG|095|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|097|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|098|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|101|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1

Shipper: FEDEX UPS USPS DHL (COURIER)

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21

RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hudson 7/30/21 1250 DATE/TIME: 7/30/21

RECEIVED BY: T. Hudson Henderson AMC DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

a.AC1 - AAL 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140920
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	08/26/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140920
Report Date: 08/26/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140920-01	3664|2021|WTG|066|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140920-02	3664|2021|WTG|067|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140920-03	3664|2021|WTG|068|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140920-04	3664|2021|WTG|074|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-05	3664|2021|WTG|076|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-06	3664|2021|WTG|077|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-07	3664|2021|WTG|078|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-08	3664|2021|WTG|081|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-09	3664|2021|WTG|083|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-10	3664|2021|WTG|084|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-11	3664|2021|WTG|085|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-12	3664|2021|WTG|087|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-13	3664|2021|WTG|090|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-14	3664|2021|WTG|090|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-15	3664|2021|WTG|095|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140920-16	3664|2021|WTG|097|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-17	3664|2021|WTG|098|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140920-18	3664|2021|WTG|101|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140920-19	3664|2021|WTG|104|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140920-20	3664|2021|WTG|107|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140920
Project Number:	3664	**Report Date:**	08/26/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140920
Project Number:	3664	**Report Date:**	08/26/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2140920-01 through -20 was frozen upon receipt in order to arrest the holding time.

The WG1539087-4/-5 MSD RPD (Rep2 - 27%), performed on L2140920-16, is outside the acceptance criteria of 25%. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 08/26/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-01
Client ID: 3664|2021|WTG|066|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.832		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.984		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.908		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-02
Client ID: 3664|2021|WTG|067|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.162		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.152		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.157		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-03
Client ID: 3664|2021|WTG|068|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.069		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.059		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.064		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-04
Client ID: 3664|2021|WTG|074|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.630		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.483		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.556		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-05
Client ID: 3664|2021|WTG|076|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.515		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.552		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.534		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-06
Client ID: 3664|2021|WTG|077|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.075		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.059		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.067		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-07
Client ID: 3664|2021|WTG|078|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.668		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.672		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.670		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-08
Client ID: 3664|2021|WTG|081|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.512		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.385		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.448		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-09
Client ID: 3664|2021|WTG|083|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.501		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.428		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.464		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-10
Client ID: 3664|2021|WTG|084|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.522		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.648		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.585		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-11
Client ID: 3664|2021|WTG|085|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.543		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.420		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.482		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-12
Client ID: 3664|2021|WTG|087|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.642		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.775		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.708		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-13
Client ID: 3664|2021|WTG|090|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.557		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.558		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.558		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-14
Client ID: 3664|2021|WTG|090|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.589		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.544		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.566		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-15
Client ID: 3664|2021|WTG|095|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.473		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	0.435		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	0.454		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-16
Client ID: 3664|2021|WTG|097|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.498		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Rep2)	0.402		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Average)	0.450		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-17
Client ID: 3664|2021|WTG|098|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.681		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Rep2)	0.618		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Average)	0.650		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-18
Client ID: 3664|2021|WTG|101|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.637		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Rep2)	0.696		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Average)	0.666		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-19
Client ID: 3664|2021|WTG|104|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.521		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Rep2)	0.487		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Average)	0.504		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

SAMPLE RESULTS

Lab ID: L2140920-20
Client ID: 3664|2021|WTG|107|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.728		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Rep2)	0.725		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Average)	0.726		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140920
Report Date: 08/26/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-15 Batch: WG1538640-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/24/21 08:44	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 16-20 Batch: WG1539087-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/25/21 08:25	1,9060A	SP

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140920
Report Date: 08/26/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-15 Batch: WG1538640-2								
Total Organic Carbon (Rep1)	100		-		75-125	-		25
Total Organic Carbon (Rep2)	109		-		75-125	-		25
Total Organic Carbon (Average)	104		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 16-20 Batch: WG1539087-2								
Total Organic Carbon (Rep1)	104		-		75-125	-		25
Total Organic Carbon (Rep2)	114		-		75-125	-		25
Total Organic Carbon (Average)	109		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140920
Report Date: 08/26/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1538640-4 QC Sample: L2136019-11 Client ID: MS Sample												
Total Organic Carbon (Rep1)	6.20	0.961	6.93	76		-	-		75-125	-		25
Total Organic Carbon (Rep2)	6.27	0.75	7.17	120		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1538640-5 QC Sample: L2140920-01 Client ID: 3664|2021|WTG|066|SED|TOC|01												
Total Organic Carbon (Rep1)	0.832	0.584	1.55	123		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.984	0.772	1.68	90		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 16-20 QC Batch ID: WG1539087-4 WG1539087-5 QC Sample: L2140920-16 Client ID: 3664|2021|WTG|097|SED|TOC|01												
Total Organic Carbon (Rep1)	0.498	0.914	1.30	88		1.47	93		75-125	12		25
Total Organic Carbon (Rep2)	0.402	1.21	1.48	89		1.13	92		75-125	**27**	Q	25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140920
Report Date: 08/26/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-15 QC Batch ID: WG1538640-3 QC Sample: L2136019-11 Client ID: DUP Sample						
Total Organic Carbon (Rep1)	6.20	6.04	%	3		25
Total Organic Carbon (Rep2)	6.27	6.15	%	2		25
Total Organic Carbon (Average)	6.23	6.10	%	2		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 16-20 QC Batch ID: WG1539087-3 QC Sample: L2140920-16 Client ID: 3664|2021|WTG|097|SED|TOC|01						
Total Organic Carbon (Rep1)	0.498	0.386	%	25		25
Total Organic Carbon (Rep2)	0.402	0.431	%	7		25
Total Organic Carbon (Average)	0.450	0.408	%	10		25

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140920
Report Date: 08/26/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent
B	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140920-01A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-02A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-03A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-04A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-05A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-06A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-07A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-08A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-09A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-10A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-11A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-12A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-13A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-14A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-15A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-16A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-17A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-18A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-19A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140920-20A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140920
Project Number:	3664	**Report Date:**	08/26/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140920
Project Number:	3664	**Report Date:**	08/26/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140920
Project Number:	3664	**Report Date:**	08/26/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	BEACON WIND	**Lab Number:**	L2140920
Project Number:	3664	**Report Date:**	08/26/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:08262116:48

7/30/21

L2140920

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|058|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|066|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -01
3664|2021|WTG|067|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -02
3664|2021|WTG|068|Sed|TOC|01	7/19/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -03
3664|2021|WTG|074|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -04
3664|2021|WTG|076|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -05
3664|2021|WTG|077|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -06
3664|2021|WTG|078|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -07
3664|2021|WTG|081|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -08
3664|2021|WTG|083|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -09
3664|2021|WTG|084|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -10
3664|2021|WTG|085|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -11
3664|2021|WTG|087|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -12
3664|2021|WTG|090|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -13
3664|2021|WTG|090|Sed|TOC|02	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate -14
3664|2021|WTG|095|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -15
3664|2021|WTG|097|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -16
3664|2021|WTG|098|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -17
3664|2021|WTG|101|Sed|TOC|01	7/20/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -18

Shipper: FEDEX UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

REUNQUISHED BY: [signature] DATE/TIME: 7/29/21 RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

REUNQUISHED BY: [signature] DATE/TIME: 7/30/21 RECEIVED BY: T. Huddleson AAL DATE/TIME: 7/30/21 1135

T. Huddleson 7/30/21 1250

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

ANC - AAL 7/30/21 1250

Serial_No:08262116:48

7/30/21

L2140920

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|104|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -19
3664|2021|WTG|107|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -20
3664|2021|WTG|122|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|123|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|128|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|134|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|137|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|150|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|150|Sed|TOC|02	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate
3664|2021|WTG|157|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|157|Sed|TOC|02	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2; QC duplicate
3664|2021|WTG|002|Sed|GS|01	7/17/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|003|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|005|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|008|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|011|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|020|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|020|Sed|GS|02	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|021|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
						Priority; Cooler #1

Shipper: FedEx UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21

RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hewitt 7/30/21 1252 DATE/TIME: 7/30/21

RECEIVED BY: Anderson MM DATE/TIME: 7/30/21 1350

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-259-1626

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AK1 - AAC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140921
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	08/30/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140921
Report Date: 08/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140921-01	3664|2021|WTG|122|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-02	3664|2021|WTG|123|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-03	3664|2021|WTG|128|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-04	3664|2021|WTG|134|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-05	3664|2021|WTG|137|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-06	3664|2021|WTG|150|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140921-07	3664|2021|WTG|150|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140921-08	3664|2021|WTG|157|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-09	3664|2021|WTG|157|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140921-10	3664|2021|WTG|001|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-11	3664|2021|WTG|004|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-12	3664|2021|WTG|006|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-13	3664|2021|WTG|015|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-14	3664|2021|WTG|017|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-15	3664|2021|WTG|029|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-16	3664|2021|WTG|032|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-17	3664|2021|WTG|036|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140921-18	3664|2021|WTG|037|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-19	3664|2021|WTG|039|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140921-20	3664|2021|WTG|042|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140921
Project Number:	3664	**Report Date:**	08/30/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140921
Project Number:	3664	**Report Date:**	08/30/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2140921-01 through -20 was frozen upon receipt in order to arrest the holding time.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 08/30/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-01
Client ID: 3664|2021|WTG|122|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.958		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.854		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.906		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-02
Client ID: 3664|2021|WTG|123|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.763		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.798		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.780		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-03
Client ID: 3664|2021|WTG|128|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.783		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.675		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.729		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-04
Client ID: 3664|2021|WTG|134|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.949		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.880		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.914		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-05
Client ID: 3664|2021|WTG|137|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.790		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.819		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.804		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-06
Client ID: 3664|2021|WTG|150|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.933		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.882		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.908		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-07
Client ID: 3664|2021|WTG|150|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.879		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.959		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.919		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-08
Client ID: 3664|2021|WTG|157|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.05		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	1.12		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	1.08		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-09
Client ID: 3664|2021|WTG|157|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.902		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.980		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.941		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-10
Client ID: 3664|2021|WTG|001|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.273		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.228		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.250		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-11
Client ID: 3664|2021|WTG|004|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.336		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.284		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.310		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-12
Client ID: 3664|2021|WTG|006|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.312		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.286		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.299		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-13
Client ID: 3664|2021|WTG|015|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.262		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.276		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.269		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-14
Client ID: 3664|2021|WTG|017|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.508		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.537		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.522		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-15
Client ID: 3664|2021|WTG|029|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.589		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.566		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.578		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-16
Client ID: 3664|2021|WTG|032|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.475		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.477		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.476		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-17
Client ID: 3664|2021|WTG|036|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.399		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.442		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.420		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-18
Client ID: 3664|2021|WTG|037|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.453		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.513		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.483		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-19
Client ID: 3664|2021|WTG|039|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.728		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.730		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.729		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140921-20
Client ID: 3664|2021|WTG|042|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.634		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	0.704		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	0.669		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140921
Report Date: 08/30/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-20 Batch: WG1539071-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/27/21 10:40	1,9060A	SP

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140921
Report Date: 08/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-20 Batch: WG1539071-2								
Total Organic Carbon (Rep1)	110		-		75-125	-		25
Total Organic Carbon (Rep2)	111		-		75-125	-		25
Total Organic Carbon (Average)	110		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140921
Report Date: 08/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-20 3664|2021|WTG|122|SED|TOC|01	QC Batch ID: WG1539071-4					QC Sample: L2140921-01			Client ID:			
Total Organic Carbon (Rep1)	0.958	0.907	2.01	116		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.854	0.809	1.73	108		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-20 3664|2021|WTG|128|SED|TOC|01	QC Batch ID: WG1539071-5					QC Sample: L2140921-03			Client ID:			
Total Organic Carbon (Rep1)	0.783	0.692	1.34	80		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.675	0.814	1.48	99		-	-		75-125	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140921
Report Date: 08/30/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1539071-3 QC Sample: L2140921-01 Client ID: 3664|2021|WTG|122|SED|TOC|01						
Total Organic Carbon (Rep1)	0.958	0.794	%	19		25
Total Organic Carbon (Rep2)	0.854	0.886	%	4		25
Total Organic Carbon (Average)	0.906	0.840	%	8		25

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140921
Report Date: 08/30/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent
B	Absent
C	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140921-01A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-02A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-03A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-04A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-05A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-06A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-07A	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-08A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-09A	Glass 120ml/4oz unpreserved	B	NA		3.3	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-10A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-11A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-12A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-13A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-14A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-15A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-16A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-17A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-18A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-19A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140921-20A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140921
Project Number:	3664	**Report Date:**	08/30/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140921
Project Number:	3664	**Report Date:**	08/30/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140921
Project Number:	3664	**Report Date:**	08/30/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140921
Project Number:	3664	**Report Date:**	08/30/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:08302116:29

7/30/21

L2140921

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|104|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|107|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|122|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -01
3664|2021|WTG|123|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -02
3664|2021|WTG|128|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -03
3664|2021|WTG|134|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -04
3664|2021|WTG|137|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -05
3664|2021|WTG|150|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1 -06
3664|2021|WTG|150|Sed|TOC|02	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate -07
3664|2021|WTG|157|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2 -08
3664|2021|WTG|157|Sed|TOC|02	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2; QC duplicate -09
3664|2021|WTG|002|Sed|GS|01	7/17/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|003|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|005|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|008|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|011|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|020|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|020|Sed|GS|02	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|021|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1

Shipper: ~~FedEx~~ UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact / ~~Broken: leaking~~

Container Temperature:

RELINQUISHED BY: DL DATE/TIME: 7/29/21 RECEIVED BY: DATE/TIME: 7/25/21 1600

RELINQUISHED BY: T. Heath 7/30/21 1250 DATE/TIME: 7/30/21 RECEIVED BY: Anderson MMT DATE/TIME: 7/30/21 1350

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms when applicable at the time of sample receipt. Note: Initials are not acceptable.

AAC - AAC 7/30/21 1250

7/30/21

L2140921

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|150|Sed|GS|02	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|157|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|157|Sed|GS|02	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|001|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -10
3664|2021|WTG|004|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -11
3664|2021|WTG|006|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -12
3664|2021|WTG|015|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -13
3664|2021|WTG|017|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -14
3664|2021|WTG|029|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -15
3664|2021|WTG|032|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -16
3664|2021|WTG|036|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -17
3664|2021|WTG|037|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -18
3664|2021|WTG|039|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -19
3664|2021|WTG|042|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -20
3664|2021|WTG|045|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|051|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|056|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|059|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3

Shipper: FEDEX UPS USPS DHL

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21

RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hubbuch 7/30/21 1250 DATE/TIME: 7/30/21

RECEIVED BY: _____ DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed here been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weigh as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable. at the time of sample receipt. Note: Initials are not acceptable.

ARC1 - AAc 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140922
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	08/30/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140922
Report Date: 08/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140922-01	3664|2021|WTG|045|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140922-02	3664|2021|WTG|051|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-03	3664|2021|WTG|056|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140922-04	3664|2021|WTG|059|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140922-05	3664|2021|WTG|061|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-06	3664|2021|WTG|065|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140922-07	3664|2021|WTG|071|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-08	3664|2021|WTG|072|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-09	3664|2021|WTG|075|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140922-10	3664|2021|WTG|086|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140922-11	3664|2021|WTG|088|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-12	3664|2021|WTG|092|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140922-13	3664|2021|WTG|094|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140922-14	3664|2021|WTG|103|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140922-15	3664|2021|WTG|105|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140922-16	3664|2021|WTG|108|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-17	3664|2021|WTG|111|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140922-18	3664|2021|WTG|115|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140922-19	3664|2021|WTG|119|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140922-20	3664|2021|WTG|126|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140922
Project Number:	3664	**Report Date:**	08/30/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140922
Project Number:	3664	**Report Date:**	08/30/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2140922-01 through -20 was frozen upon receipt in order to arrest the holding time.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 08/30/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-01
Client ID: 3664|2021|WTG|045|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.499		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.467		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.483		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-02
Client ID: 3664|2021|WTG|051|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.500		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.533		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.516		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-03
Client ID: 3664|2021|WTG|056|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.740		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.753		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.746		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-04
Client ID: 3664|2021|WTG|059|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.630		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.596		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.613		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-05
Client ID: 3664|2021|WTG|061|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.769		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.790		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.780		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-06
Client ID: 3664|2021|WTG|065|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.672		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.698		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.685		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-07
Client ID: 3664|2021|WTG|071|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.794		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.766		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.780		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-08
Client ID: 3664|2021|WTG|072|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.864		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.850		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.857		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-09
Client ID: 3664|2021|WTG|075|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.570		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.592		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.581		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-10
Client ID: 3664|2021|WTG|086|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.555		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	0.548		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	0.552		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-11
Client ID: 3664|2021|WTG|088|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.506		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.524		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.515		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-12
Client ID: 3664|2021|WTG|092|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.508		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.512		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.510		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-13
Client ID: 3664|2021|WTG|094|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.416		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.452		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.434		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-14
Client ID: 3664|2021|WTG|103|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.512		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.503		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.508		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-15
Client ID: 3664|2021|WTG|105|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.753		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.722		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.738		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-16
Client ID: 3664|2021|WTG|108|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.610		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.602		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.606		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-17
Client ID: 3664|2021|WTG|111|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.659		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.677		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.668		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-18
Client ID: 3664|2021|WTG|115|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.683		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.725		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.704		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-19
Client ID: 3664|2021|WTG|119|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.607		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.637		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.622		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

SAMPLE RESULTS

Lab ID: L2140922-20
Client ID: 3664|2021|WTG|126|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.844		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	0.907		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	0.876		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140922
Report Date: 08/30/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-10 Batch: WG1540775-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/30/21 08:43	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 11-20 Batch: WG1540776-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/30/21 09:54	1,9060A	SP

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140922
Report Date: 08/30/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 Batch: WG1540775-2								
Total Organic Carbon (Rep1)	108		-		75-125	-		25
Total Organic Carbon (Rep2)	102		-		75-125	-		25
Total Organic Carbon (Average)	105		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-20 Batch: WG1540776-2								
Total Organic Carbon (Rep1)	101		-		75-125	-		25
Total Organic Carbon (Rep2)	100		-		75-125	-		25
Total Organic Carbon (Average)	101		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140922
Report Date: 08/30/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1540775-4 WG1540775-5 QC Sample: L2140922-01 Client ID: 3664|2021|WTG|045|SED|TOC|01												
Total Organic Carbon (Rep1)	0.499	0.988	1.40	91		1.24	96		75-125	12		25
Total Organic Carbon (Rep2)	0.467	0.698	1.16	99		1.21	93		75-125	4		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-20 QC Batch ID: WG1540776-4 QC Sample: L2140922-20 Client ID: 3664|2021|WTG|126|SED|TOC|01												
Total Organic Carbon (Rep1)	0.844	0.904	1.82	108		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.907	0.908	1.90	109		-	-		75-125	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140922
Report Date: 08/30/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1540775-3 QC Sample: L2140922-01 Client ID: 3664|2021|WTG|045|SED|TOC|01						
Total Organic Carbon (Rep1)	0.499	0.460	%	8		25
Total Organic Carbon (Rep2)	0.467	0.421	%	10		25
Total Organic Carbon (Average)	0.483	0.440	%	9		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-20 QC Batch ID: WG1540776-3 QC Sample: L2140922-20 Client ID: 3664|2021|WTG|126|SED|TOC|01						
Total Organic Carbon (Rep1)	0.844	0.898	%	6		25
Total Organic Carbon (Rep2)	0.907	0.853	%	6		25
Total Organic Carbon (Average)	0.876	0.876	%	0		25

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140922
Report Date: 08/30/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
C	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140922-01A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-02A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-03A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-04A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-05A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-06A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-07A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-08A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-09A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-10A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-11A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-12A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-13A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-14A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-15A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-16A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-17A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-18A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-19A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140922-20A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140922
Project Number:	3664	**Report Date:**	08/30/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140922
Project Number:	3664	**Report Date:**	08/30/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140922
Project Number:	3664	**Report Date:**	08/30/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	BEACON WIND	**Lab Number:**	L2140922
Project Number:	3664	**Report Date:**	08/30/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21 L2140922

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|150|Sed|GS|02	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|157|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|157|Sed|GS|02	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|001|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|004|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|006|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|015|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|017|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|029|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|032|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|036|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|037|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|039|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|042|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|045|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -01
3664|2021|WTG|051|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -02
3664|2021|WTG|056|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -03
3664|2021|WTG|059|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -04

Shipper: FEDEX UPS USPS DHL
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21
RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] DATE/TIME: 7/30/21
RECEIVED BY: [signature] Hudson AM DATE/TIME: 7/30/21 1135

T. Hudson 7/30/21 1250

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable at the time of sample receipt. Note: Initials are not acceptable.

[signature] - AAL 7/30/21 1250

7/30/21

L2140922

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|061|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -05
3664|2021|WTG|065|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -06
3664|2021|WTG|071|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -07
3664|2021|WTG|072|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -08
3664|2021|WTG|075|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -09
3664|2021|WTG|086|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -10
3664|2021|WTG|088|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -11
3664|2021|WTG|092|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -12
3664|2021|WTG|094|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -13
3664|2021|WTG|103|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -14
3664|2021|WTG|105|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -15
3664|2021|WTG|108|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -16
3664|2021|WTG|111|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -17
3664|2021|WTG|115|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -18
3664|2021|WTG|119|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -19
3664|2021|WTG|126|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -20
3664|2021|WTG|131|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|140|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|140|Sed|TOC|02	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3; QC duplicate

Shipper: FEDEX UPS USPS DHL

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21 RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] 7/30/21 1250 DATE/TIME: 7/30/21 RECEIVED BY: [signature] DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

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AAC - AAC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140923
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/01/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140923
Report Date: 09/01/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140923-01	3664|2021|WTG|131|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140923-02	3664|2021|WTG|140|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140923-03	3664|2021|WTG|140|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140923-04	3664|2021|WTG|142|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140923-05	3664|2021|WTG|143|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140923-06	3664|2021|WTG|146|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140923-07	3664|2021|WTG|152|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140923-08	3664|2021|WTG|155|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140923-09	3664|2021|WTG|096|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140923-10	3664|2021|WTG|106|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140923-11	3664|2021|WTG|113|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140923-12	3664|2021|WTG|114|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140923-13	3664|2021|WTG|116|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140923-14	3664|2021|WTG|117|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140923-15	3664|2021|WTG|120|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140923-16	3664|2021|WTG|120|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140923-17	3664|2021|WTG|121|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140923-18	3664|2021|WTG|124|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140923-19	3664|2021|WTG|125|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140923-20	3664|2021|WTG|127|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140923
Project Number:	3664	**Report Date:**	09/01/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140923
Project Number:	3664	**Report Date:**	09/01/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2140923-01 through -20 was frozen upon receipt in order to arrest the holding time.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/01/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-01
Client ID: 3664|2021|WTG|131|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.865		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	0.839		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	0.852		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-02
Client ID: 3664|2021|WTG|140|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.08		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	1.01		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	1.04		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-03
Client ID: 3664|2021|WTG|140|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.954		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	0.978		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	0.966		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-04
Client ID: 3664|2021|WTG|142|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.02		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	1.06		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	1.04		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-05
Client ID: 3664|2021|WTG|143|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.01		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	0.913		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	0.961		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-06
Client ID: 3664|2021|WTG|146|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.02		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	1.02		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	1.02		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-07
Client ID: 3664|2021|WTG|152|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.24		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	1.17		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	1.20		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-08
Client ID: 3664|2021|WTG|155|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.870		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	0.823		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	0.846		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-09
Client ID: 3664|2021|WTG|096|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.550		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	0.466		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	0.508		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-10
Client ID: 3664|2021|WTG|106|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.804		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	0.752		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	0.778		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-11
Client ID: 3664|2021|WTG|113|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.794		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.734		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.764		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-12
Client ID: 3664|2021|WTG|114|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.771		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.814		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.792		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-13
Client ID: 3664|2021|WTG|116|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.893		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.922		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.908		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-14
Client ID: 3664|2021|WTG|117|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.22		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	1.17		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	1.20		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-15
Client ID: 3664|2021|WTG|120|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.732		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.762		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.747		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-16
Client ID: 3664|2021|WTG|120|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.667		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.722		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.694		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-17
Client ID: 3664|2021|WTG|121|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.660		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.601		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.630		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-18
Client ID: 3664|2021|WTG|124|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.921		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.976		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.948		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-19
Client ID: 3664|2021|WTG|125|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.27		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	1.06		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	1.17		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

SAMPLE RESULTS

Lab ID: L2140923-20
Client ID: 3664|2021|WTG|127|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.936		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	0.910		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	0.923		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140923
Report Date: 09/01/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-10 Batch: WG1539538-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/31/21 08:56	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 11-20 Batch: WG1541259-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	08/31/21 09:09	1,9060A	SP

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140923
Report Date: 09/01/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 Batch: WG1539538-2								
Total Organic Carbon (Rep1)	112		-		75-125	-		25
Total Organic Carbon (Rep2)	119		-		75-125	-		25
Total Organic Carbon (Average)	115		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-20 Batch: WG1541259-2								
Total Organic Carbon (Rep1)	118		-		75-125	-		25
Total Organic Carbon (Rep2)	106		-		75-125	-		25
Total Organic Carbon (Average)	112		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140923
Report Date: 09/01/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1539538-4 QC Sample: L2140923-01 Client ID: 3664|2021|WTG|131|SED|TOC|01												
Total Organic Carbon (Rep1)	0.865	0.677	1.54	100		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.839	0.784	1.76	118		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-20 QC Batch ID: WG1541259-4 QC Sample: L2140923-11 Client ID: 3664|2021|WTG|113|SED|TOC|01												
Total Organic Carbon (Rep1)	0.794	1.05	1.82	98		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.734	1.22	2.00	104		-	-		75-125	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140923
Report Date: 09/01/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1539538-3 QC Sample: L2140923-01 Client ID: 3664|2021|WTG|131|SED|TOC|01						
Total Organic Carbon (Rep1)	0.865	0.766	%	12		25
Total Organic Carbon (Rep2)	0.839	0.818	%	3		25
Total Organic Carbon (Average)	0.852	0.792	%	7		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-20 QC Batch ID: WG1541259-3 QC Sample: L2140923-11 Client ID: 3664|2021|WTG|113|SED|TOC|01						
Total Organic Carbon (Rep1)	0.794	0.696	%	13		25
Total Organic Carbon (Rep2)	0.734	0.778	%	6		25
Total Organic Carbon (Average)	0.764	0.737	%	4		25

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140923
Report Date: 09/01/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
C	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140923-01A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-02A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-03A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-04A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-05A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-06A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-07A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-08A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-09A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-10A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-11A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-12A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-13A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-14A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-15A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-16A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-17A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-18A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-19A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140923-20A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140923
Project Number:	3664	**Report Date:**	09/01/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140923
Project Number:	3664	**Report Date:**	09/01/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140923
Project Number:	3664	**Report Date:**	09/01/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140923
Project Number:	3664	**Report Date:**	09/01/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140923

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|061|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|065|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|071|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|072|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|075|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|086|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|088|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|092|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|094|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|103|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|105|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|108|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|111|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|115|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|119|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|126|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|131|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|140|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -01
3664|2021|WTG|140|Sed|TOC|02	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -02
					total organic carbon	Tier 2; Cooler #3; QC duplicate -03

Shipper: FEDEX UPS USPS DHL

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: [signature]
DATE/TIME: 7/29/21
RECEIVED BY: [signature]
DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] 7/30/21 1250
DATE/TIME: 7/30/21
RECEIVED BY: [signature] ANC
DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable at the time of sample receipt. Note: Initials are not acceptable.

ANC - AAC 7/30/21 1250

7/30/21

~~L2140~~ AK L2140923

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|142|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -04
3664|2021|WTG|143|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -05
3664|2021|WTG|146|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -06
3664|2021|WTG|152|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -07
3664|2021|WTG|155|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3 -08
3664|2021|WTG|001|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|004|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|006|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|015|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|017|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|029|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|032|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|036|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|037|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|039|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|042|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|045|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|051|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2

Shipper: FEDEX UPS USPS DHL
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21
RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hamilton 7/30/21 1250 DATE/TIME: 7/30/21
RECEIVED BY: _____ DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 253-258-1626

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7/30/21

L2140923

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|140|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|140|Sed|GS|02	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2; QC duplicate
3664|2021|WTG|142|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|143|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2;
3664|2021|WTG|146|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|152|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|155|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|096|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -09
3664|2021|WTG|106|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -10
3664|2021|WTG|113|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -11
3664|2021|WTG|114|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -12
3664|2021|WTG|116|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -13
3664|2021|WTG|117|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -14
3664|2021|WTG|120|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -15
3664|2021|WTG|120|Sed|TOC|02	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3; QC duplicate -16
3664|2021|WTG|121|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -17
3664|2021|WTG|124|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -18

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21 RECEIVED BY: [signature] DATE/TIME: 7/29/21 1400
RELINQUISHED BY: T. Hunt 7/30/21 1250 DATE/TIME: 7/30/21 RECEIVED BY: T. Hunt Harrison MMT DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed here been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

[signature] 7/30/21 1250

7/30/21

L2140923

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|125|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -19
3664|2021|WTG|127|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -20
3664|2021|WTG|129|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|130|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|130|Sed|TOC|02	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3; QC duplicate
3664|2021|WTG|132|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|133|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|135|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|136|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|138|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|139|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|141|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|144|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|145|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|147|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|148|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|149|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|151|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|153|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: [signature]
DATE/TIME: 7/29/21
RECEIVED BY: [signature]
DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] 7/30/21 1250
DATE/TIME: 7/30/21
RECEIVED BY: [signature] HUDSON OMR
DATE/TIME: 7/30/21 0935

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

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AK - AAC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140924
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/02/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140924
Report Date: 09/02/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140924-01	3664|2021|WTG|129|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-02	3664|2021|WTG|130|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-03	3664|2021|WTG|130|SED|TOC|02	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-04	3664|2021|WTG|132|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-05	3664|2021|WTG|133|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-06	3664|2021|WTG|135|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-07	3664|2021|WTG|136|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-08	3664|2021|WTG|138|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-09	3664|2021|WTG|139|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-10	3664|2021|WTG|141|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-11	3664|2021|WTG|144|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-12	3664|2021|WTG|145|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-13	3664|2021|WTG|147|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-14	3664|2021|WTG|148|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140924-15	3664|2021|WTG|149|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140924-16	3664|2021|WTG|151|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140924-17	3664|2021|WTG|153|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140924-18	3664|2021|WTG|154|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140924-19	3664|2021|WTG|156|SED|TOC|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140924
Project Number:	3664	**Report Date:**	09/02/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140924
Project Number:	3664	**Report Date:**	09/02/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Total Organic Carbon

L2140924-01 through -19 was frozen upon receipt in order to arrest the holding time.

WG1541920-1: The required batch QC was prepared; however, the native sample required a different reporting method; therefore, the associated QC results could not be reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/02/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-01
Client ID: 3664|2021|WTG|129|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.934		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.772		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.853		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-02
Client ID: 3664|2021|WTG|130|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.819		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.842		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.830		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-03
Client ID: 3664|2021|WTG|130|SED|TOC|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.841		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.769		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.805		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-04
Client ID: 3664|2021|WTG|132|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.556		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.542		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.549		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-05
Client ID: 3664|2021|WTG|133|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.881		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.806		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.844		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-06
Client ID: 3664|2021|WTG|135|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.18		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	1.01		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	1.10		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-07
Client ID: 3664|2021|WTG|136|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.655		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.794		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.724		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-08
Client ID: 3664|2021|WTG|138|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.893		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.869		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.881		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-09
Client ID: 3664|2021|WTG|139|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.983		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	1.01		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.998		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-10
Client ID: 3664|2021|WTG|141|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.923		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	0.867		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	0.895		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-11
Client ID: 3664|2021|WTG|144|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.763		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	0.704		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	0.734		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-12
Client ID: 3664|2021|WTG|145|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.803		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	0.755		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	0.779		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-13
Client ID: 3664|2021|WTG|147|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.974		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	1.01		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	0.990		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-14
Client ID: 3664|2021|WTG|148|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.08		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	1.21		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	1.14		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-15
Client ID: 3664|2021|WTG|149|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.06		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	0.961		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	1.01		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-16
Client ID: 3664|2021|WTG|151|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.990		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	1.17		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	1.08		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-17
Client ID: 3664|2021|WTG|153|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.17		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	0.955		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	1.06		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-18
Client ID: 3664|2021|WTG|154|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	1.10		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	0.885		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	0.992		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

SAMPLE RESULTS

Lab ID: L2140924-19
Client ID: 3664|2021|WTG|156|SED|TOC|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.860		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	0.821		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	0.840		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140924
Report Date: 09/02/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 11-19 Batch: WG1541920-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	09/01/21 09:01	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 01-10 Batch: WG1541923-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	09/01/21 09:05	1,9060A	SP

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140924
Report Date: 09/02/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 11-19 Batch: WG1541920-2								
Total Organic Carbon (Rep1)	114		-		75-125	-		25
Total Organic Carbon (Rep2)	105		-		75-125	-		25
Total Organic Carbon (Average)	110		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 Batch: WG1541923-2								
Total Organic Carbon (Rep1)	113		-		75-125	-		25
Total Organic Carbon (Rep2)	103		-		75-125	-		25
Total Organic Carbon (Average)	108		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140924
Report Date: 09/02/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1541923-4 QC Sample: L2140924-01 Client ID: 3664|2021|WTG|129|SED|TOC|01												
Total Organic Carbon (Rep1)	0.934	0.989	1.75	82		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.772	0.981	1.65	89		-	-		75-125	-		25

Lab Duplicate Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140924
Report Date: 09/02/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-10 QC Batch ID: WG1541923-3 QC Sample: L2140924-01 Client ID: 3664|2021|WTG|129|SED|TOC|01						
Total Organic Carbon (Rep1)	0.934	0.788	%	17		25
Total Organic Carbon (Rep2)	0.772	0.714	%	8		25
Total Organic Carbon (Average)	0.853	0.751	%	13		25

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140924
Report Date: 09/02/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
C	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140924-01A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-02A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-03A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-04A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-05A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-06A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-07A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-08A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-09A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-10A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-11A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-12A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-13A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-14A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-15A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-16A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-17A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-18A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)
L2140924-19A	Glass 120ml/4oz unpreserved	C	NA		3.2	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140924
Project Number:	3664	**Report Date:**	09/02/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140924
Project Number:	3664	**Report Date:**	09/02/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140924
Project Number:	3664	**Report Date:**	09/02/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140924
Project Number:	3664	**Report Date:**	09/02/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140924

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|125|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|127|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|129|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -01
3664|2021|WTG|130|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -02
3664|2021|WTG|130|Sed|TOC|02	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3; QC duplicate -03
3664|2021|WTG|132|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -04
3664|2021|WTG|133|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -05
3664|2021|WTG|135|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -06
3664|2021|WTG|136|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -07
3664|2021|WTG|138|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -08
3664|2021|WTG|139|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -09
3664|2021|WTG|141|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -10
3664|2021|WTG|144|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -11
3664|2021|WTG|145|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -12
3664|2021|WTG|147|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -13
3664|2021|WTG|148|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -14
3664|2021|WTG|149|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -15
3664|2021|WTG|151|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -16
3664|2021|WTG|153|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -17

Shipper: FEDEX UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition Intact Broken Leaking

Container Temperature

RELINQUISHED BY: BG DATE/TIME: 7/29/21 RECEIVED BY: DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hamilton 7/30/21 1250 DATE/TIME: 7/30/21 RECEIVED BY: DATE/TIME: 7/30/21 935

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

MC AAc 7/30/21

7/30/21

L2140924

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|154|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -18
3664|2021|WTG|156|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3 -19
3664|2021|WTG|096|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|106|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|113|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|114|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|116|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|117|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|120|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|120|Sed|GS|02	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
3664|2021|WTG|121|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|124|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|125|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|127|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|129|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|130|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|130|Sed|GS|02	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
3664|2021|WTG|132|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2

Shipper: FEDEX UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: BG DATE/TIME: 7/29/21

RELINQUISHED BY: [signature] DATE/TIME: 7/30/21

RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

RECEIVED BY: T. Hudson [signature] DATE/TIME: 7/30/21 1135

T. Hudson 7/30/21 1250

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

[signature] AAC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140925
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/03/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140925
Report Date: 09/03/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140925-01	3664|2021|WTG|002|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/17/21 00:00	07/30/21
L2140925-02	3664|2021|WTG|003|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-03	3664|2021|WTG|005|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-04	3664|2021|WTG|008|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-05	3664|2021|WTG|011|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-06	3664|2021|WTG|020|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-07	3664|2021|WTG|020|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-08	3664|2021|WTG|021|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-09	3664|2021|WTG|025|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-10	3664|2021|WTG|027|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-11	3664|2021|WTG|033|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-12	3664|2021|WTG|034|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-13	3664|2021|WTG|040|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-14	3664|2021|WTG|040|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-15	3664|2021|WTG|047|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-16	3664|2021|WTG|048|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-17	3664|2021|WTG|049|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140925-18	3664|2021|WTG|053|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/18/21 00:00	07/30/21
L2140925-19	3664|2021|WTG|054|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140925-20	3664|2021|WTG|058|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140925
Project Number:	3664	**Report Date:**	09/03/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140925
Project Number:	3664	**Report Date:**	09/03/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size

The WG1534792-1 Laboratory Duplicate RPD for % very coarse sand (67%), % fine sand (25%), % very fine sand (37%), % silt (149%) and % clay (153%), performed on L2140925-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/03/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-01
Client ID: 3664|2021|WTG|002|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/17/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	3.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	16.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	55.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	3.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	17.8		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-02
Client ID: 3664|2021|WTG|003|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	2.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	6.10		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	66.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	11.4		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.0		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.90		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-03
Client ID: 3664|2021|WTG|005|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	3.90		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	11.1		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	74.9		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	6.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	3.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	0.500		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-04
Client ID: 3664|2021|WTG|008|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	10.9		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	70.4		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	9.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	6.20		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.20		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-05
Client ID: 3664|2021|WTG|011|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.80		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	5.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	12.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	55.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	9.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.4		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-06
Client ID: 3664|2021|WTG|020|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.90		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	9.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	61.4		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	17.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	8.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-07
Client ID: 3664|2021|WTG|020|SED|GS|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	9.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	62.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	16.8		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	8.20		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-08
Client ID: 3664|2021|WTG|021|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	4.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	55.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	24.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.80		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-09
Client ID: 3664|2021|WTG|025|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	2.20		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	9.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	58.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	17.4		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	10.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-10
Client ID: 3664|2021|WTG|027|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	2.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	9.20		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	50.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	26.6		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	9.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-11
Client ID: 3664|2021|WTG|033|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	3.90		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	7.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	53.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	21.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.80		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-12
Client ID: 3664|2021|WTG|034|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	2.20		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	7.50		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	55.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	20.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	12.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-13
Client ID: 3664|2021|WTG|040|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	3.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	25.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	44.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	20.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-14
Client ID: 3664|2021|WTG|040|SED|GS|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	4.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	26.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	44.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-15
Client ID: 3664|2021|WTG|047|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	2.10		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	26.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	46.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	18.9		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.70		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-16
Client ID: 3664|2021|WTG|048|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	10.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	17.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	30.0		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	23.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	15.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.00		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-17
Client ID: 3664|2021|WTG|049|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.800		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	10.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	15.7		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	28.6		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	19.8		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	21.3		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.50		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-18
Client ID: 3664|2021|WTG|053|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/18/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	2.50		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	8.90		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	36.6		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	36.0		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	13.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.10		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-19
Client ID: 3664|2021|WTG|054|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	4.30		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	6.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	29.9		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	36.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.6		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.10		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140925
Report Date: 09/03/21

SAMPLE RESULTS

Lab ID: L2140925-20
Client ID: 3664|2021|WTG|058|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.40		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Coarse Sand	7.60		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Medium Sand	10.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Fine Sand	13.2		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
% Very Fine Sand	36.5		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	24.9		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.80		%	0.100	NA	1	-	08/13/21 10:16	12,D6913/D7928(M)	SM

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140925
Report Date: 09/03/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1534792-1 QC Sample: L2140925-01 Client ID: 3664|2021|WTG|002|SED|GS|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	ND	ND	%	NC		20
Granule (2.0-4.0 mm)	0.200	0.200	%	0		20
% Very Coarse Sand	0.300	0.600	%	**67**	Q	20
% Coarse Sand	3.40	3.50	%	3		20
% Medium Sand	16.7	17.1	%	2		20
% Fine Sand	55.3	70.8	%	**25**	Q	20
% Very Fine Sand	3.30	4.80	%	**37**	Q	20
Silt - (3.9-62.5 um)	17.8	2.60	%	**149**	Q	20
Clay - (<3.9 um)	3.00	0.400	%	**153**	Q	20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140925
Report Date: 09/03/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140925-01A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140925-02A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140925-03A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140925-04A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140925-05A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140925
Report Date: 09/03/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140925-06A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140925-07A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140925-08A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2140925-09A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140925-10A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140925-11A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140925
Report Date: 09/03/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140925-12A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140925-13A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140925-14A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140925-15A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140925-16A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140925-17A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140925
Report Date: 09/03/21

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140925-18A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2140925-19A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140925-20A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140925
Project Number:	3664	**Report Date:**	09/03/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140925
Project Number:	3664	**Report Date:**	09/03/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140925
Project Number:	3664	**Report Date:**	09/03/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140925
Project Number:	3664	**Report Date:**	09/03/21

REFERENCES

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

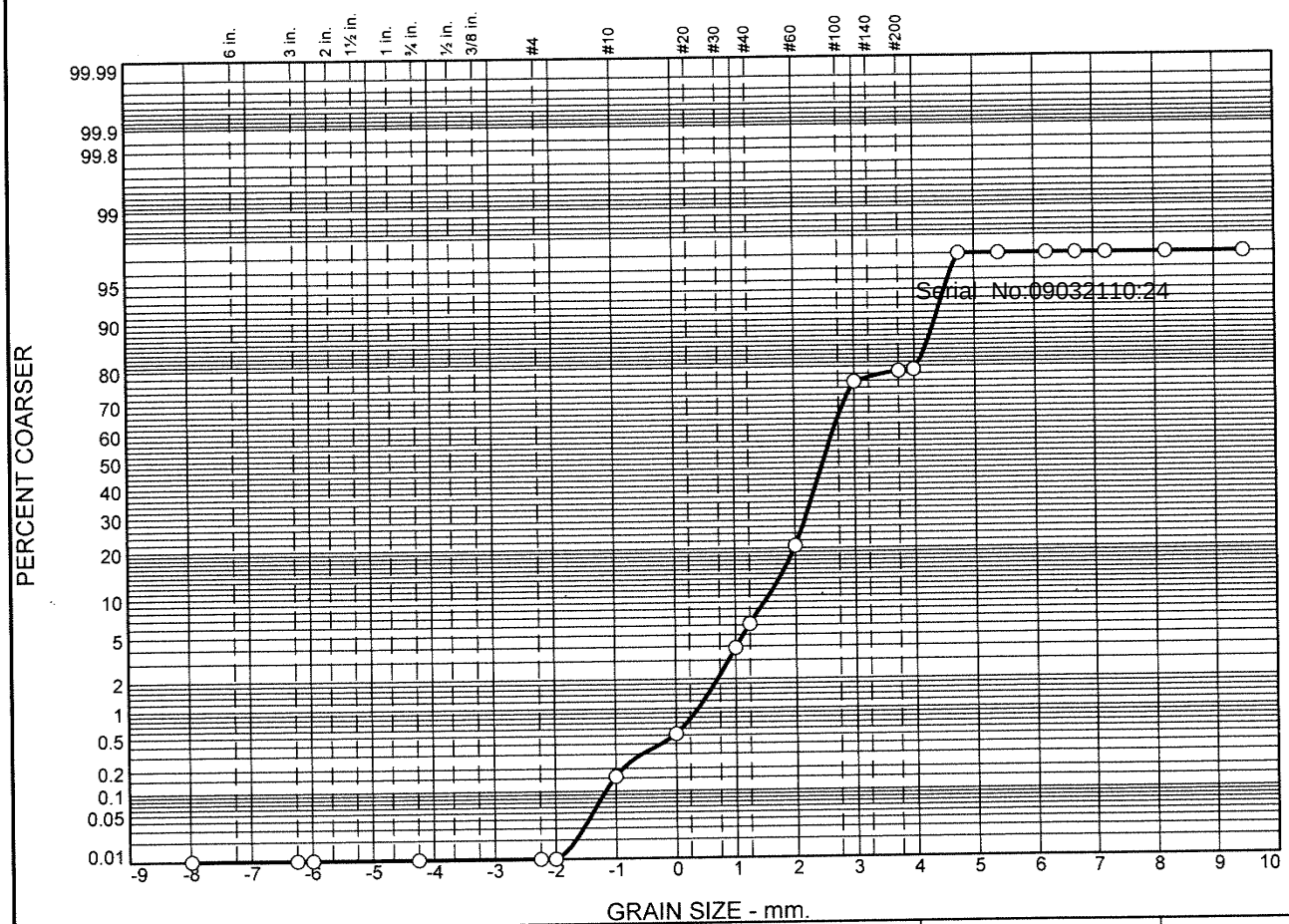
LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

ASTM D6913/D7928
GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.3	3.4	16.7	55.3	3.4	17.7	0.0	0.0		3.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2832	0.1957	0.1771	0.1401	0.0544	0.0491	2.04	3.99

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664\|2021\|WTG\|002\|SED\|GS\|01 **Sample No.:** L2140925-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|002|SED|GS|01

Sample Number: L2140925-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 38.23
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
38.23	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.06	0.00	99.8
		#18	0.14	0.00	99.5
		#35	1.28	0.00	96.1
		#40	0.86	0.00	93.9
		#60	5.53	0.00	79.4
		#120	21.13	0.00	24.1
		#200	1.07	0.00	21.3
		#230	0.16	0.00	20.9

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 20.9
Weight of hydrometer sample =35.38
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0374	3.0
5.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0237	3.0
15.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0137	3.0
30.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0097	3.0
60.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0068	3.0
240.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0034	3.0
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	3.0

Fractional Components

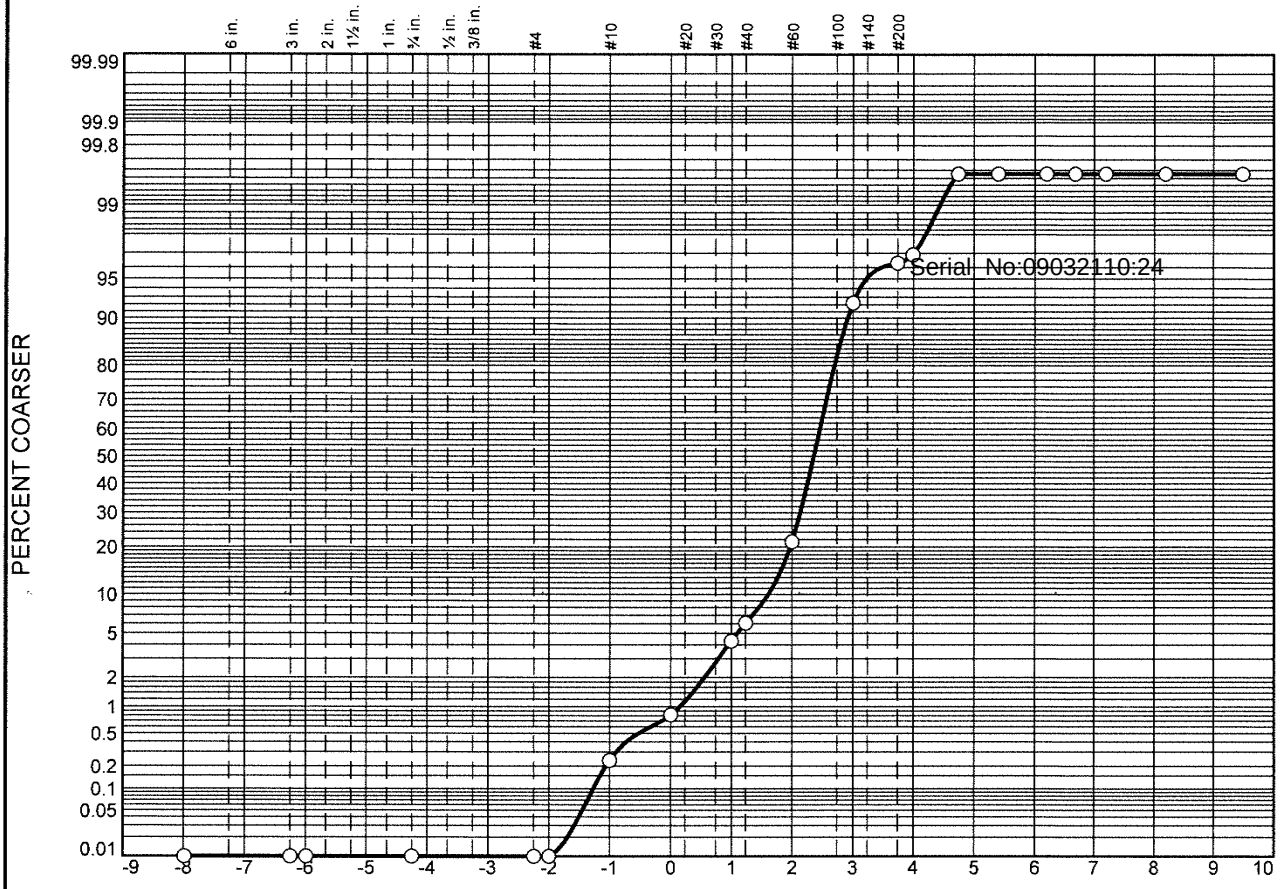
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.3	3.4	16.7	55.3	3.4	79.1	17.7	0.0	0.0		17.7	3.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0425	0.0491	0.0544	0.0610	0.1401	0.1595	0.1771	0.1957	0.2527	0.2832	0.3407	0.4583

Fineness Modulus	C_u	C_c
0.81	3.99	2.04

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.6	3.5	17.1	70.8	4.8	2.6	0.0	0.0	0.0	0.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.2789	0.2096	0.1951	0.1688	0.1449	0.1328	1.02	1.58

	Material Description	USCS	AASHTO
○		SP	

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|002|SED|GS|01 **Sample No.:** WG1534792-1

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|002|SED|GS|01
Sample Number: WG1534792-1
USCS Classification: SP

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 38.05
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09032110:24

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
38.05	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.09	0.00	99.8
		#18	0.22	0.00	99.2
		#35	1.33	0.00	95.7
		#40	0.67	0.00	93.9
		#60	5.82	0.00	78.6
		#120	26.96	0.00	7.8
		#200	1.56	0.00	3.7
		#230	0.23	0.00	3.1

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 3.1
Weight of hydrometer sample =34.93
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0374	0.4
5.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0237	0.4
15.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0137	0.4
30.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0097	0.4
60.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0068	0.4
240.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0034	0.4
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	0.4

Fractional Components

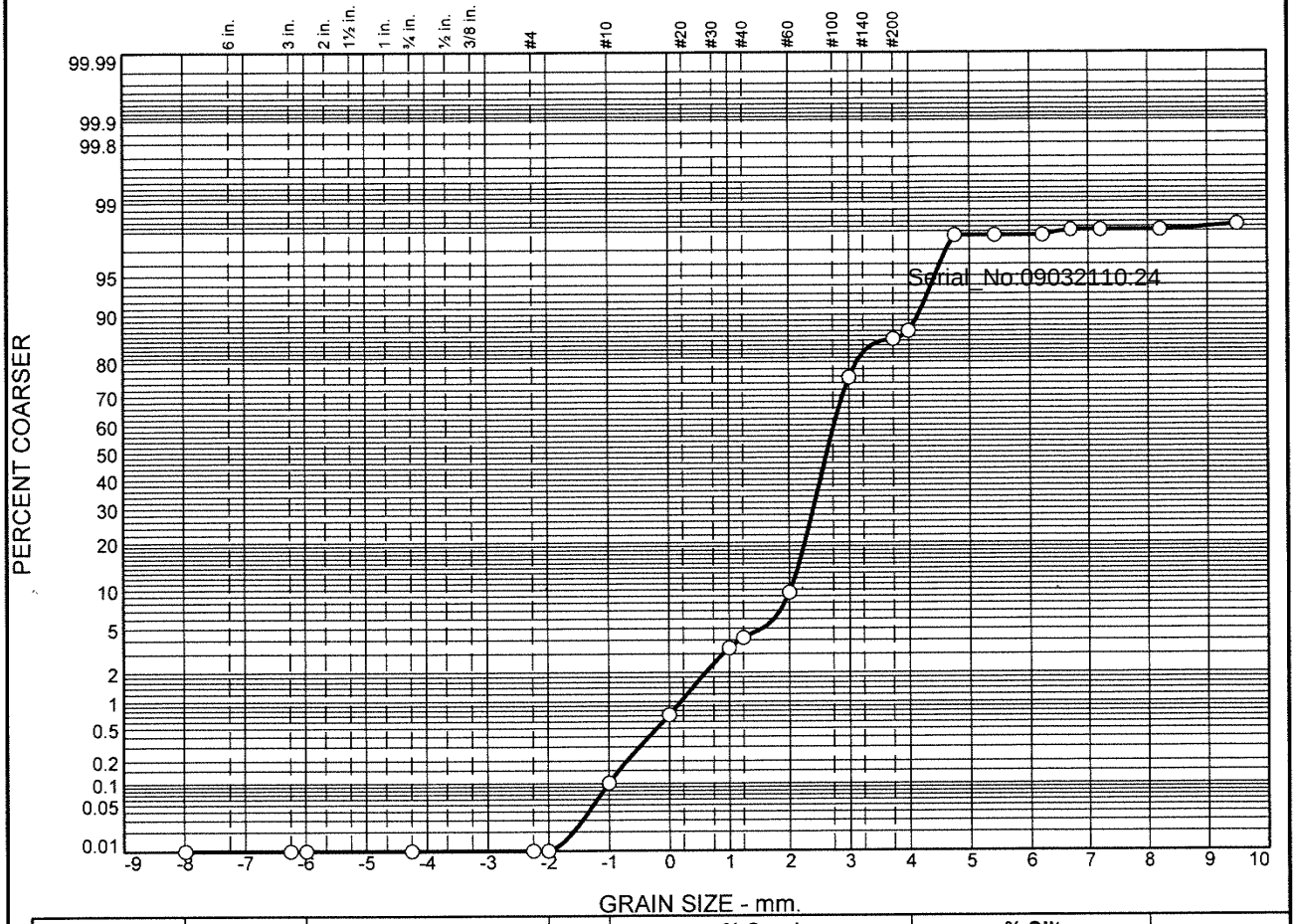
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.6	3.5	17.1	70.8	4.8	96.8	2.6	0.0	0.0	0.0	2.6	0.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.1075	0.1328	0.1449	0.1540	0.1688	0.1819	0.1951	0.2096	0.2548	0.2789	0.3270	0.4676

Fineness Modulus	C_u	C_c
0.98	1.58	1.02

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.6	2.7	6.1	66.2	11.5	10.6	0.0	0.3		1.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2231	0.1741	0.1612	0.1349	0.0836	0.0561	1.86	3.11

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|003|SED|GS|01 **Sample No.:** L2140925-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|003|SED|GS|01

Sample Number: L2140925-02

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 78.68
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
78.68	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	0.48	0.00	99.3
		#35	2.10	0.00	96.6
		#40	0.63	0.00	95.8
		#60	4.21	0.00	90.5
		#120	52.04	0.00	24.3
		#200	7.63	0.00	14.6
		#230	1.30	0.00	13.0

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 13.0
Weight of hydrometer sample =44.25
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0369	2.2
5.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0234	2.2
15.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0135	2.2
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	1.9
60.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0068	1.9
240.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0034	1.9
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	1.7

Fractional Components

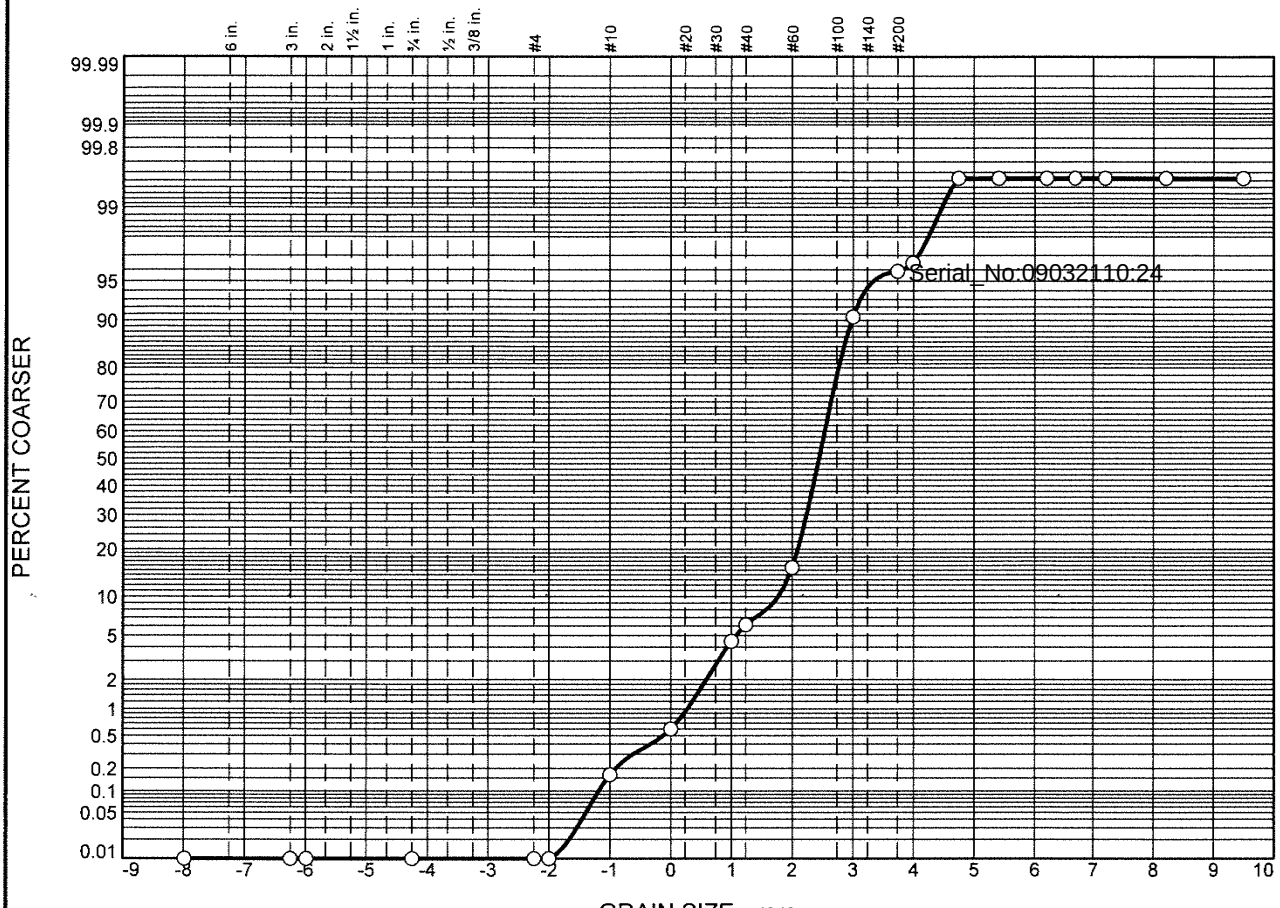
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.6	2.7	6.1	66.2	11.5	87.1	10.6	0.0	0.3		10.9	1.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0464	0.0561	0.0836	0.1144	0.1349	0.1487	0.1612	0.1741	0.2086	0.2231	0.2467	0.3413

Fineness Modulus	C_u	C_c
0.68	3.11	1.86

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.4	3.9	11.1	74.9	6.0	3.0	0.0	0.0	0.0	0.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2528	0.1965	0.1839	0.1604	0.1383	0.1266	1.03	1.55

	Material Description	USCS	AASHTO
○		SP	

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|005|SED|GS|01 **Sample No.:** L2140925-03

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|005|SED|GS|01
Sample Number: L2140925-03
USCS Classification: SP

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 85.30
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09032110:24

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
85.30	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.14	0.00	99.8
		#18	0.37	0.00	99.4
		#35	3.31	0.00	95.5
		#40	1.40	0.00	93.9
		#60	8.08	0.00	84.4
		#120	63.92	0.00	9.5
		#200	4.57	0.00	4.1
		#230	0.52	0.00	3.5

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 3.5
Weight of hydrometer sample =43.63
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0373	0.5
5.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0236	0.5
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	0.5
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	0.5
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	0.5
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	0.5
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	0.5

Fractional Components

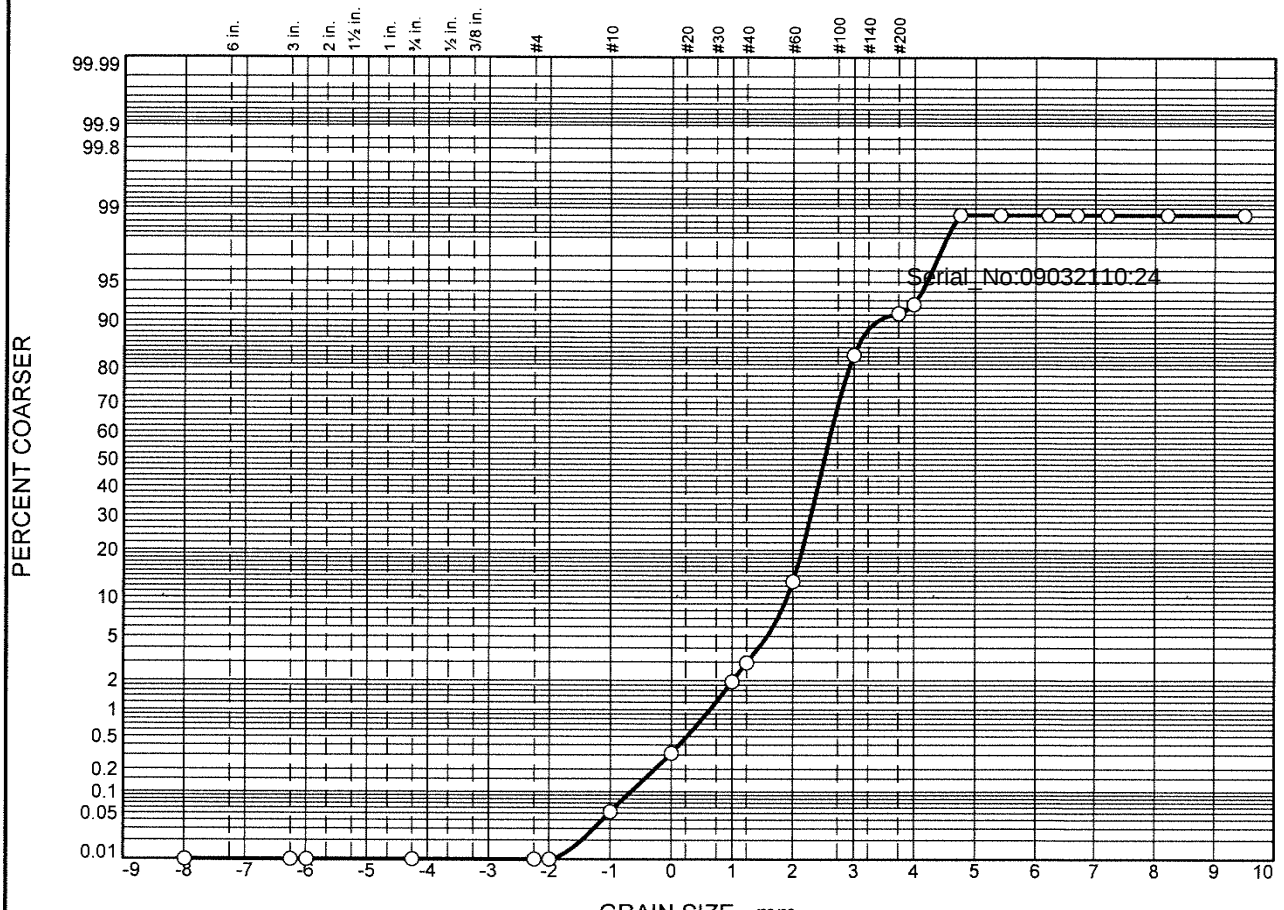
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.4	3.9	11.1	74.9	6.0	96.3	3.0	0.0	0.0	0.0	3.0	0.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0991	0.1266	0.1383	0.1469	0.1604	0.1722	0.1839	0.1965	0.2342	0.2528	0.2927	0.4757

Fineness Modulus	C_u	C_c
0.91	1.55	1.03

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.2	1.7	10.9	70.4	9.3	6.2	0.0	0.0		1.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2408	0.1880	0.1746	0.1487	0.1205	0.0954	1.23	1.97

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|008|SED|GS|01 **Sample No.:** L2140925-04

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|008|SED|GS|01

Sample Number: L2140925-04

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 75.84
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
75.84	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	99.9
		#18	0.20	0.00	99.7
		#35	1.24	0.00	98.0
		#40	0.75	0.00	97.1
		#60	7.52	0.00	87.1
		#120	53.46	0.00	16.7
		#200	5.96	0.00	8.8
		#230	0.96	0.00	7.5

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 7.5
Weight of hydrometer sample =42.42
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	1.2
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	1.2
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	1.2
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	1.2
60.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0068	1.2
240.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0034	1.2
1440.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0014	1.2

Fractional Components

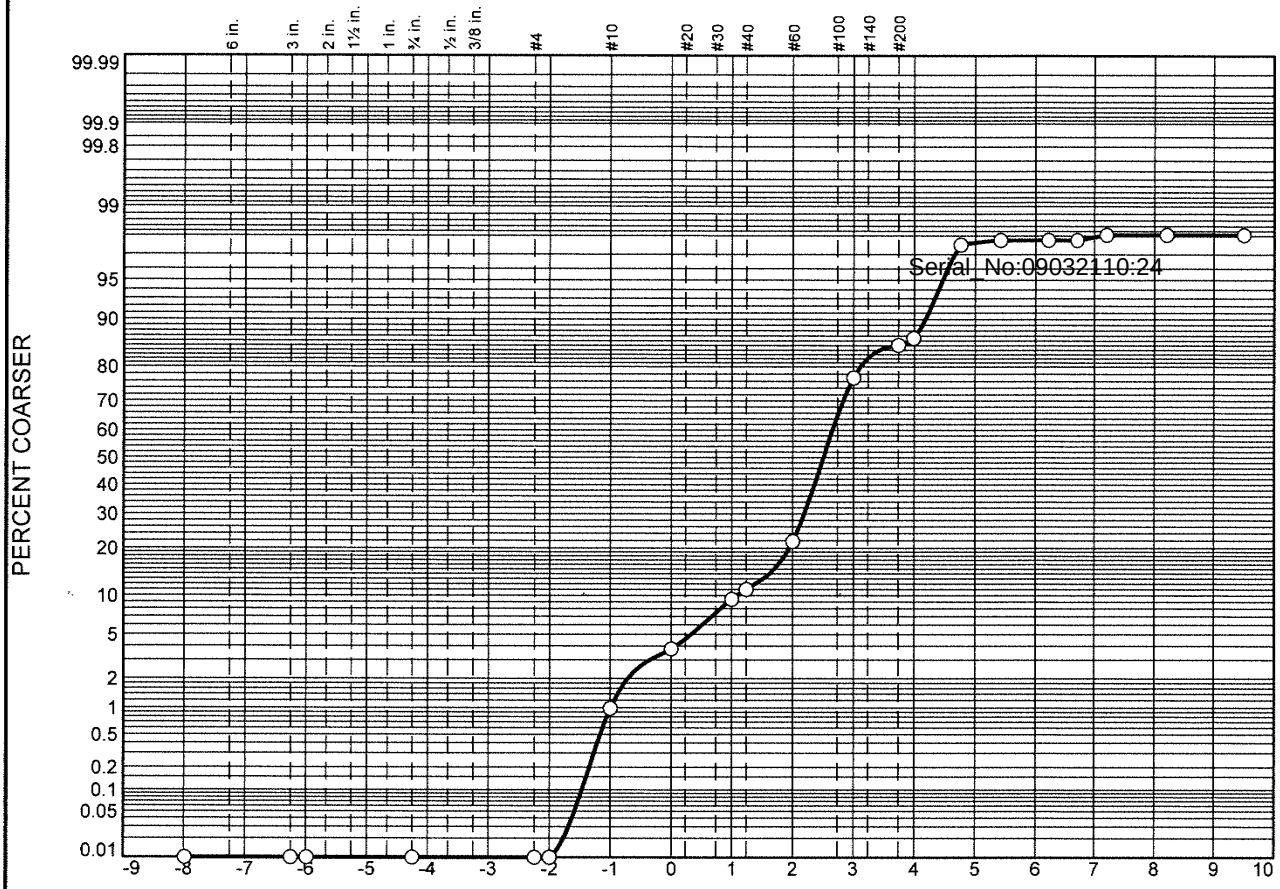
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.2	1.7	10.9	70.4	9.3	92.5	6.2	0.0	0.0		6.2	1.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0541	0.0954	0.1205	0.1324	0.1487	0.1620	0.1746	0.1880	0.2249	0.2408	0.2669	0.3364

Fineness Modulus	C_u	C_c
0.77	1.97	1.23

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.0	2.8	5.6	12.3	55.3	9.7	11.0	0.1	0.1	0.1	2.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3082	0.1951	0.1761	0.1407	0.0775	0.0549	1.85	3.56

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|011|SED|GS|01 **Sample No.:** L2140925-05

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|011|SED|GS|01

Sample Number: L2140925-05

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 64.03
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
64.03	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.63	0.00	99.0
		#18	1.78	0.00	96.2
		#35	3.59	0.00	90.6
		#40	1.05	0.00	89.0
		#60	6.86	0.00	78.3
		#120	35.37	0.00	23.0
		#200	5.21	0.00	14.9
		#230	0.91	0.00	13.5

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 13.5
Weight of hydrometer sample =45.74
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0050	1.0051	0.0134	5.0	15.0	0.0368	2.4
5.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0234	2.2
15.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0135	2.2
30.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0095	2.2
60.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0068	2.0
240.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0034	2.0
1440.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0014	2.0

Fractional Components

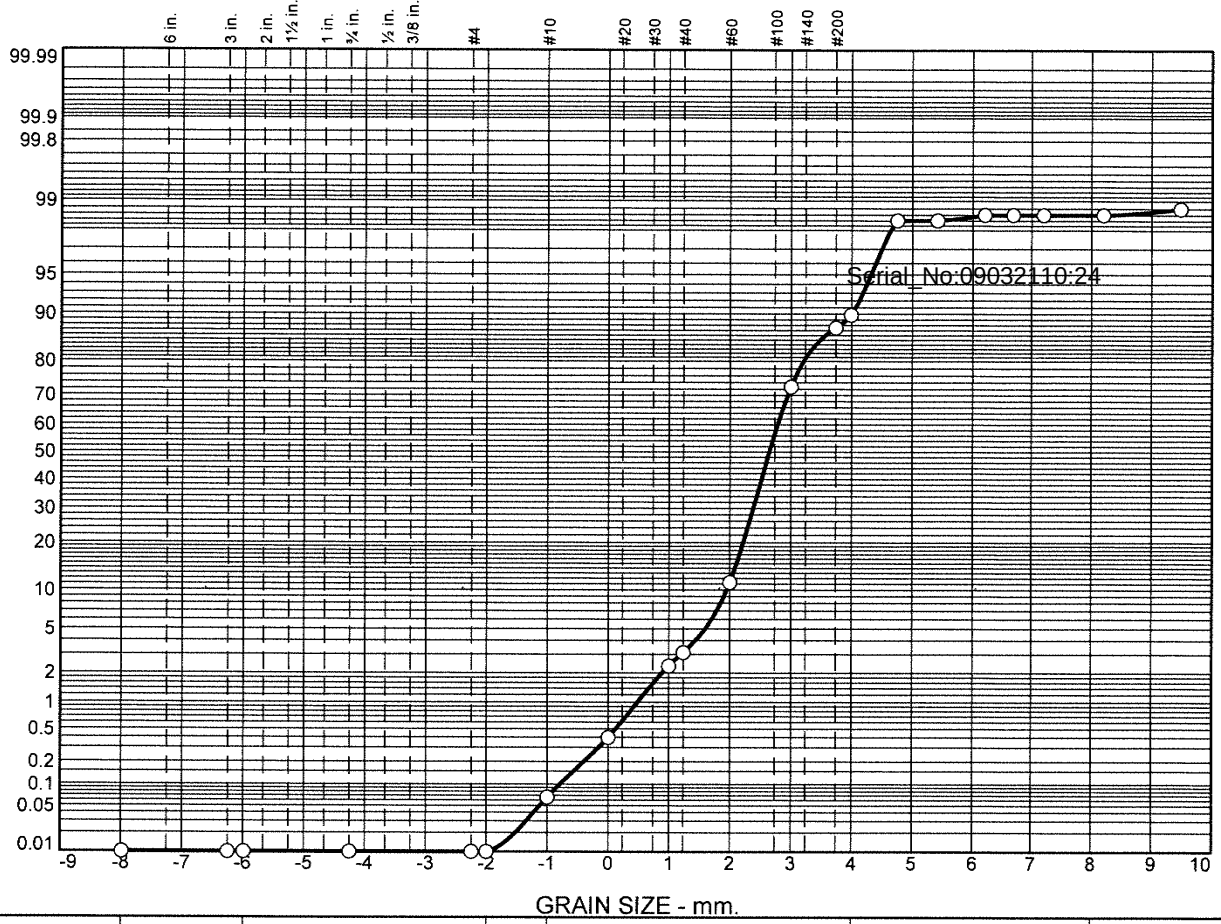
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.0	2.8	5.6	12.3	55.3	9.7	85.7	11.0	0.1	0.1	0.1	11.3	2.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0452	0.0549	0.0775	0.1155	0.1407	0.1588	0.1761	0.1951	0.2597	0.3082	0.4705	0.7964

Fineness Modulus	C_u	C_c
0.92	3.56	1.85

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.3	1.9	9.0	61.4	17.3	8.4	0.1	0.1		1.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_u
○			0.2315	0.1743	0.1595	0.1298	0.0898	0.0623	1.55	2.79

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|020|SED|GS|01 **Sample No.:** L2140925-06

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|020|SED|GS|01

Sample Number: L2140925-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 75.75
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
75.75	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.05	0.00	99.9
		#18	0.25	0.00	99.6
		#35	1.47	0.00	97.7
		#40	0.59	0.00	96.9
		#60	6.19	0.00	88.7
		#120	46.50	0.00	27.3
		#200	11.23	0.00	12.5
		#230	1.74	0.00	10.2

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 10.2
Weight of hydrometer sample =42.62
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	1.6
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	1.6
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	1.4
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	1.4
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.4
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	1.4
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	1.2

Fractional Components

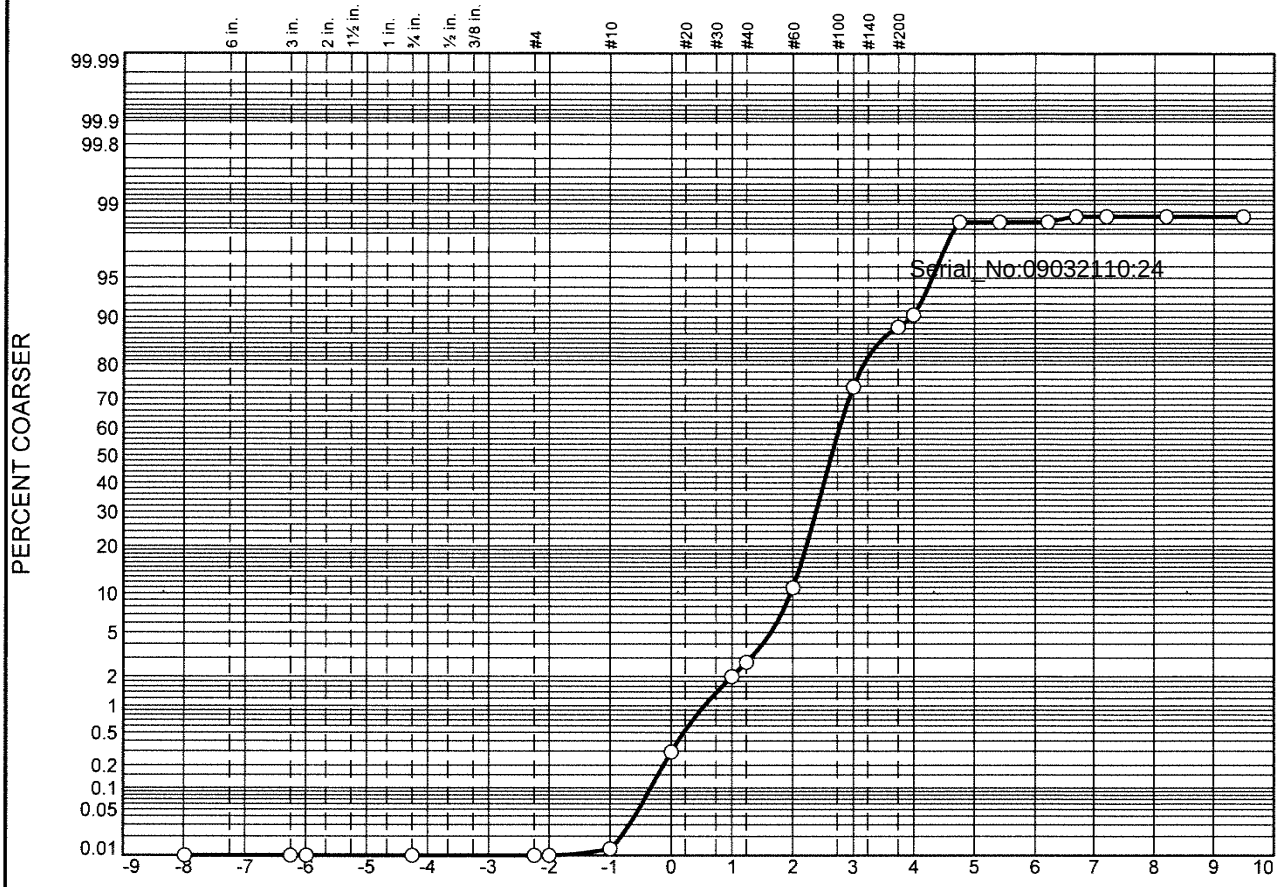
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.3	1.9	9.0	61.4	17.3	89.9	8.4	0.1	0.1		8.6	1.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0501	0.0623	0.0898	0.1083	0.1298	0.1453	0.1595	0.1743	0.2145	0.2315	0.2588	0.3312

Fineness Modulus	C_u	C_c
0.65	2.79	1.55

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.3	1.7	9.0	62.7	16.8	8.0	0.0	0.2		1.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2306	0.1750	0.1605	0.1315	0.0943	0.0643	1.54	2.72

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|020|SED|GS|02 **Sample No.:** L2140925-07

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|020|SED|GS|02

Sample Number: L2140925-07

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 78.46
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
78.46	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.01	0.00	100.0
		#18	0.22	0.00	99.7
		#35	1.34	0.00	98.0
		#40	0.58	0.00	97.3
		#60	6.47	0.00	89.0
		#120	49.23	0.00	26.3
		#200	11.41	0.00	11.7
		#230	1.62	0.00	9.7

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 9.7
Weight of hydrometer sample =41.99
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	1.5
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	1.5
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	1.5
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	1.3
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.3
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	1.3
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	1.3

Fractional Components

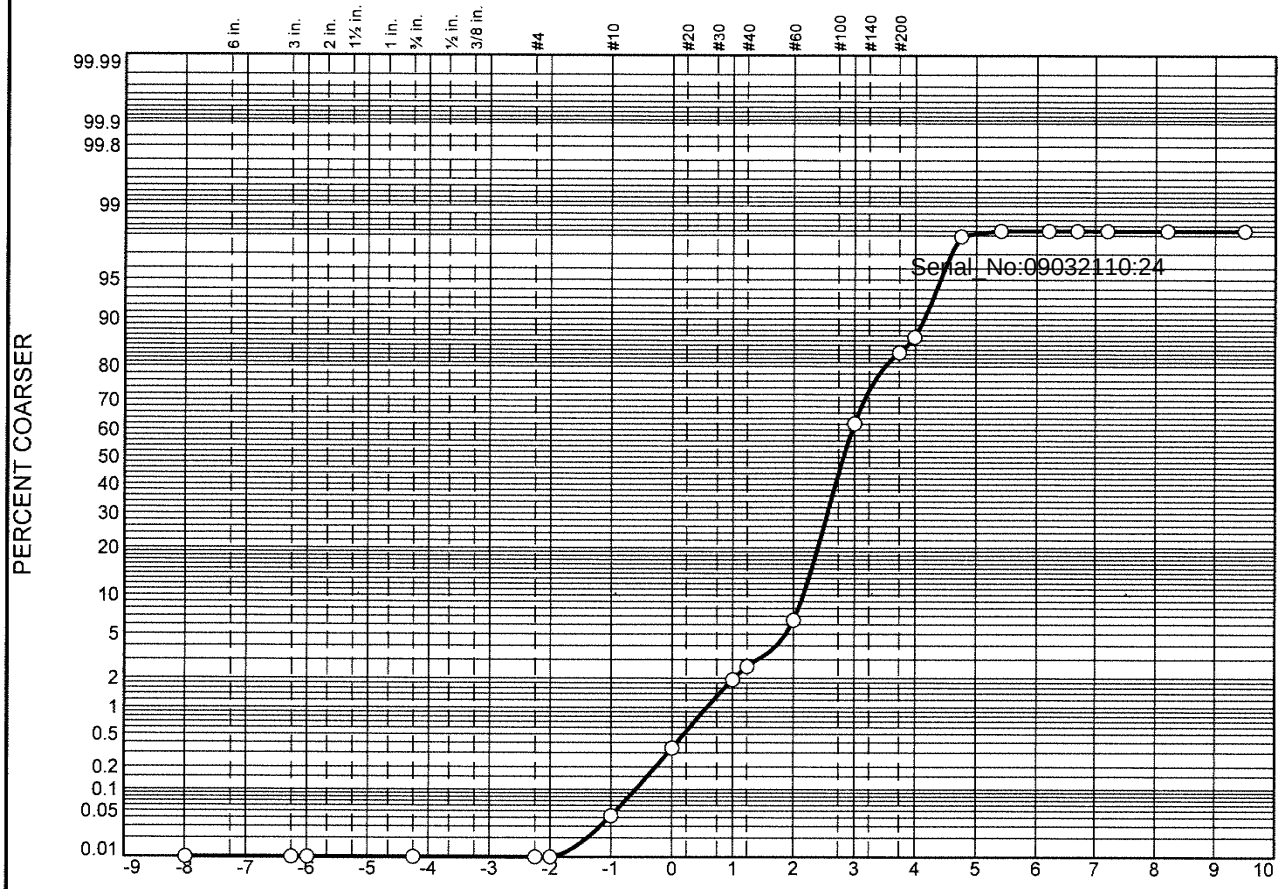
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.3	1.7	9.0	62.7	16.8	90.5	8.0	0.0	0.2		8.2	1.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0507	0.0643	0.0943	0.1111	0.1315	0.1466	0.1605	0.1750	0.2142	0.2306	0.2565	0.3211

Fineness Modulus	C_u	C_c
0.65	2.72	1.54

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.3	1.6	4.6	55.7	24.7	11.2	0.1	0.0	0.0	1.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2029	0.1550	0.1417	0.1122	0.0682	0.0563	1.44	2.75

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|021|SED|GS|01 **Sample No.:** L2140925-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|021|SED|GS|01

Sample Number: L2140925-08

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 70.10
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
70.10	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	100.0
		#18	0.21	0.00	99.7
		#35	1.12	0.00	98.1
		#40	0.45	0.00	97.4
		#60	2.75	0.00	93.5
		#120	39.07	0.00	37.8
		#200	14.83	0.00	16.6
		#230	2.32	0.00	13.3

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 13.3
Weight of hydrometer sample =43.31
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	2.0
5.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0236	1.8
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	1.8
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	1.8
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.8
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	1.8
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	1.8

Fractional Components

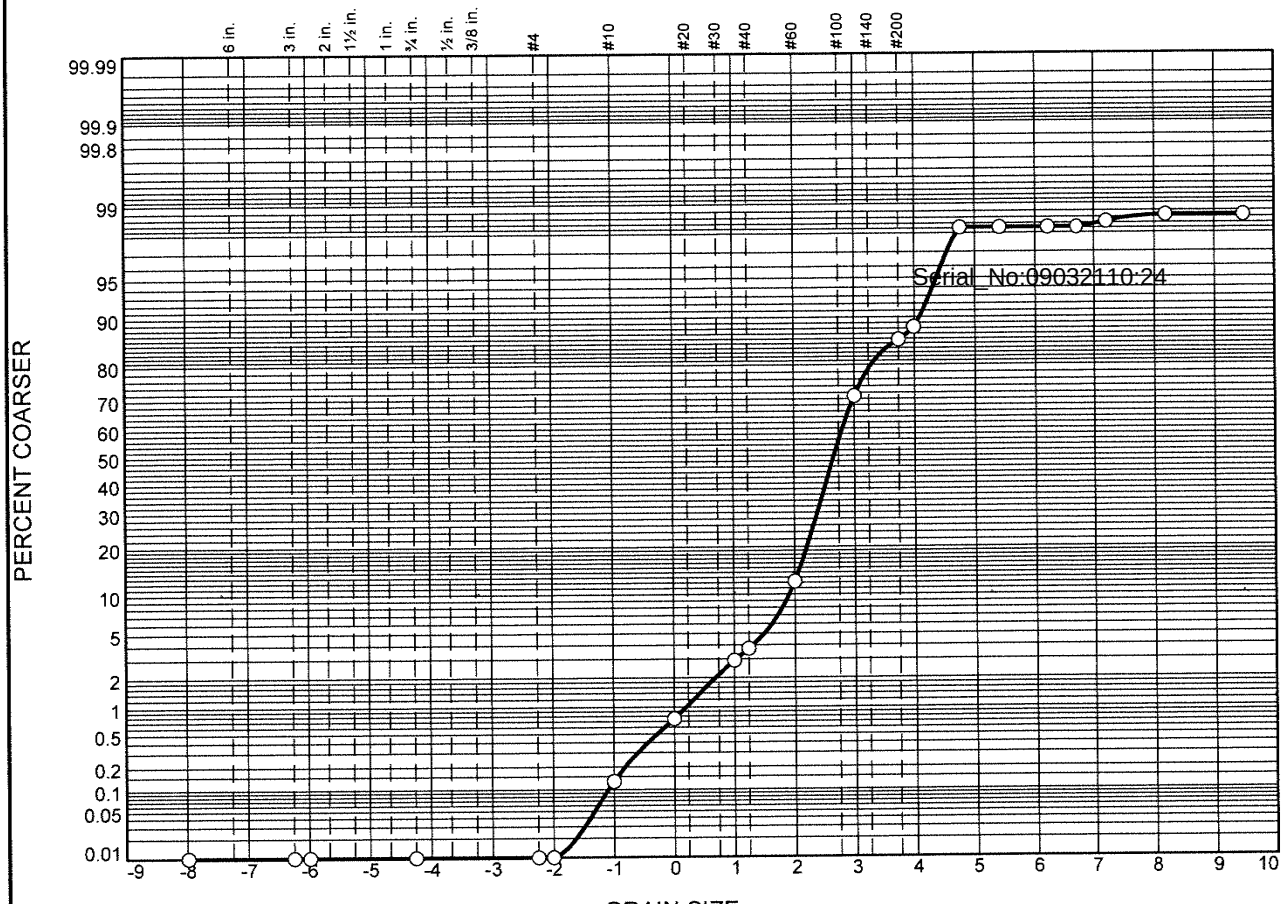
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.3	1.6	4.6	55.7	24.7	86.9	11.2	0.1	0.0	0.0	11.3	1.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0470	0.0563	0.0682	0.0880	0.1122	0.1282	0.1417	0.1550	0.1893	0.2029	0.2235	0.2730

Fineness Modulus	C_u	C_c
0.49	2.75	1.44

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.6	2.2	9.4	58.7	17.5	9.7	0.0	0.2	0.3	1.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2356	0.1741	0.1585	0.1269	0.0804	0.0588	1.57	2.96

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|025|SED|GS|01 **Sample No.:** L2140925-09

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|025|SED|GS|01

Sample Number: L2140925-09

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 85.52
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
85.52	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.11	0.00	99.9
		#18	0.53	0.00	99.3
		#35	1.85	0.00	97.1
		#40	0.69	0.00	96.3
		#60	7.30	0.00	87.7
		#120	50.23	0.00	29.0
		#200	12.70	0.00	14.2
		#230	2.10	0.00	11.7

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 11.7
Weight of hydrometer sample =44.25
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	1.8
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	1.8
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	1.8
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	1.8
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.5
240.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0034	1.3
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	1.3

Fractional Components

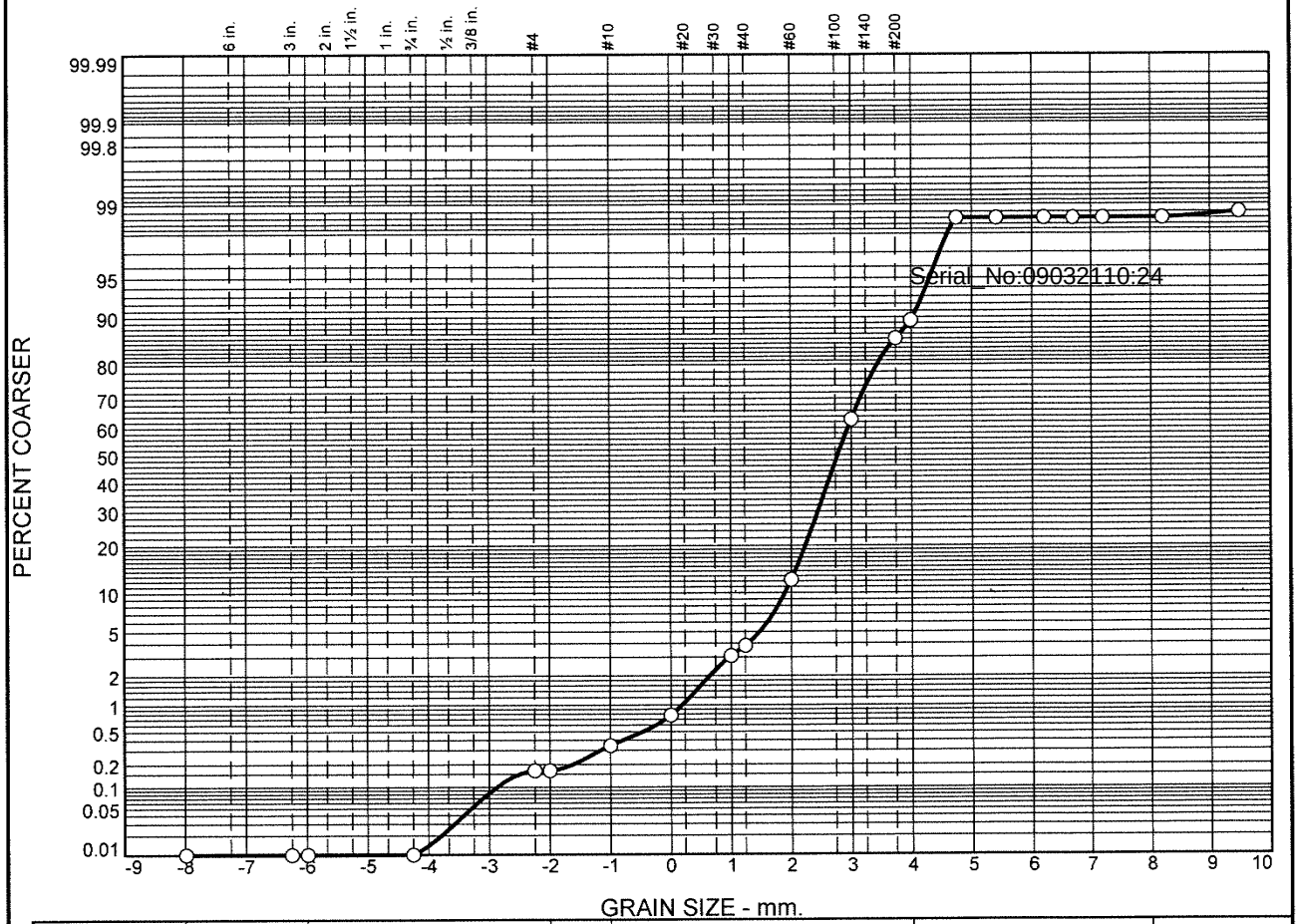
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.6	2.2	9.4	58.7	17.5	88.4	9.7	0.0	0.2	0.3	10.2	1.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0485	0.0588	0.0804	0.1028	0.1269	0.1435	0.1585	0.1741	0.2171	0.2356	0.2665	0.3550

Fineness Modulus	C_u	C_c
0.66	2.96	1.57

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.1	0.5	2.3	9.2	50.7	26.6	9.0	0.0	0.0		1.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2337	0.1633	0.1460	0.1130	0.0788	0.0615	1.27	2.65

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|027|SED|GS|01 **Sample No.:** L2140925-10

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|027|SED|GS|01

Sample Number: L2140925-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.16
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.16	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.15	0.00	99.8
		#5	0.00	0.00	99.8
		#10	0.16	0.00	99.7
		#18	0.39	0.00	99.2
		#35	2.09	0.00	96.9
		#40	0.64	0.00	96.2
		#60	7.63	0.00	87.7
		#120	45.74	0.00	37.0
		#200	20.81	0.00	13.9
		#230	3.02	0.00	10.6

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 10.6
Weight of hydrometer sample =44.37
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0373	1.4
5.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0236	1.4
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	1.4
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	1.4
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.4
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	1.4
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	1.2

Fractional Components

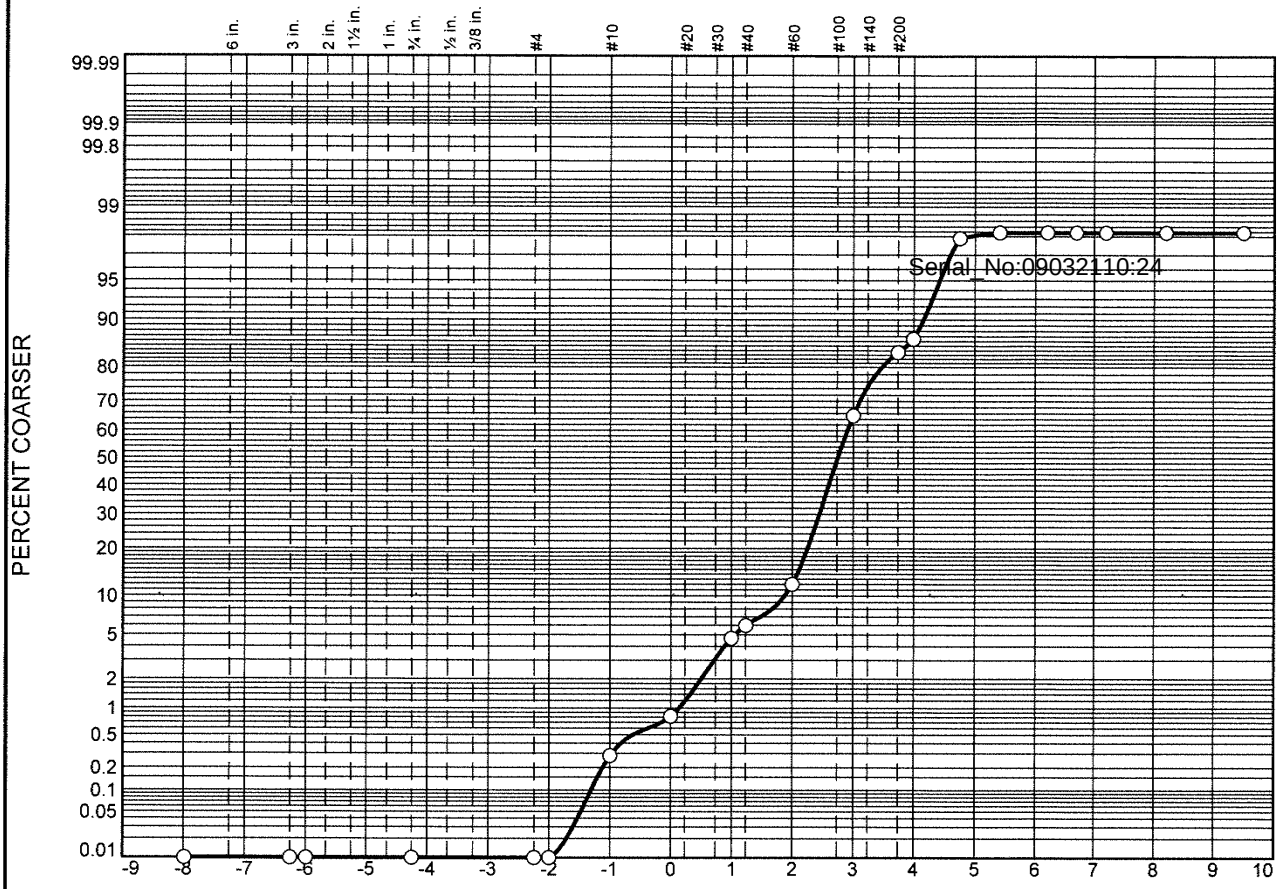
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.1	0.5	2.3	9.2	50.7	26.6	89.3	9.0	0.0	0.0		9.0	1.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0507	0.0615	0.0788	0.0927	0.1130	0.1299	0.1460	0.1633	0.2123	0.2337	0.2685	0.3596

Fineness Modulus	C_u	C_c
0.58	2.65	1.27

Serial_No:09032110:24

Particle Size Distribution Report



GRAIN SIZE - mm.

	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.5	3.9	7.3	53.2	21.5	11.3	0.2	0.0	0.0	1.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2304	0.1649	0.1490	0.1161	0.0680	0.0559	1.46	2.95

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|033|SED|GS|01 **Sample No.:** L2140925-11

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|033|SED|GS|01

Sample Number: L2140925-11

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 74.94
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.94	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.7
		#18	0.40	0.00	99.2
		#35	2.90	0.00	95.3
		#40	0.96	0.00	94.0
		#60	4.52	0.00	88.0
		#120	39.88	0.00	34.8
		#200	13.76	0.00	16.4
		#230	2.20	0.00	13.5

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 13.5
Weight of hydrometer sample =42.9
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	2.1
5.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0236	1.8
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	1.8
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	1.8
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.8
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	1.8
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	1.8

Fractional Components

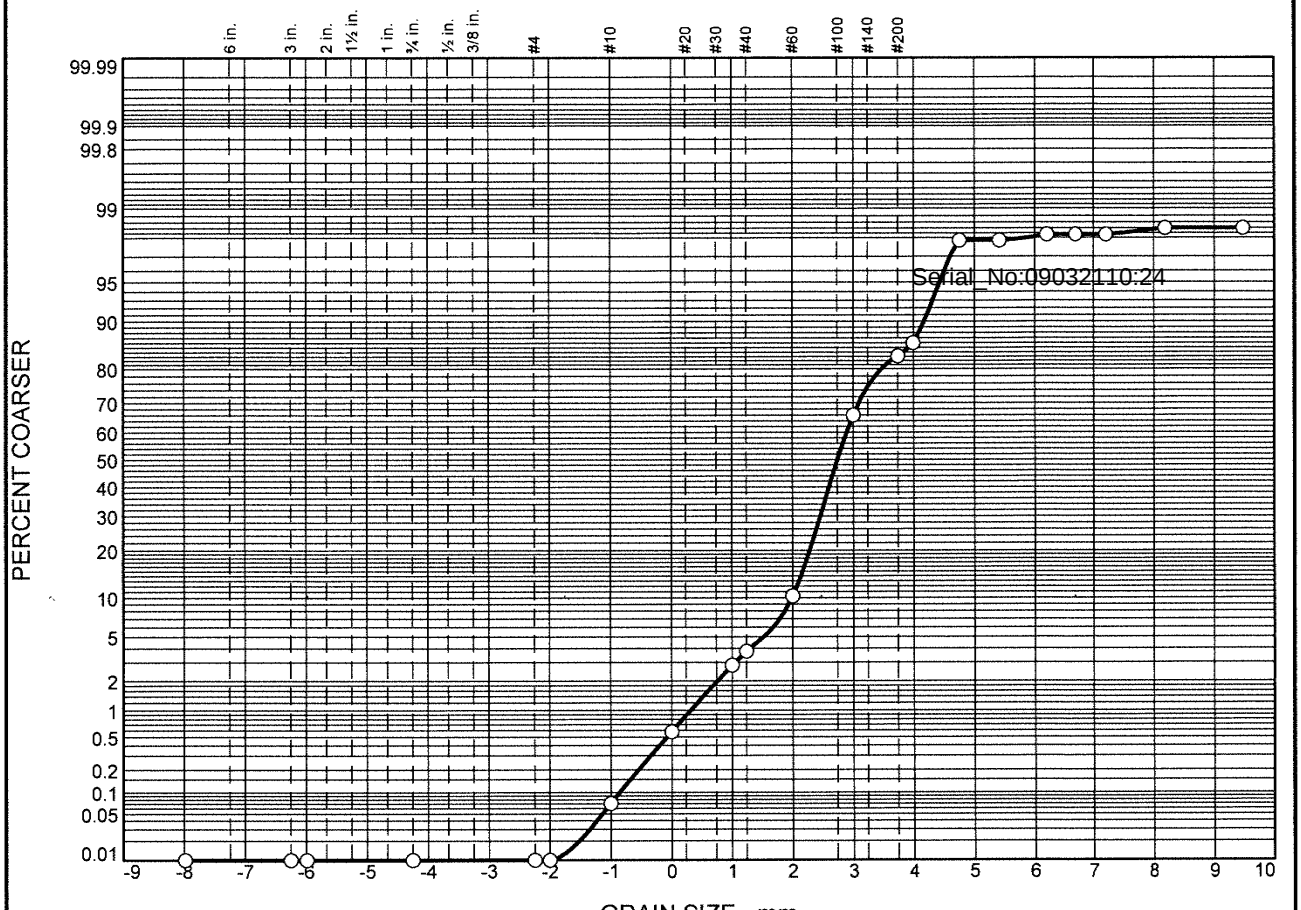
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.5	3.9	7.3	53.2	21.5	86.4	11.3	0.2	0.0	0.0	11.5	1.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0466	0.0559	0.0680	0.0902	0.1161	0.1336	0.1490	0.1649	0.2097	0.2304	0.2714	0.4819

Fineness Modulus	C_u	C_c
0.62	2.95	1.46

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.5	2.2	7.5	55.7	20.2	11.7	0.2	0.0	0.3	1.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2232	0.1649	0.1497	0.1175	0.0661	0.0554	1.51	2.98

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|034|SED|GS|01 **Sample No.:** L2140925-12

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|034|SED|GS|01

Sample Number: L2140925-12

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 71.11
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
71.11	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.05	0.00	99.9
		#18	0.36	0.00	99.4
		#35	1.59	0.00	97.2
		#40	0.67	0.00	96.2
		#60	4.62	0.00	89.7
		#120	39.66	0.00	34.0
		#200	12.19	0.00	16.8
		#230	2.04	0.00	14.0

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 14.0
Weight of hydrometer sample =43.84
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	2.1
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	2.1
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	1.9
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	1.9
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	1.9
240.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0034	1.6
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	1.6

Fractional Components

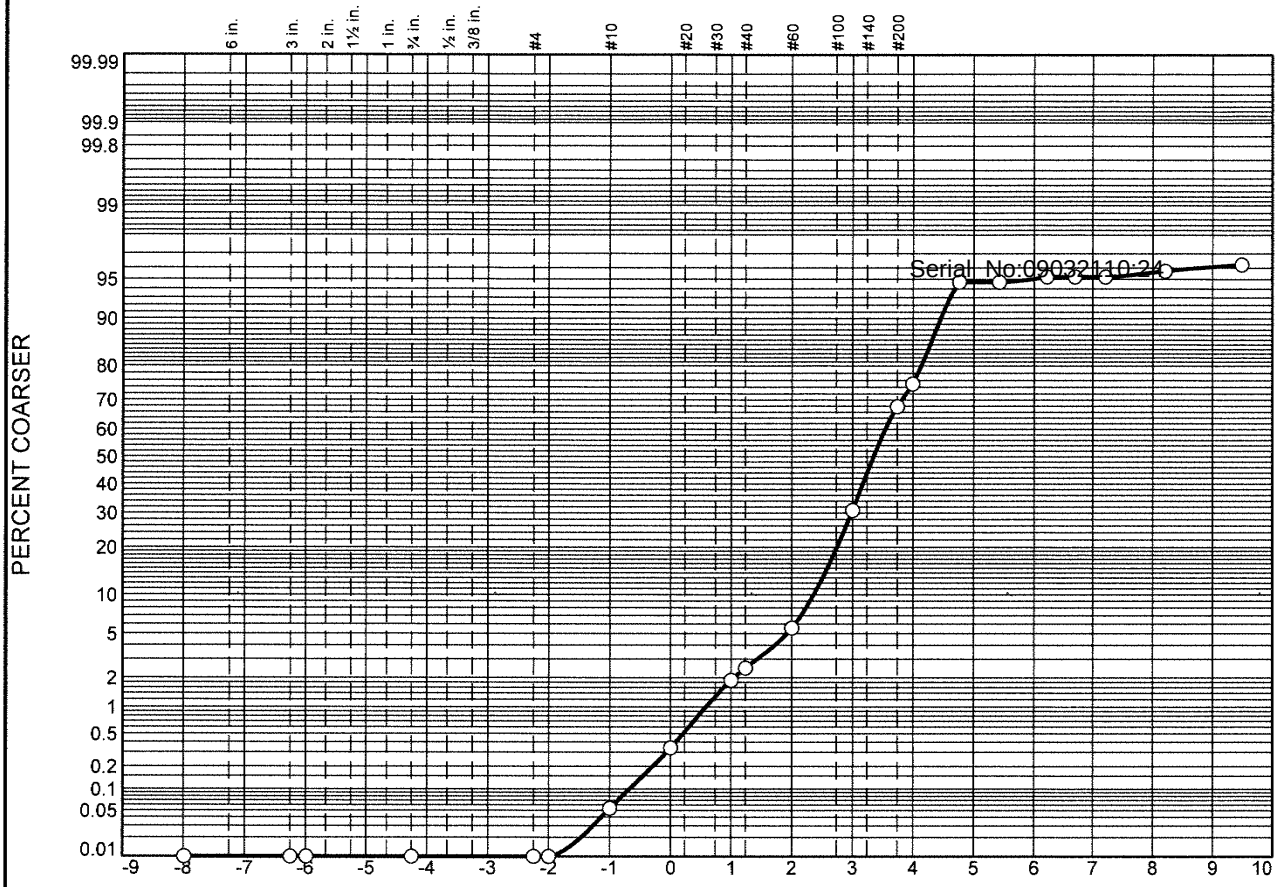
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.5	2.2	7.5	55.7	20.2	86.1	11.7	0.2	0.0	0.3	12.2	1.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0465	0.0554	0.0661	0.0902	0.1175	0.1349	0.1497	0.1649	0.2057	0.2232	0.2520	0.3487

Fineness Modulus	C_u	C_c
0.59	2.98	1.51

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.2	1.6	3.7	25.2	44.5	19.4	0.3	0.2	0.4	4.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1662	0.1111	0.0983	0.0713	0.0515	0.0457	1.00	2.43

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|040|SED|GS|01 **Sample No.:** L2140925-13

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|040|SED|GS|01

Sample Number: L2140925-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 56.10
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
56.10	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	99.9
		#18	0.16	0.00	99.7
		#35	0.87	0.00	98.1
		#40	0.33	0.00	97.5
		#60	1.73	0.00	94.4
		#120	14.18	0.00	69.2
		#200	20.75	0.00	32.2
		#230	4.00	0.00	25.0

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 25.0
Weight of hydrometer sample =38.98
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0050	1.0051	0.0134	5.0	15.0	0.0368	5.3
5.00	21.2	1.0050	1.0051	0.0134	5.0	15.0	0.0233	5.3
15.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0135	4.8
30.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0095	4.8
60.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0067	4.8
240.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0034	4.3
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	3.8

Fractional Components

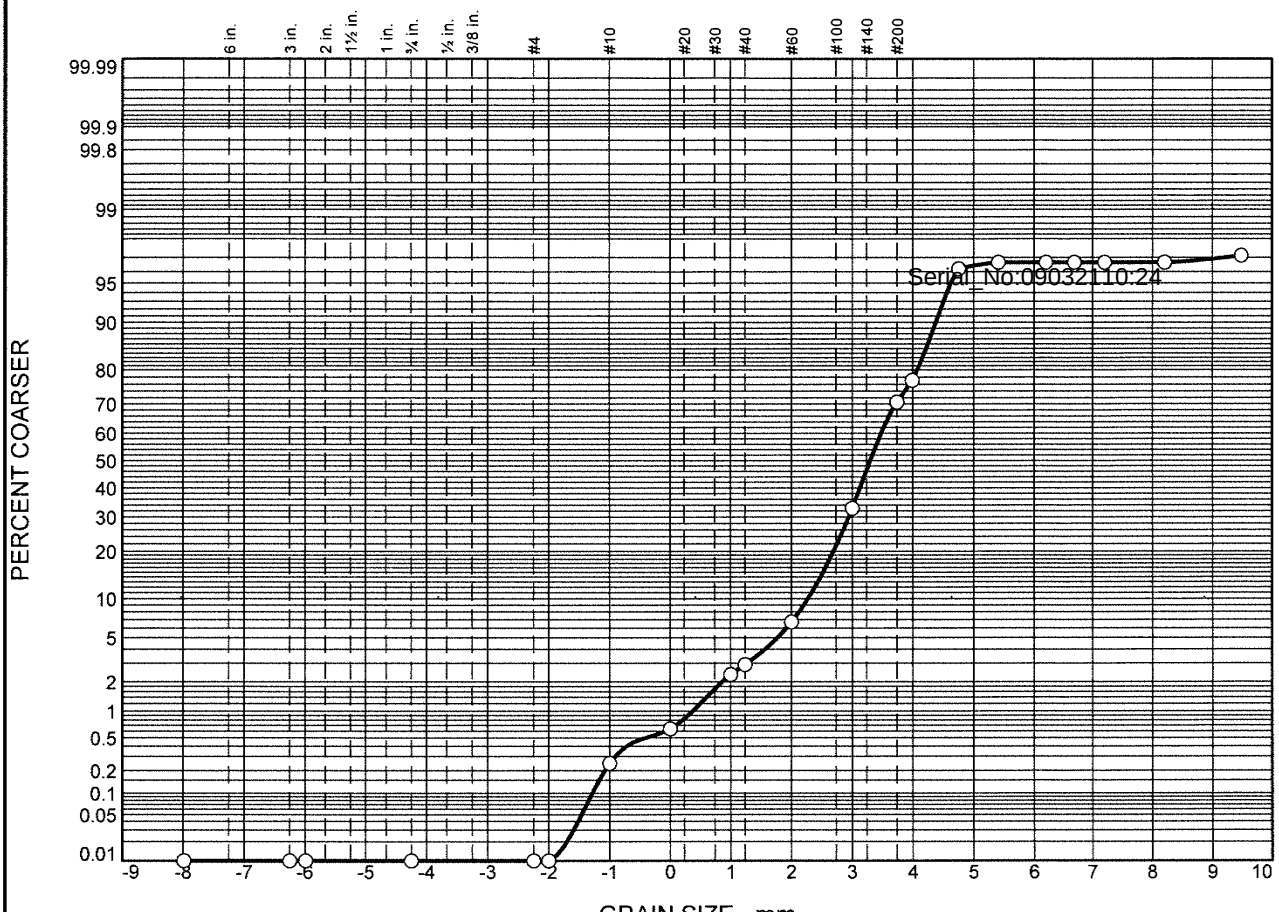
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.2	1.6	3.7	25.2	44.5	75.2	19.4	0.3	0.2	0.4	20.3	4.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0160	0.0457	0.0515	0.0569	0.0713	0.0860	0.0983	0.1111	0.1489	0.1662	0.1941	0.2642

Fineness Modulus	C_u	C_c
0.25	2.43	1.00

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.4	1.7	4.4	26.2	44.6	19.0	0.2	0.0		3.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1740	0.1143	0.1017	0.0760	0.0538	0.0482	1.05	2.37

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|040|SED|GS|02 **Sample No.:** L2140925-14

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|040|SED|GS|02

Sample Number: L2140925-14

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 56.63
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
56.63	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.14	0.00	99.8
		#18	0.22	0.00	99.4
		#35	0.97	0.00	97.7
		#40	0.32	0.00	97.1
		#60	2.14	0.00	93.3
		#120	14.85	0.00	67.1
		#200	21.33	0.00	29.4
		#230	3.70	0.00	22.9

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.9
Weight of hydrometer sample =40.23
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	3.8
5.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0236	3.3
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	3.3
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	3.3
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	3.3
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	3.3
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	2.9

Fractional Components

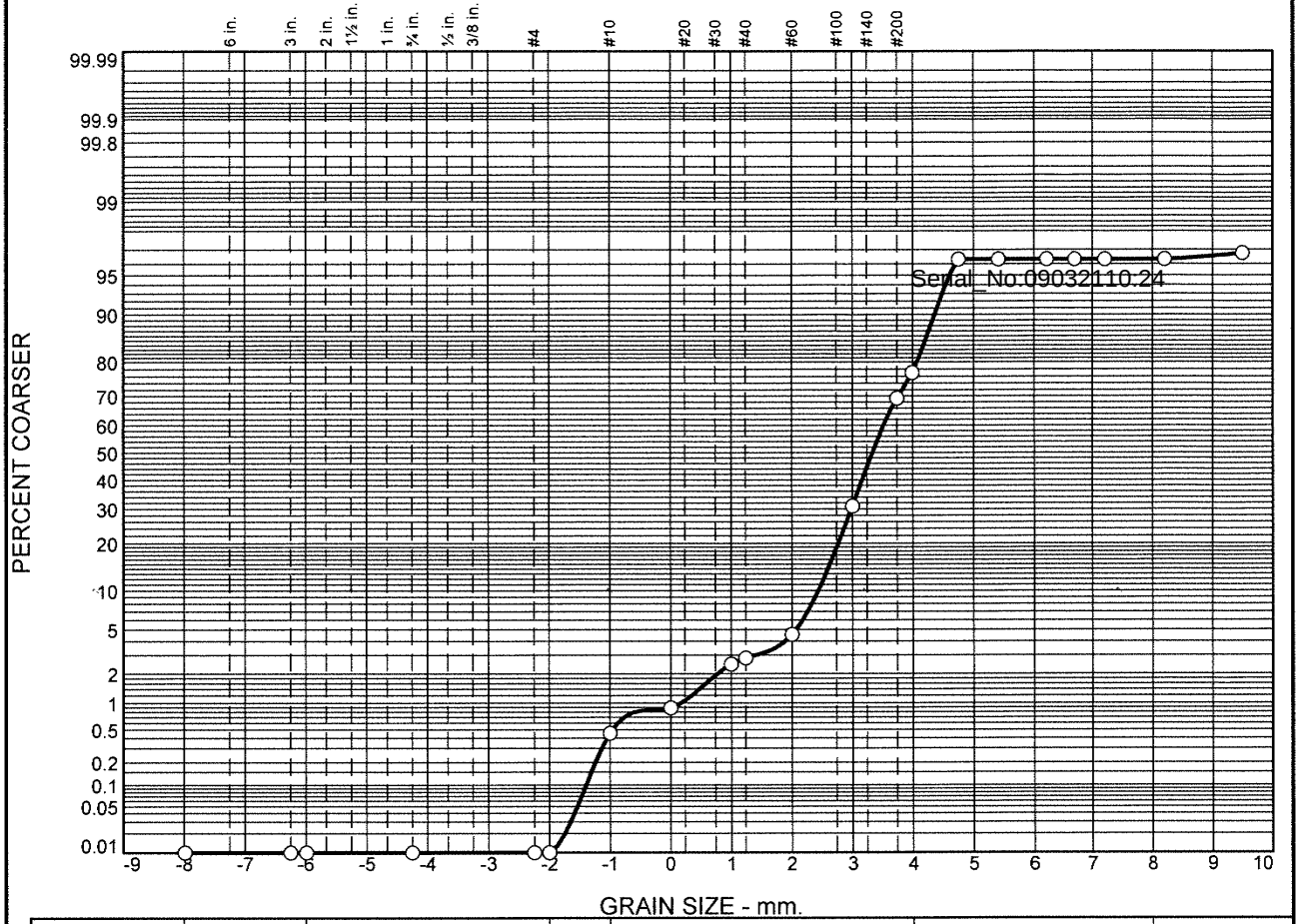
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.4	1.7	4.4	26.2	44.6	77.3	19.0	0.2	0.0		19.2	3.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0405	0.0482	0.0538	0.0592	0.0760	0.0897	0.1017	0.1143	0.1544	0.1740	0.2069	0.2930

Fineness Modulus	C_u	C_c
0.29	2.37	1.05

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	0.4	1.6	2.1	26.3	46.6	18.8	0.0	0.0	0.0	3.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1617	0.1118	0.0994	0.0738	0.0543	0.0488	1.00	2.29

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|047|SED|GS|01 **Sample No.:** L2140925-15

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|047|SED|GS|01

Sample Number: L2140925-15

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 58.89
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
58.89	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.27	0.00	99.5
		#18	0.25	0.00	99.1
		#35	0.94	0.00	97.5
		#40	0.20	0.00	97.2
		#60	1.02	0.00	95.4
		#120	15.53	0.00	69.1
		#200	22.57	0.00	30.8
		#230	4.60	0.00	22.9

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.9
Weight of hydrometer sample =41.72
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	3.7
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	3.7
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	3.7
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	3.7
60.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0068	3.7
240.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0034	3.7
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	3.2

Fractional Components

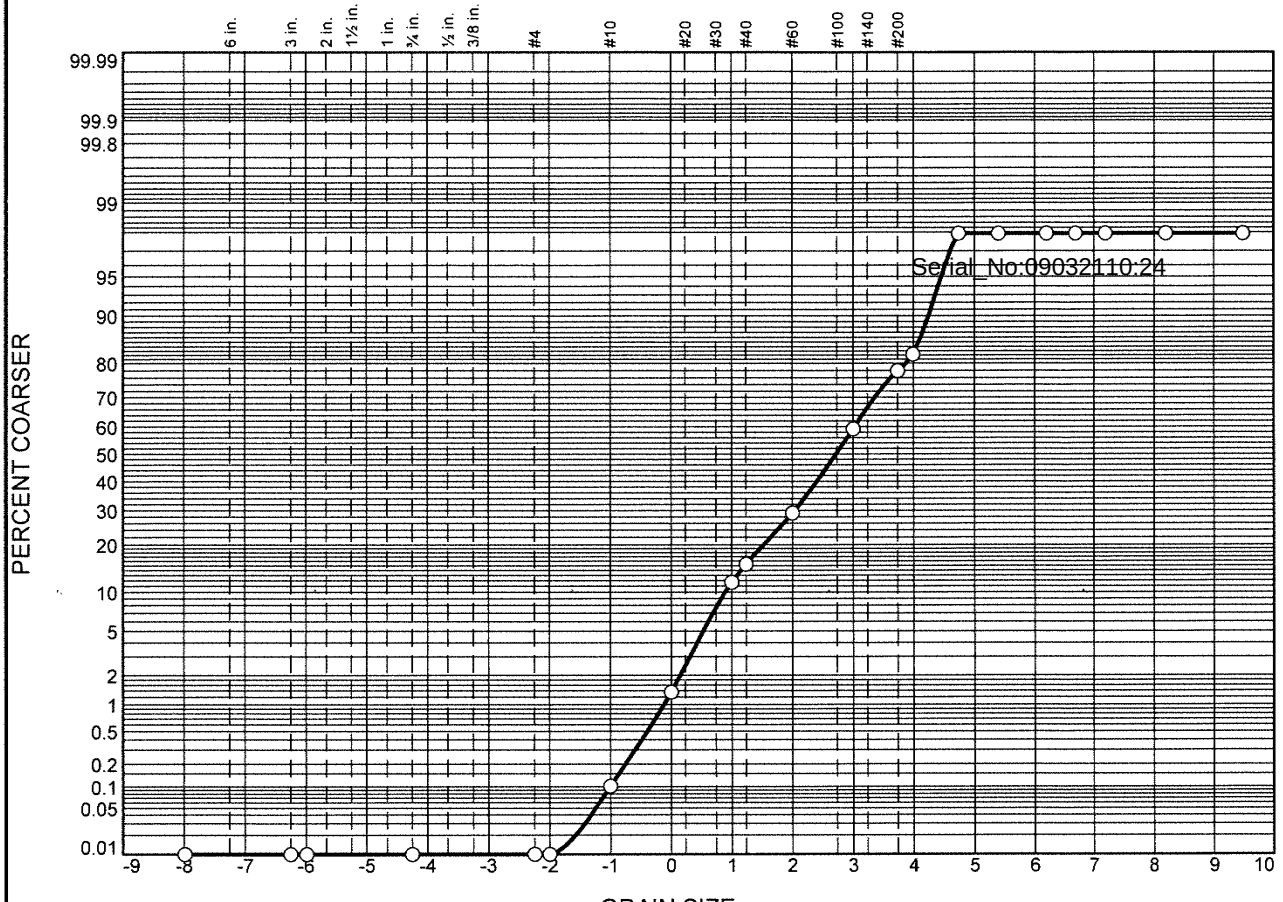
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	0.4	1.6	2.1	26.3	46.6	77.0	18.8	0.0	0.0	0.0	18.8	3.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0411	0.0488	0.0543	0.0595	0.0738	0.0874	0.0994	0.1118	0.1468	0.1617	0.1847	0.2389

Fineness Modulus	C_u	C_c
0.25	2.29	1.00

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.3	10.3	17.5	30.0	23.3	15.5	0.0	0.0	0.0	2.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4306	0.1887	0.1516	0.0974	0.0589	0.0527	0.95	3.58

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|048|SED|GS|01 **Sample No.:** L2140925-16

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|048|SED|GS|01

Sample Number: L2140925-16

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 68.61
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
68.61	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.07	0.00	99.9
		#18	0.86	0.00	98.6
		#35	7.09	0.00	88.3
		#40	2.47	0.00	84.7
		#60	9.53	0.00	70.8
		#120	20.57	0.00	40.8
		#200	12.87	0.00	22.1
		#230	2.96	0.00	17.8

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 17.8
Weight of hydrometer sample =43.75
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0374	2.0
5.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0237	2.0
15.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0137	2.0
30.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0097	2.0
60.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0068	2.0
240.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0034	2.0
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	2.0

Fractional Components

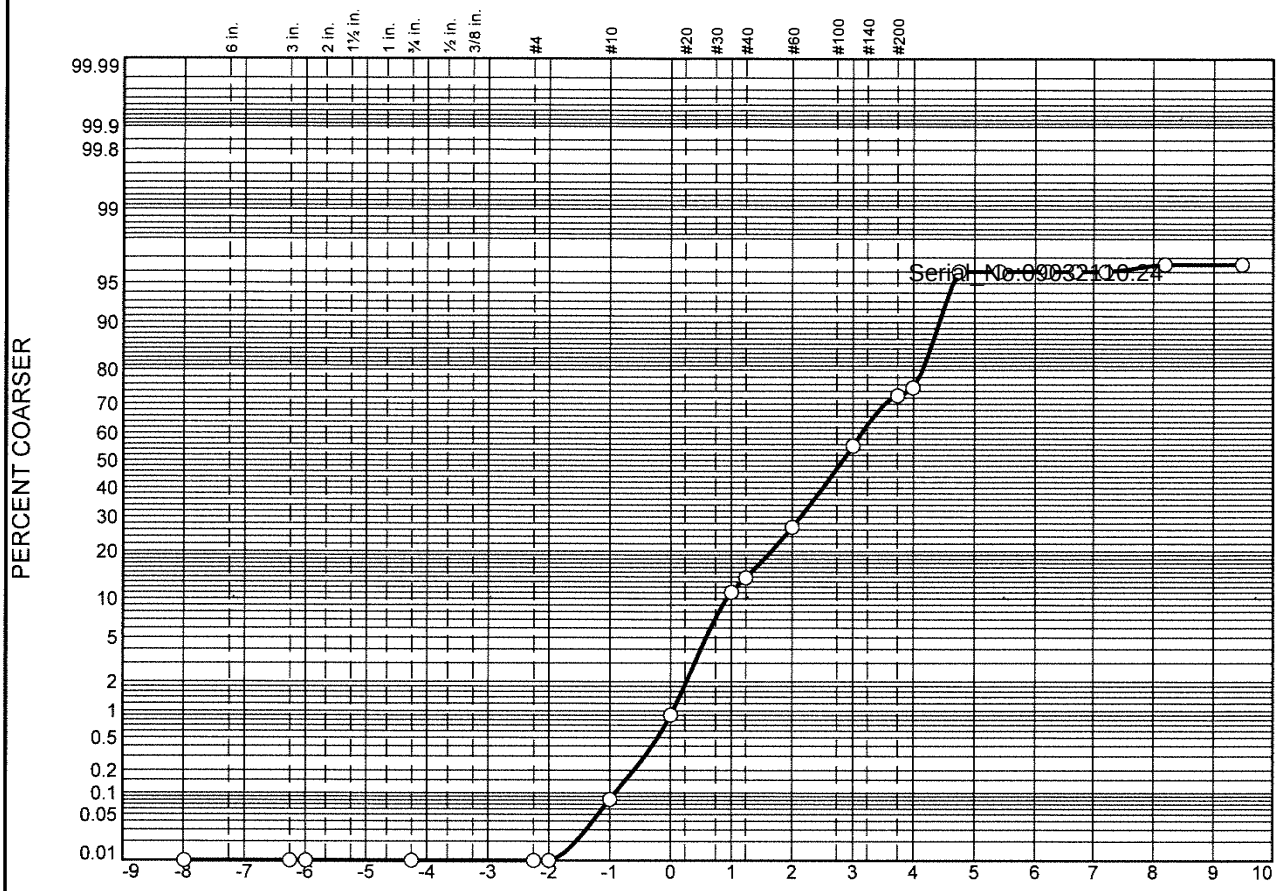
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.3	10.3	17.5	30.0	23.3	82.4	15.5	0.0	0.0	0.0	15.5	2.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0457	0.0527	0.0589	0.0680	0.0974	0.1228	0.1516	0.1887	0.3468	0.4306	0.5389	0.6943

Fineness Modulus	C_u	C_c
0.83	3.58	0.95

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.8	10.2	15.7	28.6	19.9	20.7	0.0	0.0	0.5	3.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3980	0.1758	0.1403	0.0867	0.0516	0.0467	0.92	3.76

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|049|SED|GS|01 **Sample No.:** L2140925-17

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|049|SED|GS|01

Sample Number: L2140925-17

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 36.61
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
36.61	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	99.9
		#18	0.30	0.00	99.1
		#35	3.73	0.00	88.9
		#40	1.01	0.00	86.2
		#60	4.73	0.00	73.2
		#120	10.48	0.00	44.6
		#200	6.34	0.00	27.3
		#230	0.86	0.00	24.9

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 24.9
Weight of hydrometer sample =36.61
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0373	4.0
5.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0236	4.0
15.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0136	4.0
30.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0096	4.0
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	4.0
240.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0034	3.4
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	3.4

Fractional Components

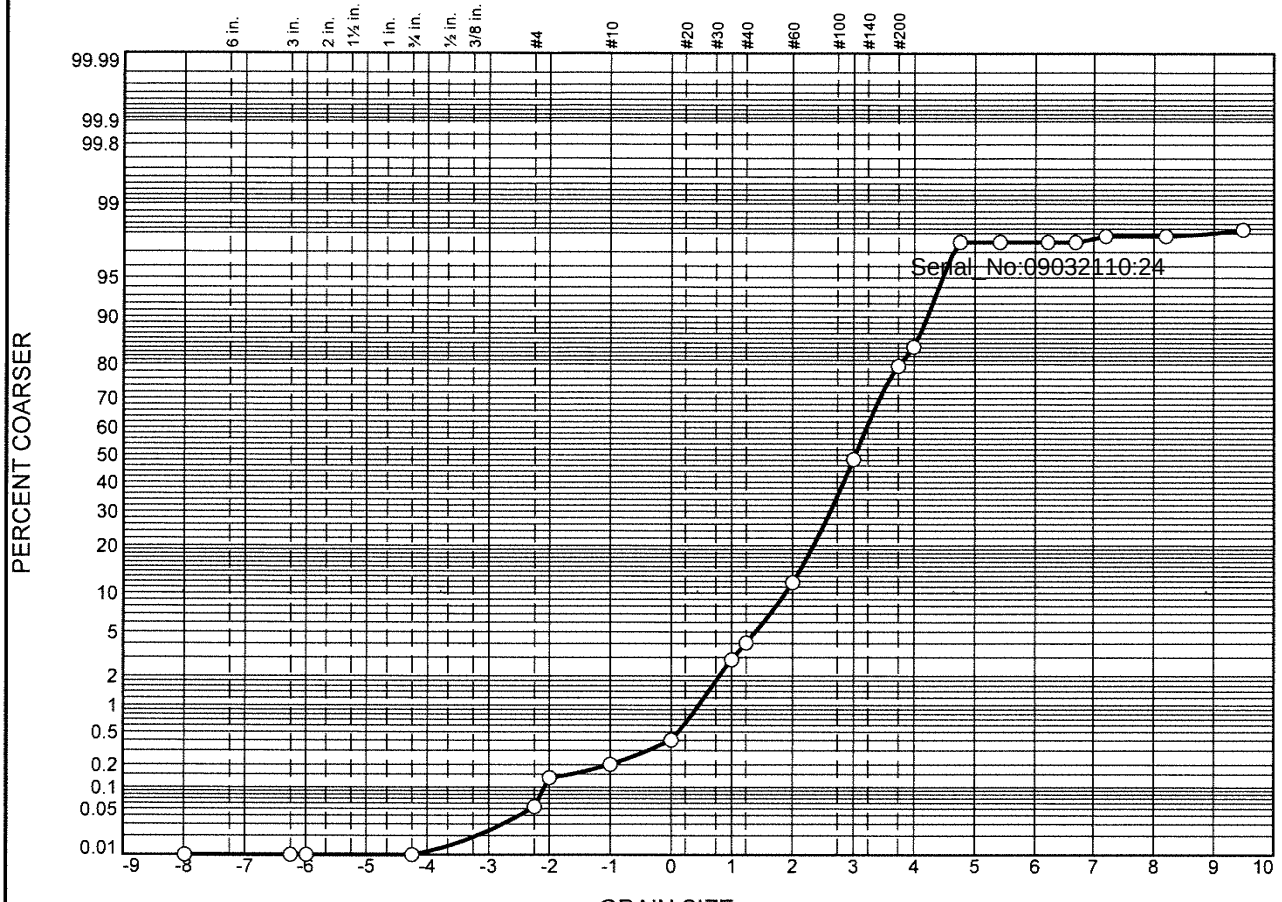
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.8	10.2	15.7	28.6	19.9	75.2	20.7	0.0	0.0	0.5	21.2	3.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0399	0.0467	0.0516	0.0564	0.0867	0.1132	0.1403	0.1758	0.3162	0.3980	0.5274	0.6686

Fineness Modulus	C_u	C_c
0.76	3.76	0.92

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.1	0.2	2.5	8.9	36.6	36.1	13.1	0.0	0.2	0.1	2.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2242	0.1398	0.1224	0.0927	0.0615	0.0537	1.14	2.60

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|053|SED|GS|01 **Sample No.:** L2140925-18

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|053|SED|GS|01

Sample Number: L2140925-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 74.43
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.43	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.04	0.00	99.9
		#5	0.06	0.00	99.9
		#10	0.05	0.00	99.8
		#18	0.15	0.00	99.6
		#35	1.83	0.00	97.1
		#40	0.88	0.00	96.0
		#60	5.79	0.00	88.2
		#120	27.21	0.00	51.6
		#200	23.16	0.00	20.5
		#230	3.50	0.00	15.8

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 15.8
Weight of hydrometer sample =43.47
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	2.4
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	2.4
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	2.4
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	2.4
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	2.1
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	2.1
1440.00	21.2	1.0030	1.0031	0.0134	3.0	15.5	0.0014	1.8

Fractional Components

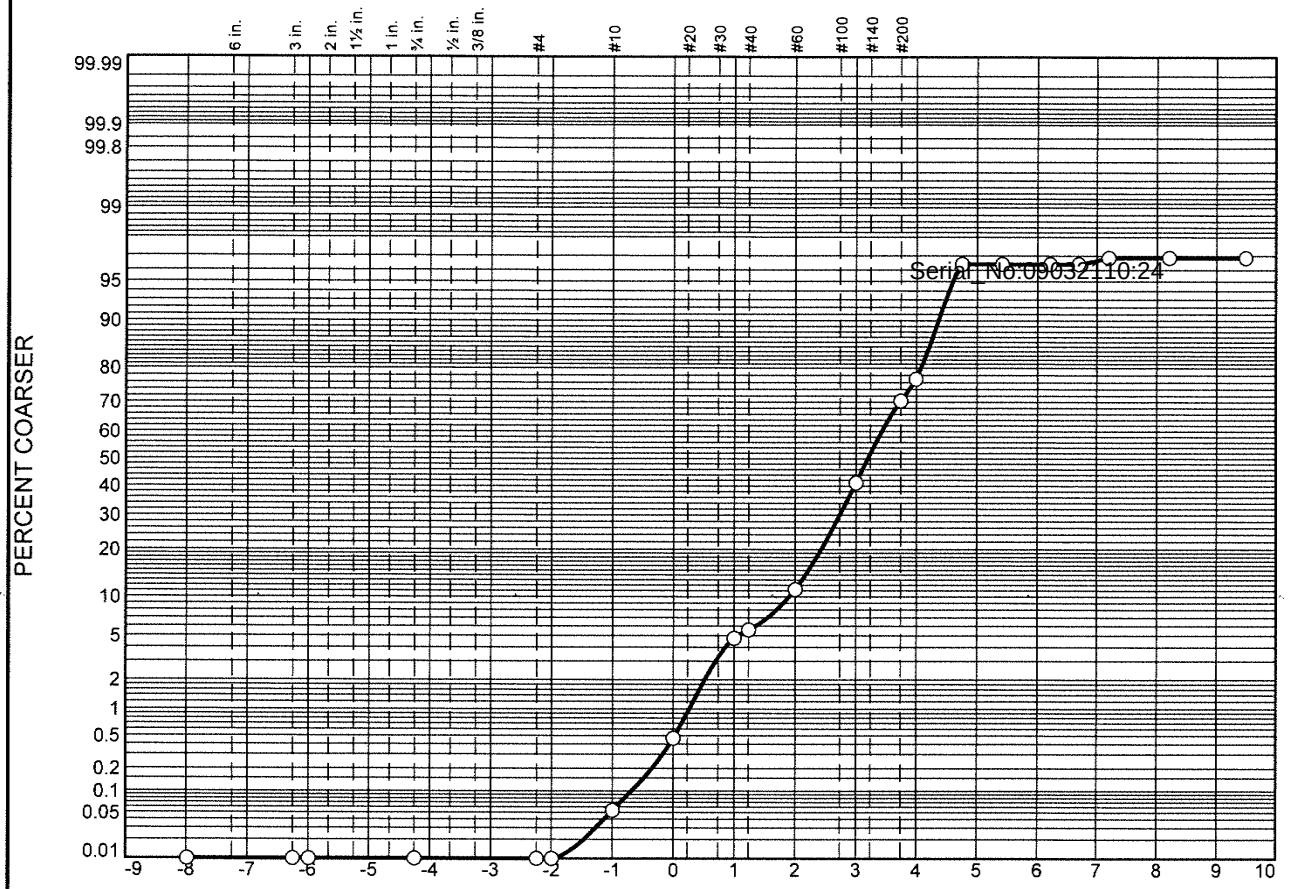
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.1	0.2	2.5	8.9	36.6	36.1	84.3	13.1	0.0	0.2	0.1	13.4	2.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0453	0.0537	0.0615	0.0737	0.0927	0.1075	0.1224	0.1398	0.1968	0.2242	0.2705	0.3819

Fineness Modulus	C_u	C_c
0.46	2.60	1.14

Serial_No:09032110:24

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.4	4.3	6.4	29.9	36.2	19.1	0.0	0.3	0.2	3.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2145	0.1271	0.1091	0.0758	0.0540	0.0486	0.93	2.61

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|054|SED|GS|01 **Sample No.:** L2140925-19

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|054|SED|GS|01

Sample Number: L2140925-19

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 74.54
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.54	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	99.9
		#18	0.31	0.00	99.5
		#35	3.21	0.00	95.2
		#40	0.60	0.00	94.4
		#60	4.21	0.00	88.8
		#120	22.25	0.00	58.9
		#200	21.85	0.00	29.6
		#230	4.91	0.00	23.0

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 23.0
Weight of hydrometer sample =42.95
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0371	3.6
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	3.6
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	3.6
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	3.6
60.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0068	3.1
240.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0034	3.1
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	3.1

Fractional Components

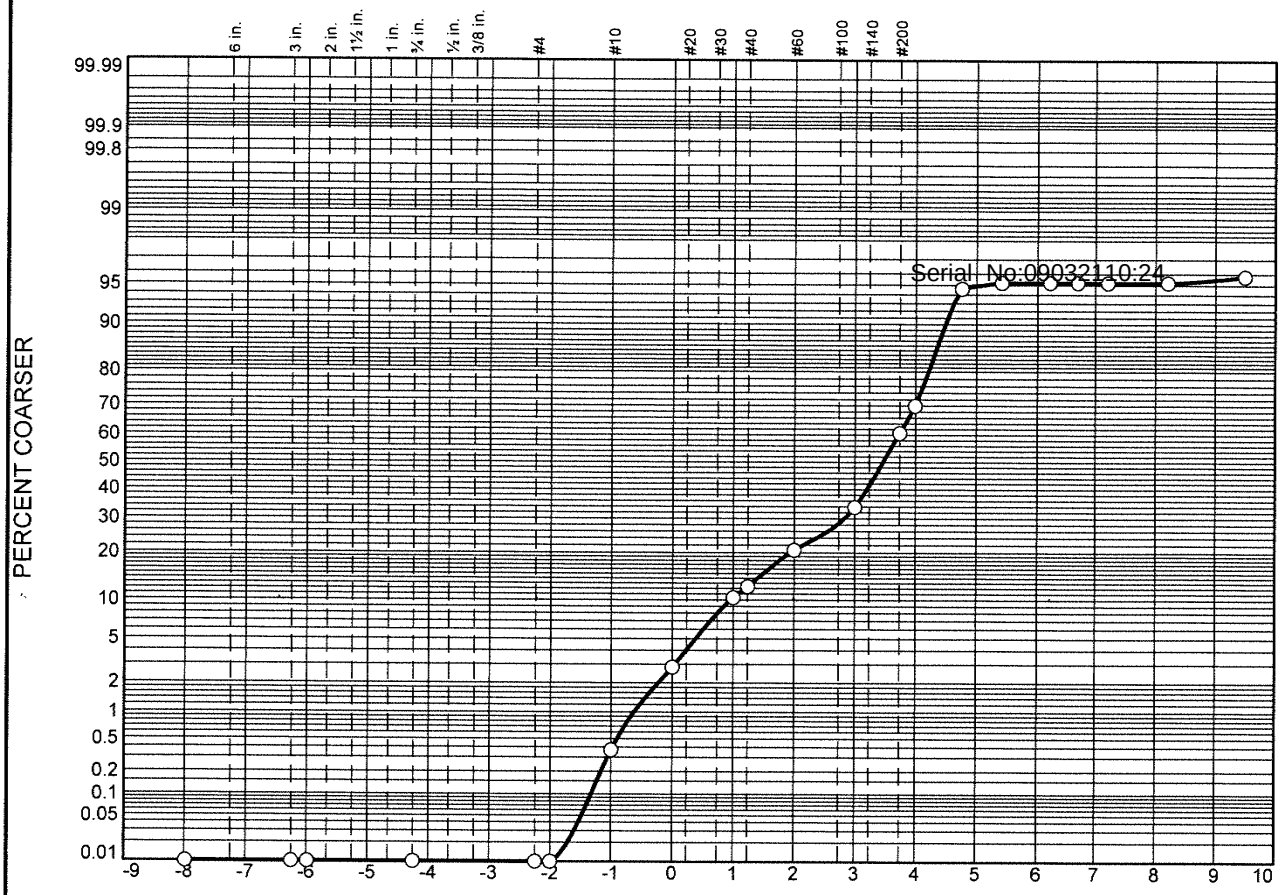
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.4	4.3	6.4	29.9	36.2	77.2	19.1	0.0	0.3	0.2	19.6	3.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0412	0.0486	0.0540	0.0593	0.0758	0.0929	0.1091	0.1271	0.1855	0.2145	0.2672	0.4815

Fineness Modulus	C_u	C_c
0.42	2.61	0.93

Serial_No:09032110:24

Particle Size Distribution Report



GRAIN SIZE - mm.

	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	2.4	7.6	10.2	13.2	36.6	24.5	0.3	0.0	0.0	4.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.3542	0.1087	0.0906	0.0629	0.0496	0.0446	0.82	2.44

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|058|SED|GS|01 **Sample No.:** L2140925-20

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/2/2021

Location: 3664|2021|WTG|058|SED|GS|01

Sample Number: L2140925-20

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 67.95
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
67.95	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.25	0.00	99.6
		#18	1.66	0.00	97.2
		#35	5.13	0.00	89.6
		#40	1.36	0.00	87.6
		#60	5.62	0.00	79.4
		#120	8.95	0.00	66.2
		#200	18.22	0.00	39.4
		#230	6.31	0.00	30.1

Serial_No:09032110:24

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 30.1
Weight of hydrometer sample =41.74
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.2	1.0045	1.0046	0.0134	4.5	15.1	0.0369	5.4
5.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0235	4.8
15.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0136	4.8
30.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0096	4.8
60.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0068	4.8
240.00	21.2	1.0040	1.0041	0.0134	4.0	15.2	0.0034	4.8
1440.00	21.2	1.0035	1.0036	0.0134	3.5	15.4	0.0014	4.2

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	2.4	7.6	10.2	13.2	36.6	70.0	24.5	0.3	0.0	0.0	24.8	4.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0293	0.0446	0.0496	0.0540	0.0629	0.0759	0.0906	0.1087	0.2607	0.3542	0.5143	0.7671

Fineness Modulus	C_u	C_c
0.56	2.44	0.82

Serial_No:09032110:24

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140925

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|104|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|107|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|122|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|123|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|128|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|134|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|137|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|150|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
3664|2021|WTG|150|Sed|TOC|02	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1
3664|2021|WTG|157|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #1; QC duplicate
3664|2021|WTG|157|Sed|TOC|02	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Priority; Cooler #2
					total organic carbon	Priority; Cooler #2; QC duplicate
3664|2021|WTG|002|Sed|GS|01	7/17/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -01
3664|2021|WTG|003|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -02
3664|2021|WTG|005|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -03
3664|2021|WTG|008|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -04
3664|2021|WTG|011|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -05
3664|2021|WTG|020|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -06
3664|2021|WTG|020|Sed|GS|02	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate -07
3664|2021|WTG|021|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -08

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact/Broken-Leaking
Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21 RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] DATE/TIME: 7/30/21 RECEIVED BY: [signature] Huddleson AML DATE/TIME: 7/30/21 1135

T. Hudd 7/30/21 1250

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

7/30/21

L2140925

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|025|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -09
3664|2021|WTG|027|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -10
3664|2021|WTG|033|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -11
3664|2021|WTG|034|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -12
3664|2021|WTG|040|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -13
3664|2021|WTG|040|Sed|GS|02	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate -14
3664|2021|WTG|047|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -15
3664|2021|WTG|048|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -16
3664|2021|WTG|049|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -17
3664|2021|WTG|053|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -18
3664|2021|WTG|054|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -19
3664|2021|WTG|058|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -20
3664|2021|WTG|066|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|067|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|068|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|074|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|076|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|077|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|078|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1

Shipper: FEDEX UPS USPS DHL

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

REUNQUISHED BY: [signature] DATE/TIME: 7/29/21 RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

REUNQUISHED BY: [signature] DATE/TIME: 7/30/21 RECEIVED BY: T. Hudder Hudderson AAL DATE/TIME: 7/30/21 1135

T. Hudder 7/30/21 1250

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable at the time of sample receipt. Note: Initials are not acceptable.

ANALYTICAL REPORT

Lab Number:	L2140926
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/07/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140926
Report Date: 09/07/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140926-01	3664|2021|WTG|066|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140926-02	3664|2021|WTG|067|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140926-03	3664|2021|WTG|068|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/19/21 00:00	07/30/21
L2140926-04	3664|2021|WTG|074|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-05	3664|2021|WTG|076|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-06	3664|2021|WTG|077|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-07	3664|2021|WTG|078|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-08	3664|2021|WTG|081|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-09	3664|2021|WTG|083|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-10	3664|2021|WTG|084|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-11	3664|2021|WTG|085|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-12	3664|2021|WTG|087|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-13	3664|2021|WTG|090|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-14	3664|2021|WTG|090|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-15	3664|2021|WTG|095|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140926-16	3664|2021|WTG|097|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-17	3664|2021|WTG|098|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140926-18	3664|2021|WTG|101|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/20/21 00:00	07/30/21
L2140926-19	3664|2021|WTG|104|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140926-20	3664|2021|WTG|107|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140926
Project Number:	3664	**Report Date:**	09/07/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140926
Project Number:	3664	**Report Date:**	09/07/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size

The WG1535953-1 Laboratory Duplicate RPD for % granule (29%) performed on L2140926-02, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/07/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-01
Client ID: 3664|2021|WTG|066|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.700		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	3.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	5.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	16.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	18.3		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	9.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	17.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	25.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-02
Client ID: 3664|2021|WTG|067|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	19.6		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	52.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	7.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	0.500		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	15.9		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.60		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-03
Client ID: 3664|2021|WTG|068|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/19/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	3.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	38.8		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	41.3		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	6.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	0.400		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	8.50		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	1.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-04
Client ID: 3664|2021|WTG|074|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.400		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	6.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	10.6		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	11.6		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	30.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	30.8		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	6.70		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-05
Client ID: 3664|2021|WTG|076|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.400		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	3.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	14.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	22.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	29.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	9.60		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	16.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	3.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-06
Client ID: 3664|2021|WTG|077|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	16.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	64.6		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	7.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	2.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	0.500		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	7.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	1.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-07
Client ID: 3664|2021|WTG|078|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.300		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.70		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	3.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	3.90		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	17.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	41.5		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	27.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.80		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-08
Client ID: 3664|2021|WTG|081|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	3.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	11.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	36.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	18.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	26.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-09
Client ID: 3664|2021|WTG|083|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.800		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	3.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	12.9		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	41.6		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	15.8		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	20.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.50		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-10
Client ID: 3664|2021|WTG|084|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.900		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	4.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	9.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	38.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	18.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	23.5		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	3.80		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-11
Client ID: 3664|2021|WTG|085|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	4.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	15.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	14.3		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	27.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	14.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	20.3		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	3.50		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-12
Client ID: 3664|2021|WTG|087|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.300		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	2.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	6.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	9.80		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	24.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	21.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	28.9		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-13
Client ID: 3664|2021|WTG|090|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	3.70		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	9.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	39.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	19.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	22.5		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.90		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-14
Client ID: 3664|2021|WTG|090|SED|GS|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.900		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	3.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	8.90		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	36.9		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	18.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	24.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	6.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-15
Client ID: 3664|2021|WTG|095|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	6.60		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	9.50		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	36.9		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	18.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	23.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	3.80		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-16
Client ID: 3664|2021|WTG|097|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	3.00		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	9.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	16.3		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	37.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	13.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	18.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.90		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-17
Client ID: 3664|2021|WTG|098|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.30		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	4.70		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	13.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	21.9		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	23.6		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	28.5		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	6.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-18
Client ID: 3664|2021|WTG|101|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/20/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.600		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.60		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	4.60		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	14.2		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	22.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	23.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	27.7		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.60		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-19
Client ID: 3664|2021|WTG|104|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.800		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.900		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	5.20		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	15.8		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	31.4		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	16.8		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	23.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.80		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140926
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140926-20
Client ID: 3664|2021|WTG|107|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.300		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	2.10		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.80		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Coarse Sand	3.40		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Medium Sand	6.50		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Fine Sand	27.1		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
% Very Fine Sand	20.0		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	30.3		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	7.50		%	0.100	NA	1	-	08/17/21 11:57	12,D6913/D7928(M)	SJ

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140926
Report Date: 09/07/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1535953-1 QC Sample: L2140926-02 Client ID: 3664|2021|WTG|067|SED|GS|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	ND	ND	%	NC		20
Granule (2.0-4.0 mm)	0.400	0.300	%	**29**	Q	20
% Very Coarse Sand	1.20	1.00	%	18		20
% Coarse Sand	19.6	17.2	%	13		20
% Medium Sand	52.4	53.9	%	3		20
% Fine Sand	7.40	8.70	%	16		20
% Very Fine Sand	0.500	0.500	%	0		20
Silt - (3.9-62.5 um)	15.9	15.9	%	0		20
Clay - (<3.9 um)	2.60	2.50	%	4		20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140926
Report Date: 09/07/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140926-01A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140926-02A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140926-03A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140926-04A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140926-05A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140926
Report Date: 09/07/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140926-06A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140926-07A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140926-08A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140926-09A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140926-10A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140926-11A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140926
Report Date: 09/07/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140926-12A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140926-13A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140926-14A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140926-15A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140926-16A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140926-17A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140926
Report Date: 09/07/21

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140926-18A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140926-19A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140926-20A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140926
Project Number:	3664	**Report Date:**	09/07/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140926
Project Number:	3664	**Report Date:**	09/07/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140926
Project Number:	3664	**Report Date:**	09/07/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	BEACON WIND	**Lab Number:**	L2140926
Project Number:	3664	**Report Date:**	09/07/21

REFERENCES

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

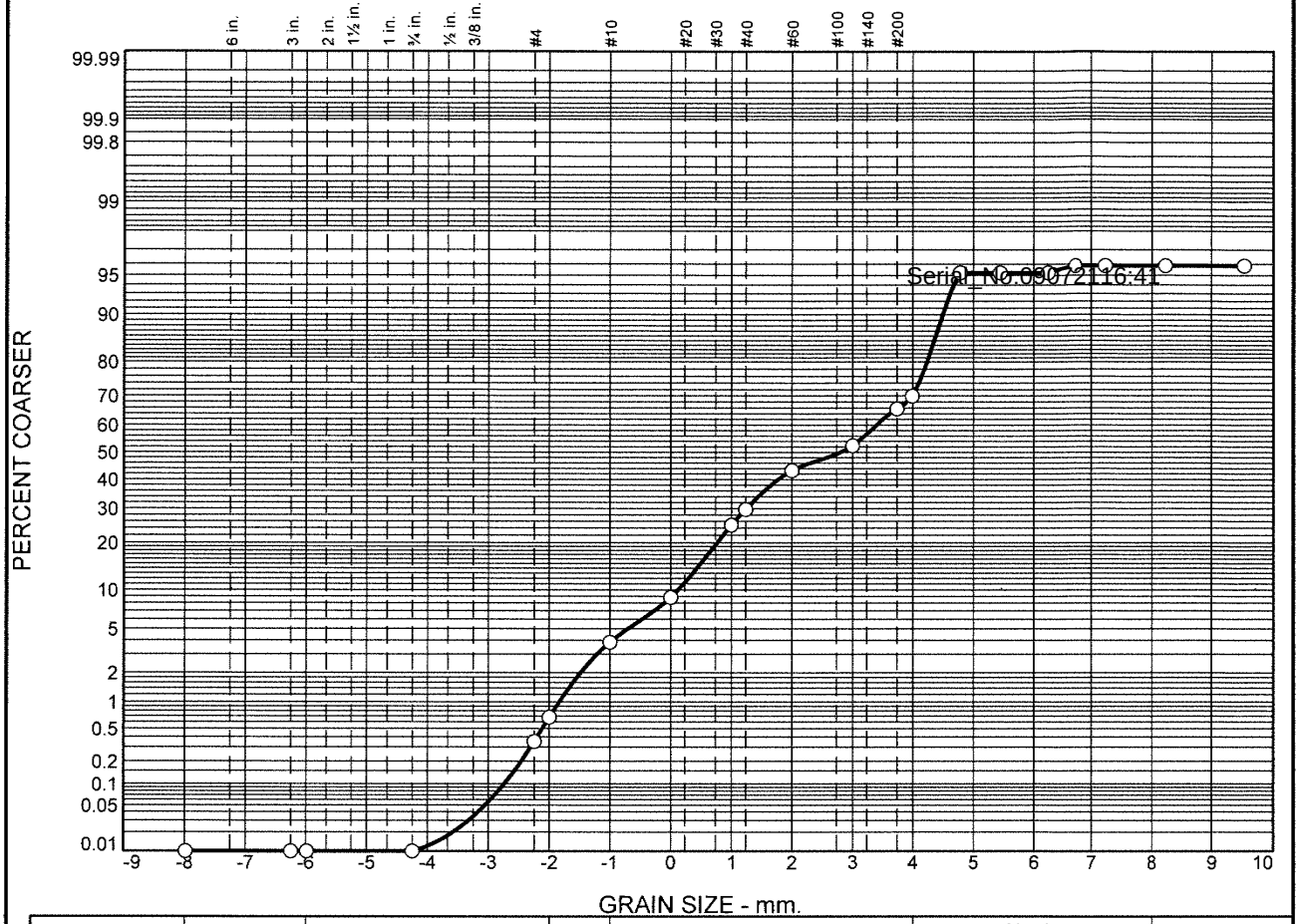
LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

ASTM D6913/D7928
GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.7	3.1	5.0	16.1	18.3	9.3	17.7	25.1	0.0	0.6	0.0	4.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_u
○			0.7108	0.2923	0.1429	0.0629	0.0489	0.0443	0.30	6.59

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|066|SED|GS|01 **Sample No.:** L2140926-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|066|SED|GS|01

Sample Number: L2140926-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 88.62
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
88.62	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.31	0.00	99.7
		#5	0.29	0.00	99.3
		#10	2.80	0.00	96.2
		#18	4.40	0.00	91.2
		#35	14.23	0.00	75.1
		#40	4.28	0.00	70.3
		#60	11.97	0.00	56.8
		#120	8.22	0.00	47.5
		#200	11.70	0.00	34.3
		#230	3.75	0.00	30.1

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 30.1
Weight of hydrometer sample =40.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	4.7
5.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0230	4.7
15.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0133	4.7
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	4.1
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	4.1
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	4.1
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	4.1

Alpha Analytical

Fractional Components

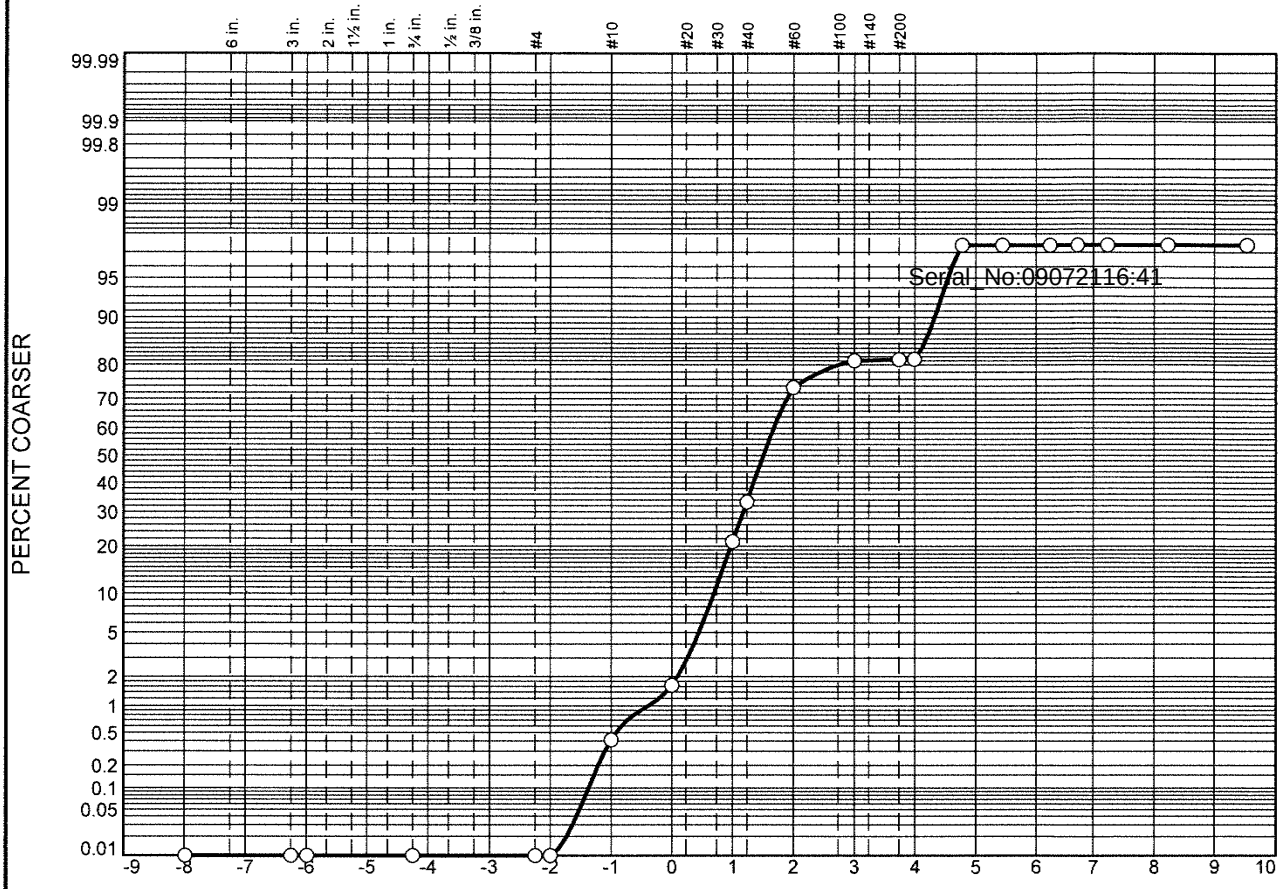
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.7	3.1	5.0	16.1	18.3	9.3	17.7	66.4	25.1	0.0	0.6	0.0	25.7	4.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0371	0.0443	0.0489	0.0530	0.0629	0.0946	0.1429	0.2923	0.5890	0.7108	0.9167	1.6285

Fineness Modulus	C_u	C_c
1.19	6.59	0.30

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	1.2	19.6	52.4	7.4	0.6	15.8	0.0	0.0	0.0	2.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.5551	0.3932	0.3518	0.2691	0.0562	0.0500	3.69	7.87

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 3664|2021|WTG **Sample Number:** L2140926-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG

Sample Number: L2140926-02

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 51.10
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
51.10	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.6
		#18	0.63	0.00	98.4
		#35	10.01	0.00	78.8
		#40	6.17	0.00	66.7
		#60	20.57	0.00	26.4
		#120	3.80	0.00	19.0
		#200	0.16	0.00	18.7
		#230	0.05	0.00	18.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 18.6
Weight of hydrometer sample =40.16
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0365	2.6
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	2.6
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	2.6
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	2.6
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	2.6
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	2.6
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	2.6

Fractional Components

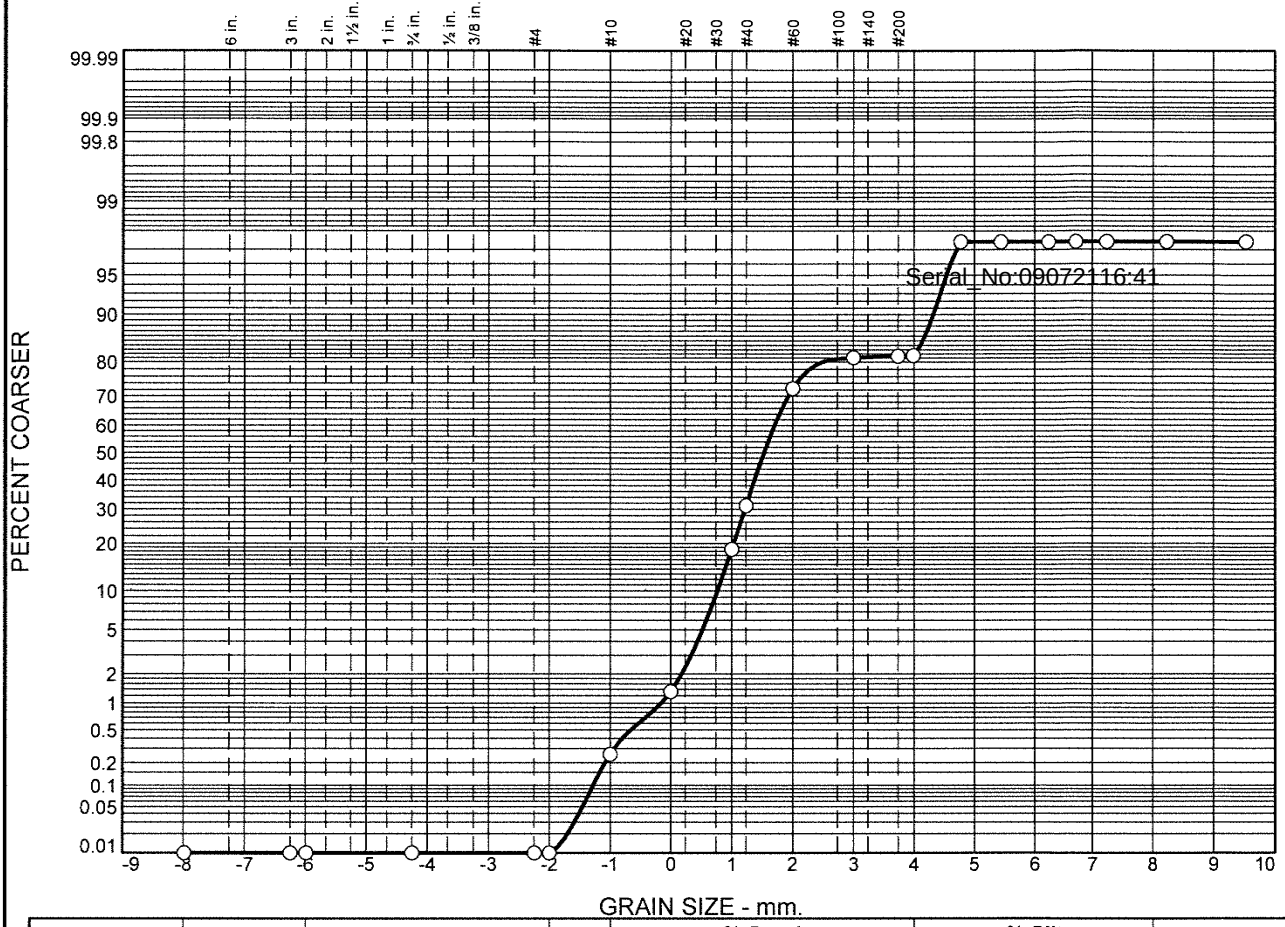
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	1.2	19.6	52.4	7.4	0.6	81.2	15.8	0.0	0.0	0.0	15.8	2.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0430	0.0500	0.0562	0.1482	0.2691	0.3124	0.3518	0.3932	0.5096	0.5551	0.6188	0.7348

Fineness Modulus	C_u	C_c
1.56	7.87	3.69

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	1.0	17.2	53.9	8.7	0.6	15.8	0.0	0.0	0.0	2.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.5296	0.3858	0.3462	0.2629	0.0563	0.0501	3.58	7.70

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source of Sample:** 3664|2021|WTG **Sample Number:** WG1535953-1

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG

Sample Number: WG1535953-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 51.15
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
51.15	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.13	0.00	99.7
		#18	0.55	0.00	98.7
		#35	8.78	0.00	81.5
		#40	6.48	0.00	68.8
		#60	21.08	0.00	27.6
		#120	4.47	0.00	18.9
		#200	0.19	0.00	18.5
		#230	0.04	0.00	18.4

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 18.4
Weight of hydrometer sample =40.25
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0365	2.5
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	2.5
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	2.5
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	2.5
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	2.5
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	2.5
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	2.5

Fractional Components

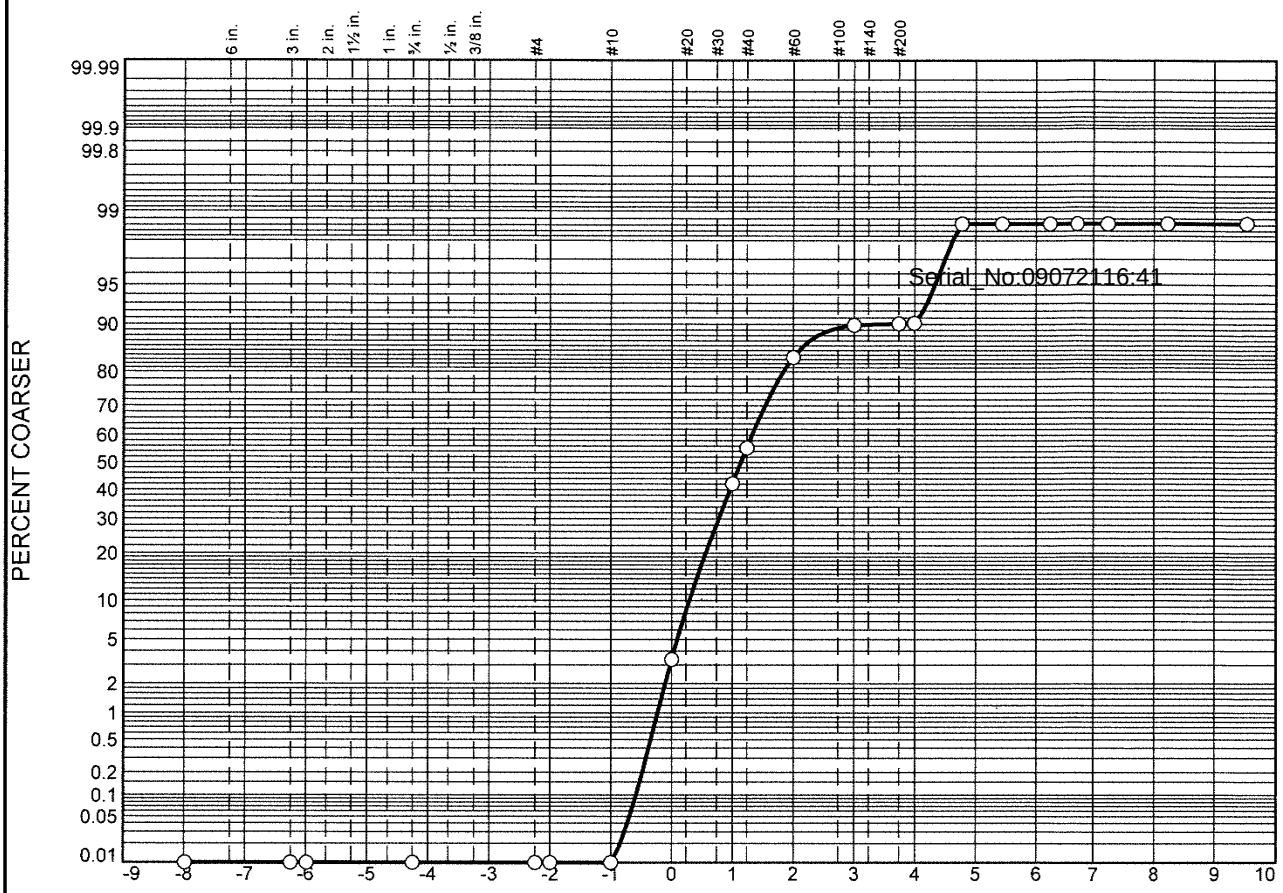
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	1.0	17.2	53.9	8.7	0.6	81.4	15.8	0.0	0.0	0.0	15.8	2.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0430	0.0501	0.0563	0.1773	0.2629	0.3072	0.3462	0.3858	0.4890	0.5296	0.5883	0.6975

Fineness Modulus	C_u	C_c
1.53	7.70	3.58

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	3.4	38.8	41.3	6.3	0.5	8.4	0.0	0.0		1.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.7384	0.5139	0.4545	0.3447	0.2338	0.0883	2.62	5.82

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|068|SED|GS|01 **Sample No.:** L2140926-03

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|068|SED|GS|01

Sample Number: L2140926-03

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 121.63
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
121.63	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#18	4.08	0.00	96.6
		#35	47.26	0.00	57.8
		#40	16.01	0.00	44.6
		#60	34.18	0.00	16.5
		#120	7.75	0.00	10.2
		#200	0.29	0.00	9.9
		#230	0.12	0.00	9.8

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 9.8
Weight of hydrometer sample =40.27
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0365	1.3
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	1.3
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	1.3
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	1.3
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	1.3
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	1.3
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	1.3

Fractional Components

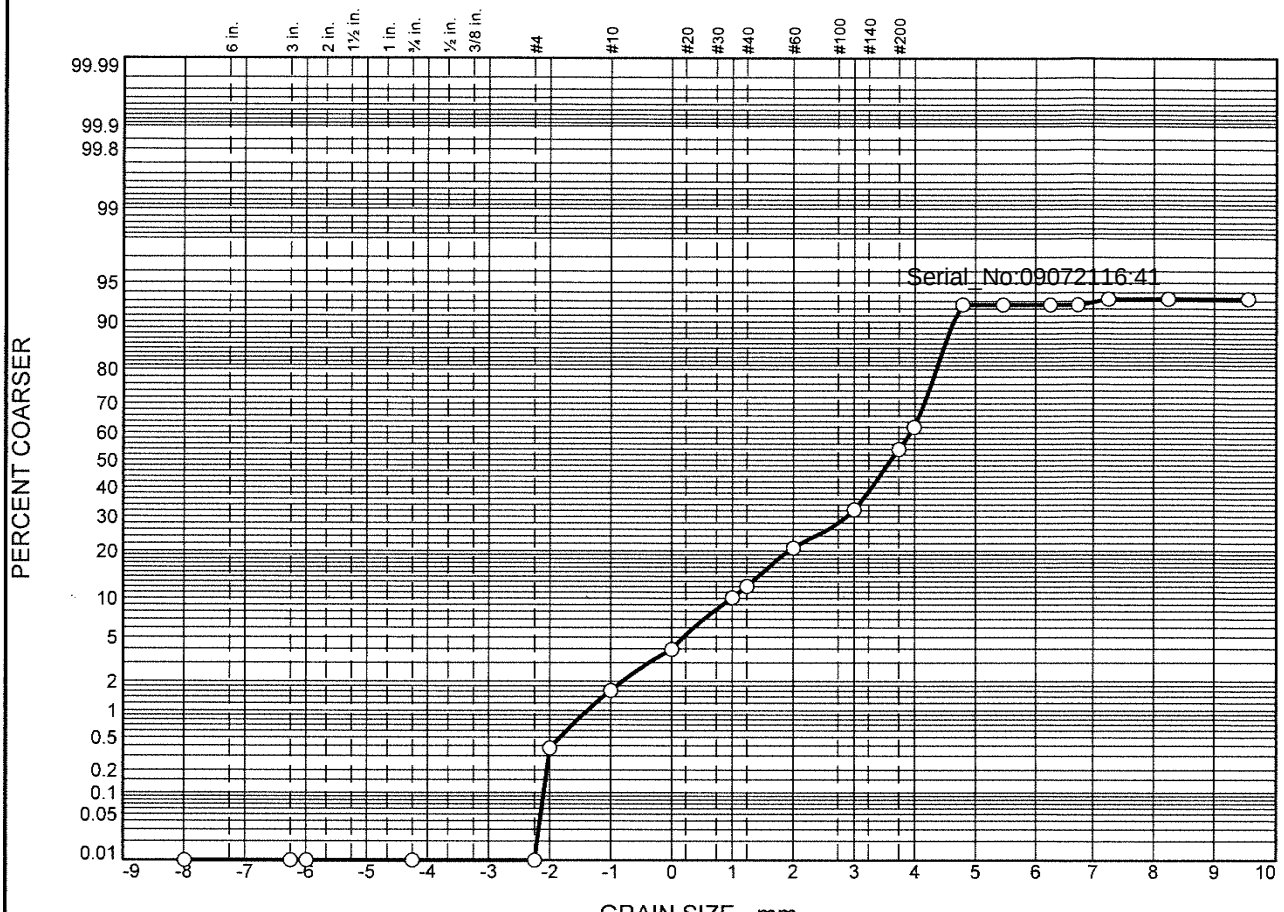
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	3.4	38.8	41.3	6.3	0.5	90.3	8.4	0.0	0.0		8.4	1.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0497	0.0883	0.2338	0.2797	0.3447	0.4000	0.4545	0.5139	0.6780	0.7384	0.8171	0.9373

Fineness Modulus	C_u	C_c
1.96	5.82	2.62

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.4	1.2	2.3	6.2	10.6	11.6	30.2	30.0	0.0	0.4	0.4	6.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3513	0.1022	0.0822	0.0561	0.0450	0.0401	0.77	2.55

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|074|SED|GS|01 **Sample No.:** L2140926-04

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|074|SED|GS|01

Sample Number: L2140926-04

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 77.71
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
77.71	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.29	0.00	99.6
		#10	0.97	0.00	98.4
		#18	1.80	0.00	96.1
		#35	4.79	0.00	89.9
		#40	1.54	0.00	87.9
		#60	6.73	0.00	79.3
		#120	9.01	0.00	67.7
		#200	16.84	0.00	46.0
		#230	6.24	0.00	38.0

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 38.0
Weight of hydrometer sample =40.33
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0361	7.5
5.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0228	7.5
15.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0132	7.5
30.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0093	7.5
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	6.7
240.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0033	6.7
1440.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0013	6.7

Fractional Components

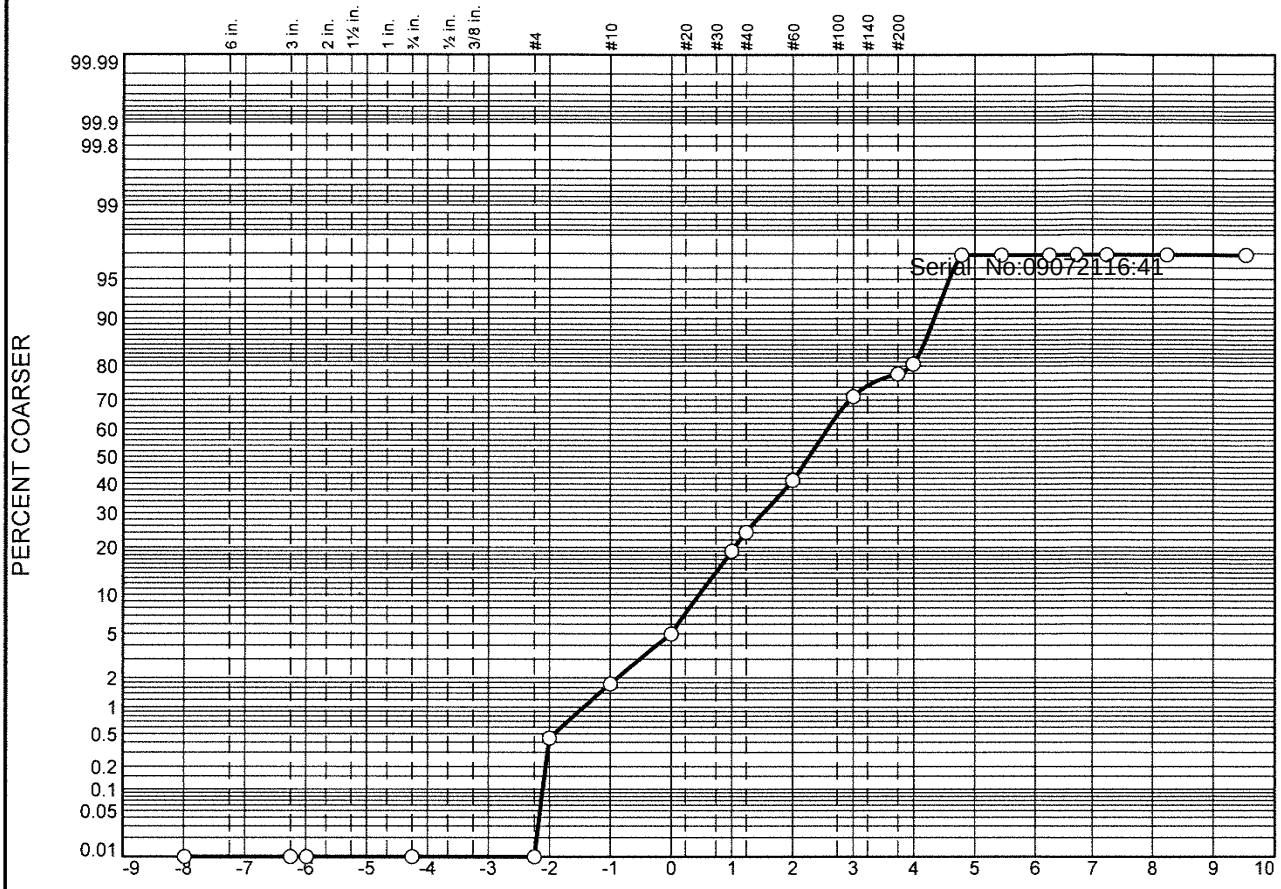
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.4	1.2	2.3	6.2	10.6	11.6	30.2	60.9	30.0	0.0	0.4	0.4	30.8	6.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0401	0.0450	0.0489	0.0561	0.0654	0.0822	0.1022	0.2622	0.3513	0.5047	0.8755

Fineness Modulus	C_u	C_c
0.58	2.55	0.77

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.4	1.3	3.3	14.0	22.4	29.7	9.6	16.2	0.0	0.0	0.0	3.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.5787	0.2587	0.2068	0.1302	0.0558	0.0496	1.32	5.22

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|076|SED|GS|01 **Sample No.:** L2140926-05

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|076|SED|GS|01

Sample Number: L2140926-05

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 107.88
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
107.88	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.48	0.00	99.6
		#10	1.40	0.00	98.3
		#18	3.51	0.00	95.0
		#35	15.10	0.00	81.0
		#40	5.51	0.00	75.9
		#60	18.62	0.00	58.6
		#120	32.13	0.00	28.9
		#200	7.30	0.00	22.1
		#230	2.77	0.00	19.5

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 19.5
Weight of hydrometer sample =40.21
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	3.1
5.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0230	3.1
15.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0133	3.1
30.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0094	3.1
60.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0066	3.1
240.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0033	3.1
1440.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0014	3.1

Fractional Components

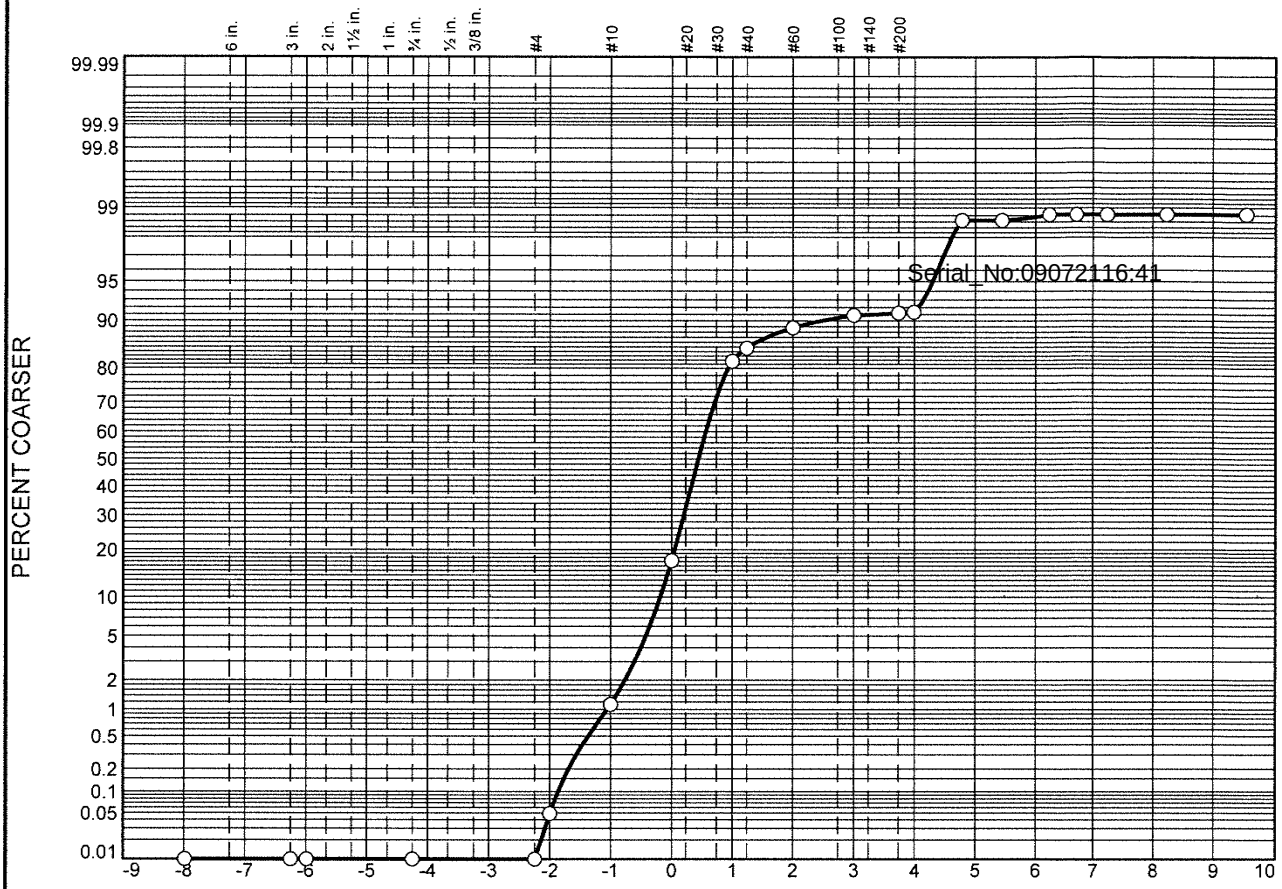
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.4	1.3	3.3	14.0	22.4	29.7	9.6	79.0	16.2	0.0	0.0	0.0	16.2	3.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0419	0.0496	0.0558	0.0642	0.1302	0.1682	0.2068	0.2587	0.4837	0.5787	0.7271	0.9997

Fineness Modulus	C_u	C_c
1.19	5.22	1.32

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.1	16.1	64.6	7.0	2.1	0.5	7.3	0.1	0.0		1.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			1.0331	0.7980	0.7360	0.6114	0.4176	0.1790	2.62	4.46

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|077|SED|GS|01 **Sample No.:** L2140926-06

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|077|SED|GS|01

Sample Number: L2140926-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 121.82
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
121.82	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.06	0.00	100.0
		#10	1.32	0.00	98.9
		#18	19.59	0.00	82.8
		#35	78.62	0.00	18.2
		#40	3.71	0.00	15.2
		#60	4.87	0.00	11.2
		#120	2.52	0.00	9.1
		#200	0.39	0.00	8.8
		#230	0.20	0.00	8.7

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 8.7
Weight of hydrometer sample =40.64
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	1.3
5.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0230	1.3
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	1.2
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	1.2
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	1.2
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	1.2
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	1.2

Alpha Analytical

Fractional Components

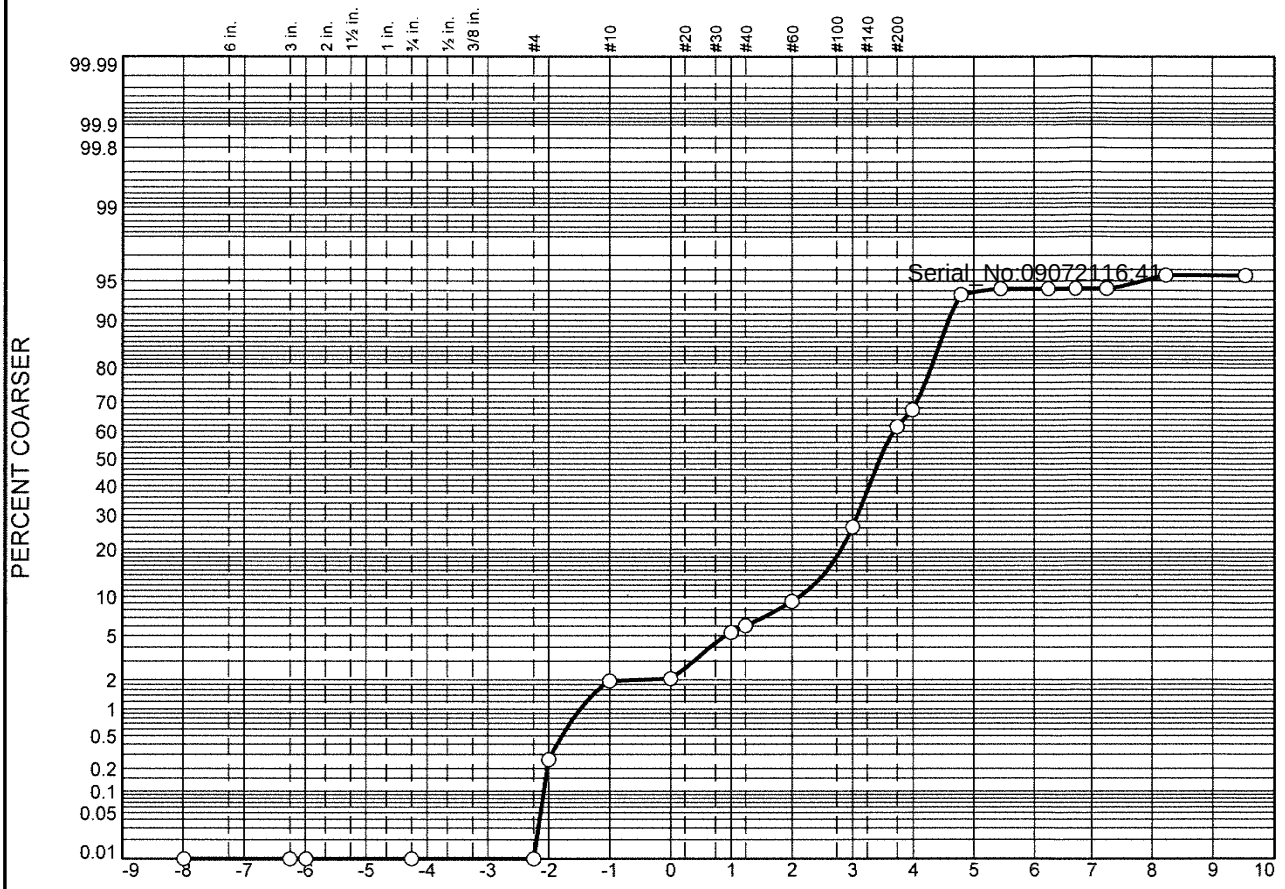
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.1	16.1	64.6	7.0	2.1	0.5	90.3	7.3	0.1	0.0		7.4	1.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0508	0.1790	0.4176	0.5238	0.6114	0.6762	0.7360	0.7980	0.9646	1.0331	1.1360	1.3387

Fineness Modulus	C_u	C_c
2.59	4.46	2.62

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.3	1.7	0.0	3.3	3.9	17.1	41.5	26.1	0.3	0.0	1.1	4.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.1670	0.1032	0.0910	0.0598	0.0466	0.0417	0.83	2.48

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|078|SED|GS|01 **Sample No.:** L2140926-07

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|078|SED|GS|01

Sample Number: L2140926-07

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 84.96
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
84.96	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.22	0.00	99.7
		#10	1.44	0.00	98.0
		#18	0.08	0.00	98.0
		#35	2.79	0.00	94.7
		#40	0.60	0.00	94.0
		#60	2.72	0.00	90.8
		#120	14.46	0.00	73.7
		#200	30.03	0.00	38.4
		#230	4.99	0.00	32.5

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 32.5
Weight of hydrometer sample =40.23
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0361	6.4
5.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0229	5.8
15.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0132	5.8
30.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0094	5.8
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	5.8
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	4.5
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	4.5

Fractional Components

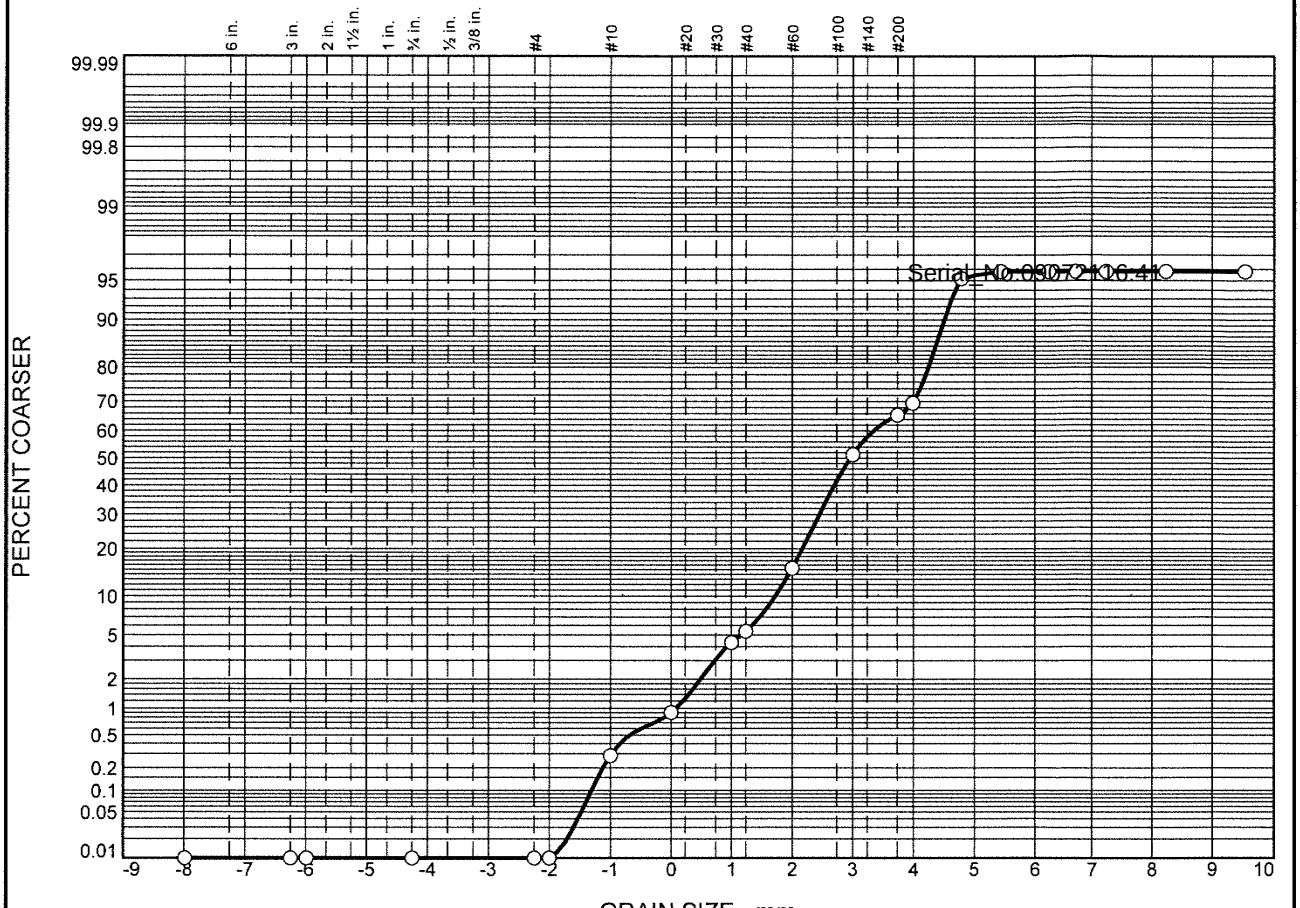
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.3	1.7	0.0	3.3	3.9	17.1	41.5	65.8	26.1	0.3	0.0	1.1	27.5	4.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0044	0.0417	0.0466	0.0508	0.0598	0.0778	0.0910	0.1032	0.1422	0.1670	0.2303	0.5331

Fineness Modulus	C_u	C_c
0.34	2.48	0.83

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.6	3.4	11.0	36.0	18.5	25.7	0.3	0.0		4.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2520	0.1543	0.1284	0.0622	0.0486	0.0440	0.57	3.50

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|081|SED|GS|01 **Sample No.:** L2140926-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|081|SED|GS|01

Sample Number: L2140926-08

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 84.37
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
84.37	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.24	0.00	99.7
		#18	0.52	0.00	99.1
		#35	2.90	0.00	95.7
		#40	0.88	0.00	94.6
		#60	8.35	0.00	84.7
		#120	30.38	0.00	48.7
		#200	11.96	0.00	34.5
		#230	3.35	0.00	30.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 30.6
Weight of hydrometer sample =40.21
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	4.8
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	4.2
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	4.2
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	4.2
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	4.2
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	4.2
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	4.2

Fractional Components

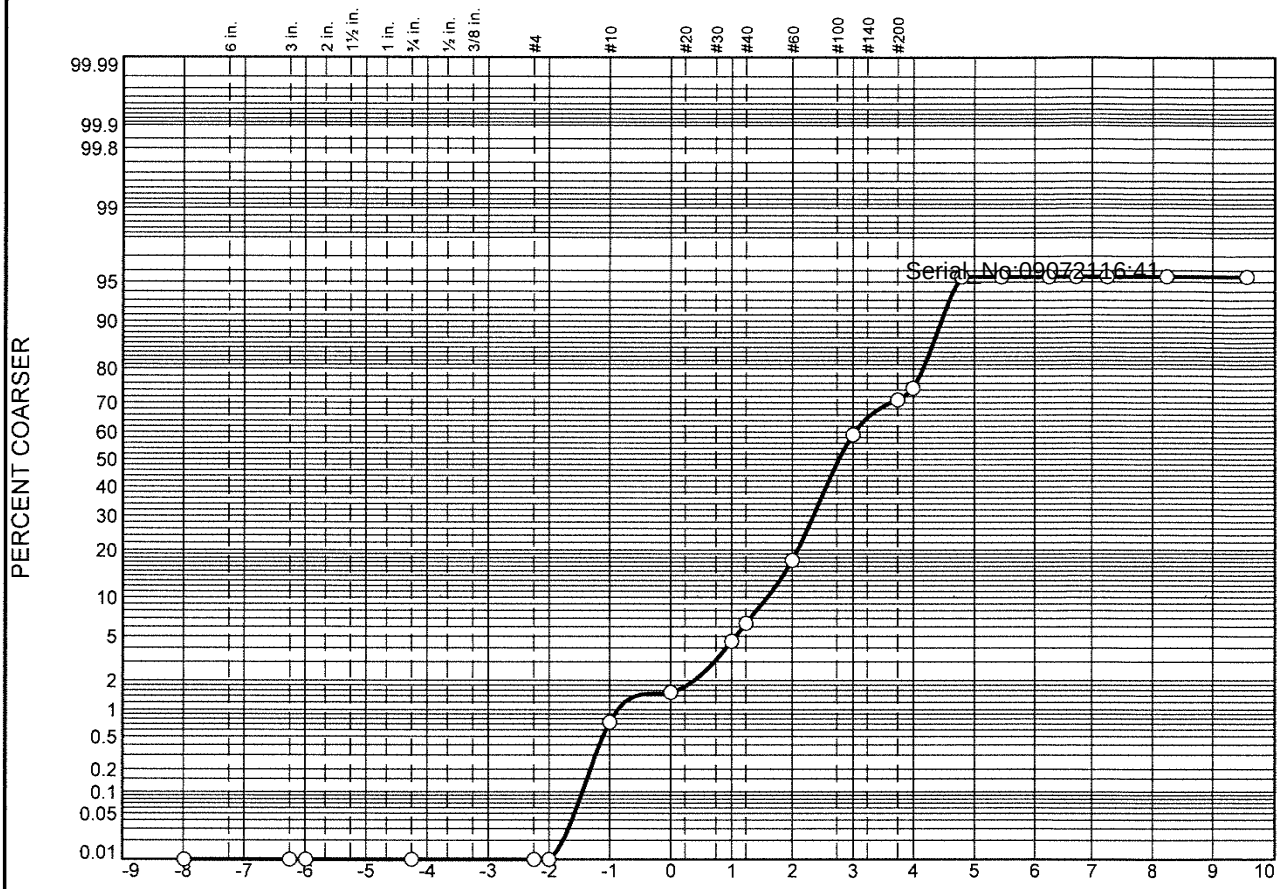
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.6	3.4	11.0	36.0	18.5	69.5	25.7	0.3	0.0		26.0	4.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0368	0.0440	0.0486	0.0526	0.0622	0.0983	0.1284	0.1543	0.2221	0.2520	0.3021	0.4496

Fineness Modulus	C_u	C_c
0.56	3.50	0.57

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.7	0.8	3.0	12.9	41.6	15.8	20.7	0.0	0.0		4.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2682	0.1695	0.1465	0.0811	0.0509	0.0456	0.85	3.72

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|083|SED|GS|01 **Sample No.:** L2140926-09

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|083|SED|GS|01

Sample Number: L2140926-09

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 91.56
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.56	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.67	0.00	99.3
		#18	0.72	0.00	98.5
		#35	2.77	0.00	95.5
		#40	1.68	0.00	93.6
		#60	10.11	0.00	82.6
		#120	38.06	0.00	41.0
		#200	10.99	0.00	29.0
		#230	3.24	0.00	25.5

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 25.5
Weight of hydrometer sample =40.26
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0362	4.5
5.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0229	4.5
15.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0132	4.5
30.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0094	4.5
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	4.5
240.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0033	4.5
1440.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0013	4.5

Fractional Components

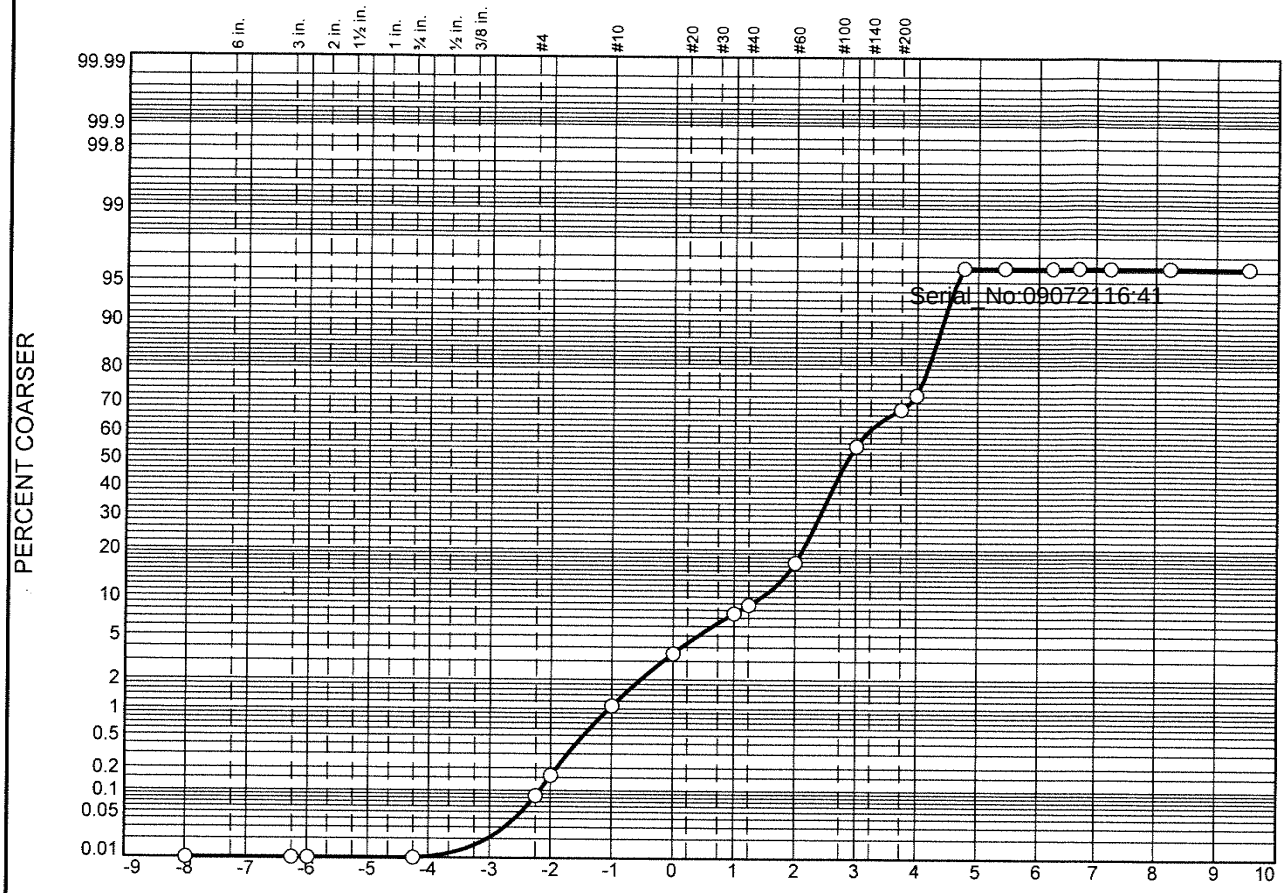
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.7	0.8	3.0	12.9	41.6	15.8	74.1	20.7	0.0	0.0		20.7	4.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0377	0.0456	0.0509	0.0559	0.0811	0.1222	0.1465	0.1695	0.2351	0.2682	0.3320	0.4781

Fineness Modulus	C_u	C_c
0.65	3.72	0.85

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.9	2.4	4.1	9.1	38.0	18.1	23.4	0.0	0.0	0.0	3.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2659	0.1608	0.1369	0.0675	0.0509	0.0463	0.61	3.48

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|084|SED|GS|01 **Sample No.:** L2140926-10

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|084|SED|GS|01

Sample Number: L2140926-10

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 94.15
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
94.15	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.08	0.00	99.9
		#5	0.07	0.00	99.8
		#10	0.86	0.00	98.9
		#18	2.29	0.00	96.5
		#35	3.81	0.00	92.4
		#40	1.09	0.00	91.3
		#60	7.57	0.00	83.3
		#120	35.77	0.00	45.3
		#200	12.37	0.00	32.1
		#230	4.28	0.00	27.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 27.6
Weight of hydrometer sample =40.36
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0365	3.8
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	3.8
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	3.8
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	3.8
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	3.8
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	3.8
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	3.8

Fractional Components

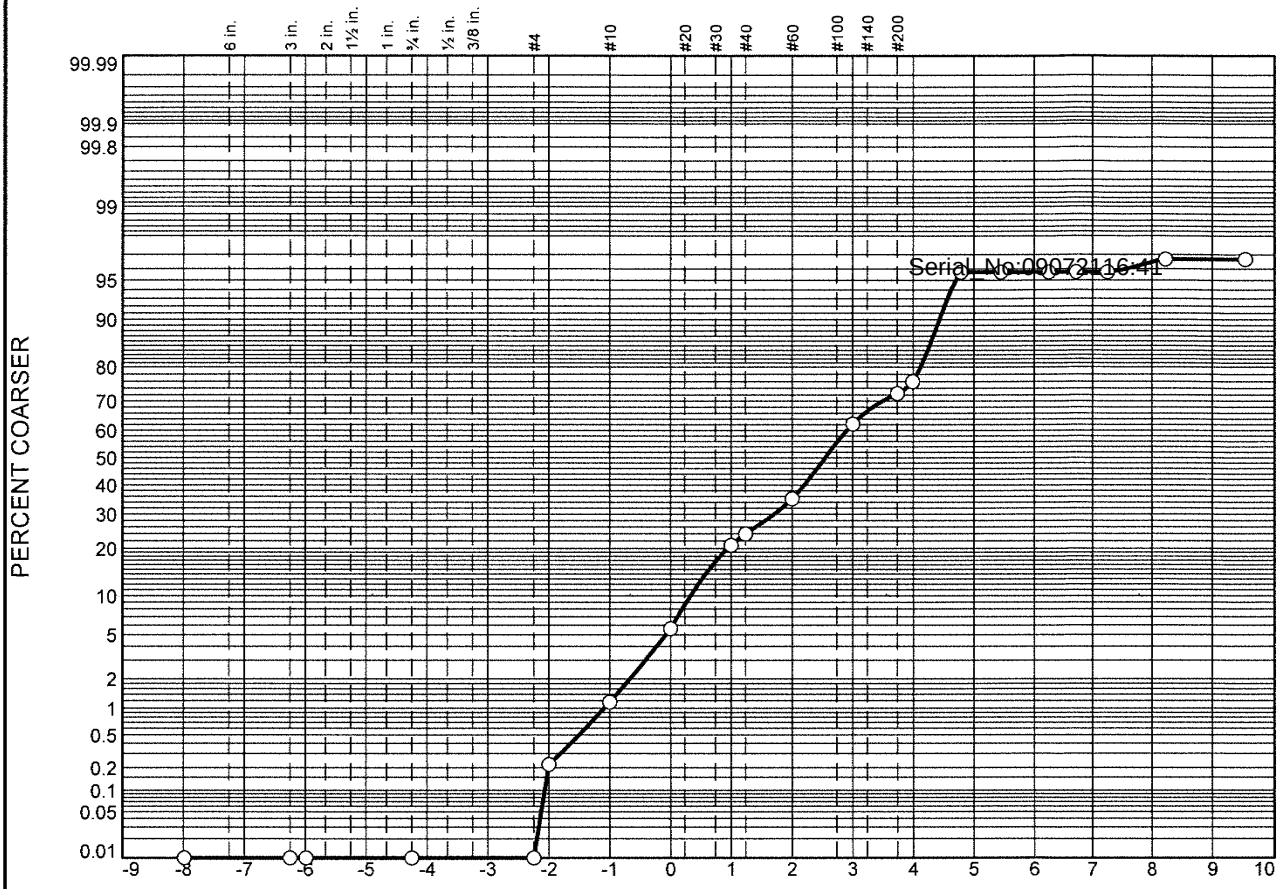
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.9	2.4	4.1	9.1	38.0	18.1	71.7	23.4	0.0	0.0	0.0	23.4	3.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0396	0.0463	0.0509	0.0551	0.0675	0.1091	0.1369	0.1608	0.2287	0.2659	0.3644	0.7513

Fineness Modulus	C_U	C_C
0.67	3.48	0.61

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	1.0	4.4	15.2	14.3	27.1	14.1	19.4	0.0	0.0	0.8	3.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.6431	0.2174	0.1712	0.0885	0.0519	0.0463	0.78	4.69

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|085|SED|GS|01 **Sample No.:** L2140926-11

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|085|SED|GS|01

Sample Number: L2140926-11

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 109.51
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
109.51	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.24	0.00	99.8
		#10	1.03	0.00	98.8
		#18	4.89	0.00	94.4
		#35	16.67	0.00	79.2
		#40	3.42	0.00	76.0
		#60	12.23	0.00	64.9
		#120	29.65	0.00	37.8
		#200	11.19	0.00	27.6
		#230	3.91	0.00	24.0

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 24.0
Weight of hydrometer sample =40.19
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0362	4.3
5.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0229	4.3
15.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0132	4.3
30.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0094	4.3
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	4.3
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	3.3
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	3.3

Fractional Components

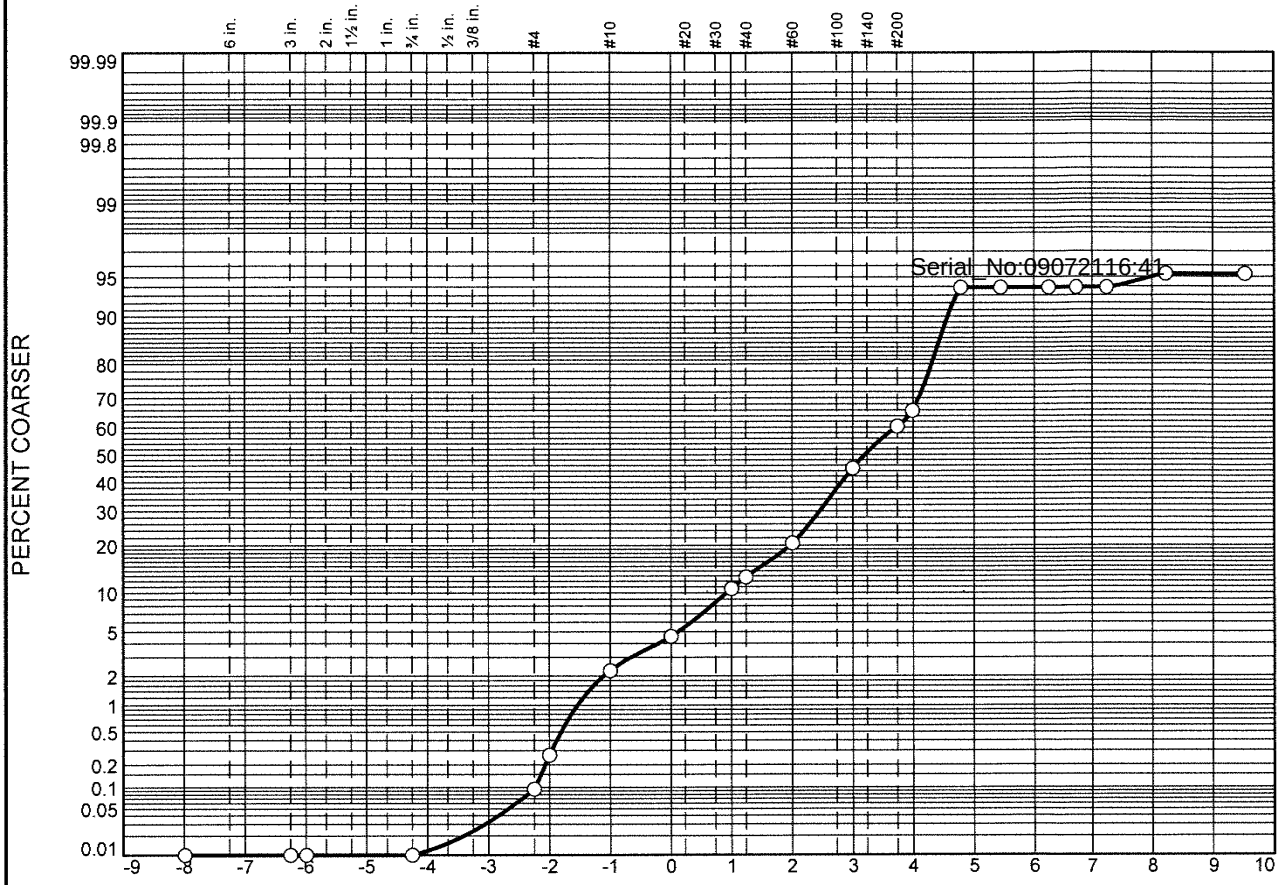
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	1.0	4.4	15.2	14.3	27.1	14.1	75.1	19.4	0.0	0.0	0.8	20.2	3.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0384	0.0463	0.0519	0.0573	0.0885	0.1336	0.1712	0.2174	0.5201	0.6431	0.7959	1.0563

Fineness Modulus	C_u	C_c
1.07	4.69	0.78

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.3	2.0	2.3	6.1	9.8	24.4	21.2	27.8	0.0	0.0	1.1	5.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3559	0.1416	0.1084	0.0585	0.0468	0.0421	0.57	3.36

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|087|SED|GS|01 **Sample No.:** L2140926-12

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|087|SED|GS|01

Sample Number: L2140926-12

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 95.00
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
95.00	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.09	0.00	99.9
		#5	0.16	0.00	99.7
		#10	1.89	0.00	97.7
		#18	2.21	0.00	95.4
		#35	5.80	0.00	89.3
		#40	2.01	0.00	87.2
		#60	7.36	0.00	79.5
		#120	23.14	0.00	55.1
		#200	14.64	0.00	39.7
		#230	5.15	0.00	34.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 34.3
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0362	6.1
5.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0229	6.1
15.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0132	6.1
30.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0094	6.1
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	6.1
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	4.7
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	4.7

Fractional Components

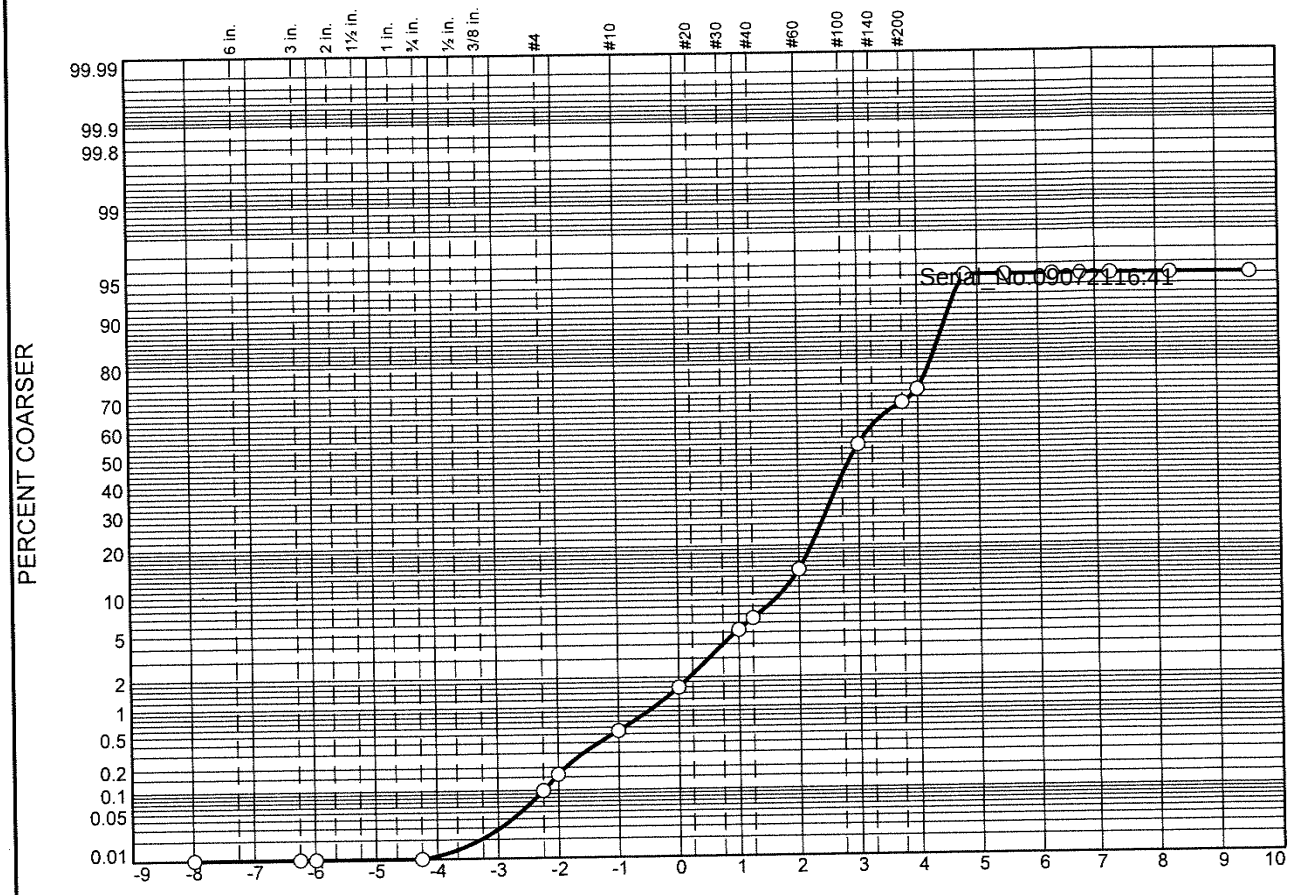
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.3	2.0	2.3	6.1	9.8	24.4	21.2	63.8	27.8	0.0	0.0	1.1	28.9	5.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0039	0.0421	0.0468	0.0506	0.0585	0.0760	0.1084	0.1416	0.2565	0.3559	0.5282	0.9221

Fineness Modulus	C_u	C_c
0.69	3.36	0.57

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.3	1.1	3.7	9.0	39.2	19.2	22.4	0.0	0.0	0.0	4.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2445	0.1554	0.1331	0.0681	0.0497	0.0446	0.67	3.48

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|090|SED|GS|01 **Sample No.:** L2140926-13

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|090|SED|GS|01

Sample Number: L2140926-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 80.53
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
80.53	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.08	0.00	99.9
		#5	0.05	0.00	99.8
		#10	0.31	0.00	99.5
		#18	0.84	0.00	98.4
		#35	2.97	0.00	94.7
		#40	1.01	0.00	93.5
		#60	6.26	0.00	85.7
		#120	31.53	0.00	46.5
		#200	11.85	0.00	31.8
		#230	3.39	0.00	27.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 27.6
Weight of hydrometer sample =40.11
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0362	4.9
5.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0229	4.9
15.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0132	4.9
30.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0094	4.9
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	4.9
240.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0033	4.9
1440.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0013	4.9

Fractional Components

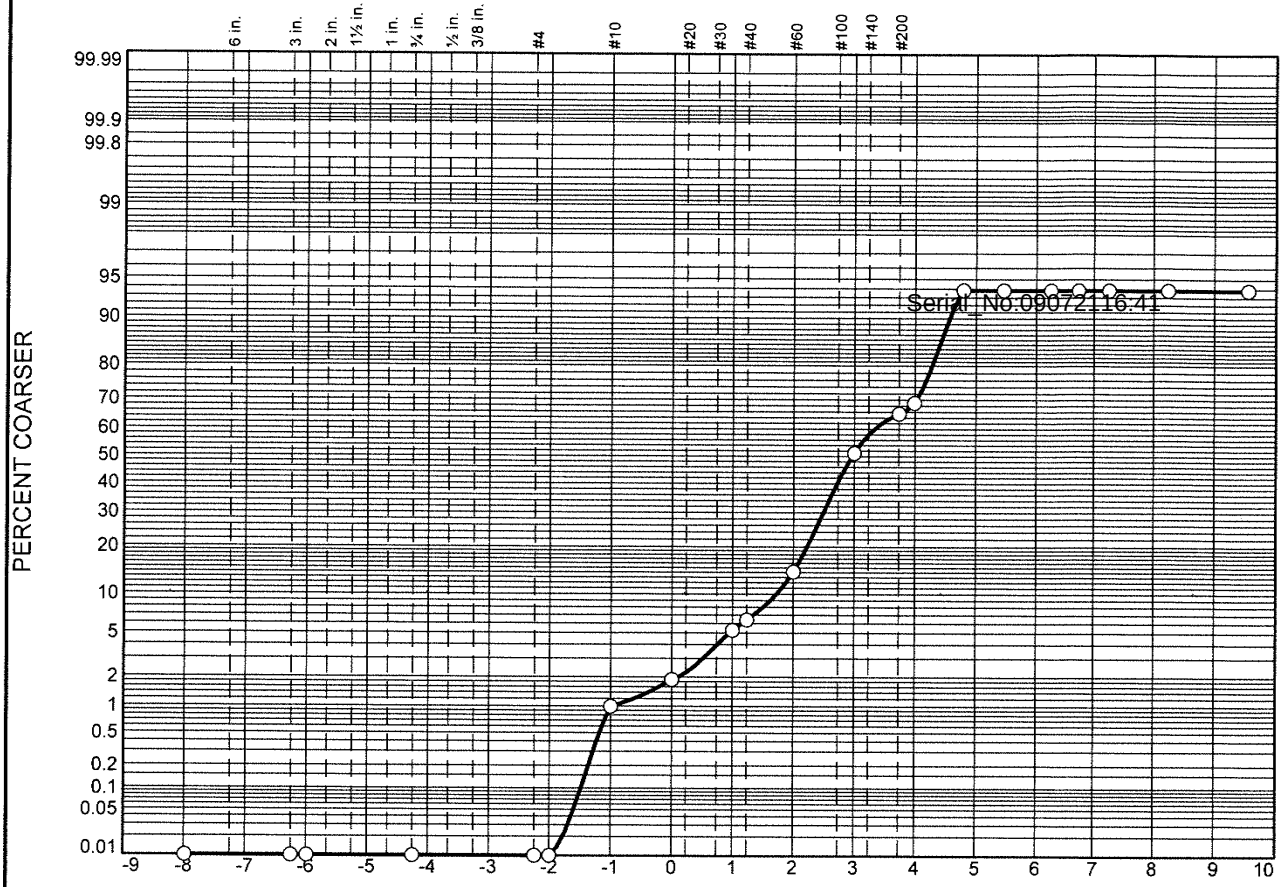
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.3	1.1	3.7	9.0	39.2	19.2	72.2	22.4	0.0	0.0	0.0	22.4	4.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0365	0.0446	0.0497	0.0543	0.0681	0.1071	0.1331	0.1554	0.2157	0.2445	0.3048	0.5190

Fineness Modulus	C_u	C_c
0.58	3.48	0.67

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.0	0.9	3.4	8.9	36.9	18.2	24.6	0.0	0.0		6.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2432	0.1515	0.1278	0.0614	0.0472	0.0422	0.59	3.59

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|090|SED|GS|02 **Sample No.:** L2140926-14

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|090|SED|GS|02

Sample Number: L2140926-14

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 52.36
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
52.36	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.52	0.00	99.0
		#18	0.47	0.00	98.1
		#35	1.76	0.00	94.7
		#40	0.60	0.00	93.6
		#60	4.06	0.00	85.8
		#120	19.37	0.00	48.9
		#200	7.44	0.00	34.6
		#230	1.90	0.00	31.0

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 31.0
Weight of hydrometer sample =40.10
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0361	6.1
5.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0228	6.1
15.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0132	6.1
30.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0093	6.1
60.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0066	6.1
240.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0033	6.1
1440.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0013	6.1

Alpha Analytical

Fractional Components

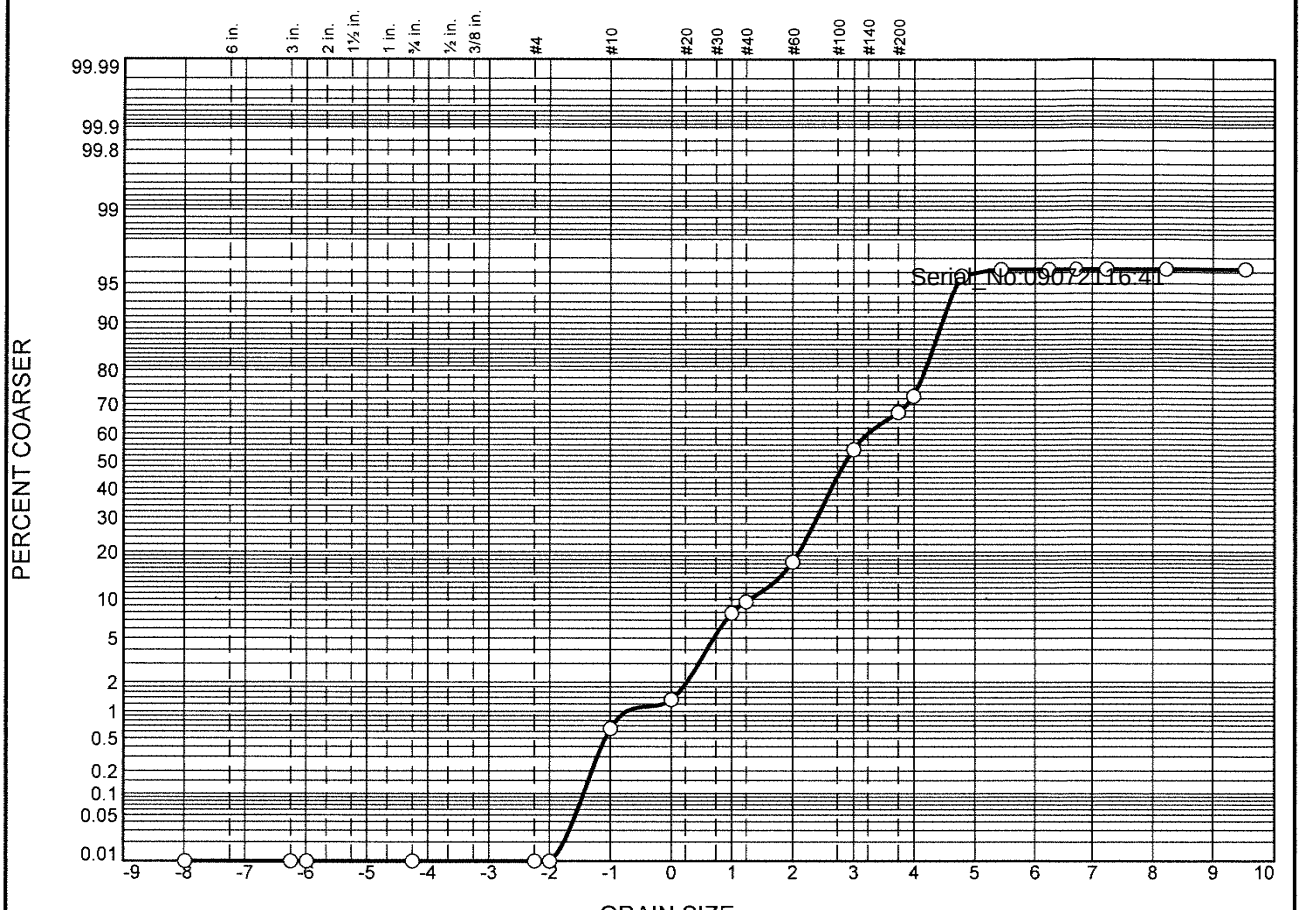
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.0	0.9	3.4	8.9	36.9	18.2	68.3	24.6	0.0	0.0		24.6	6.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0422	0.0472	0.0515	0.0614	0.0989	0.1278	0.1515	0.2139	0.2432	0.3020	0.5177

Fineness Modulus	C_u	C_c
0.57	3.59	0.59

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	0.7	6.6	9.5	36.9	18.8	22.9	0.2	0.0		3.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2750	0.1609	0.1363	0.0677	0.0506	0.0456	0.62	3.53

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|095|SED|GS|01 **Sample No.:** L2140926-15

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|095|SED|GS|01

Sample Number: L2140926-15

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 98.88
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
98.88	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.64	0.00	99.4
		#18	0.68	0.00	98.7
		#35	6.48	0.00	92.1
		#40	1.68	0.00	90.4
		#60	7.76	0.00	82.6
		#120	36.44	0.00	45.7
		#200	12.98	0.00	32.6
		#230	5.24	0.00	27.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 27.3
Weight of hydrometer sample =40.19
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	4.3
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	3.8
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	3.8
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	3.8
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	3.8
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	3.8
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	3.8

Fractional Components

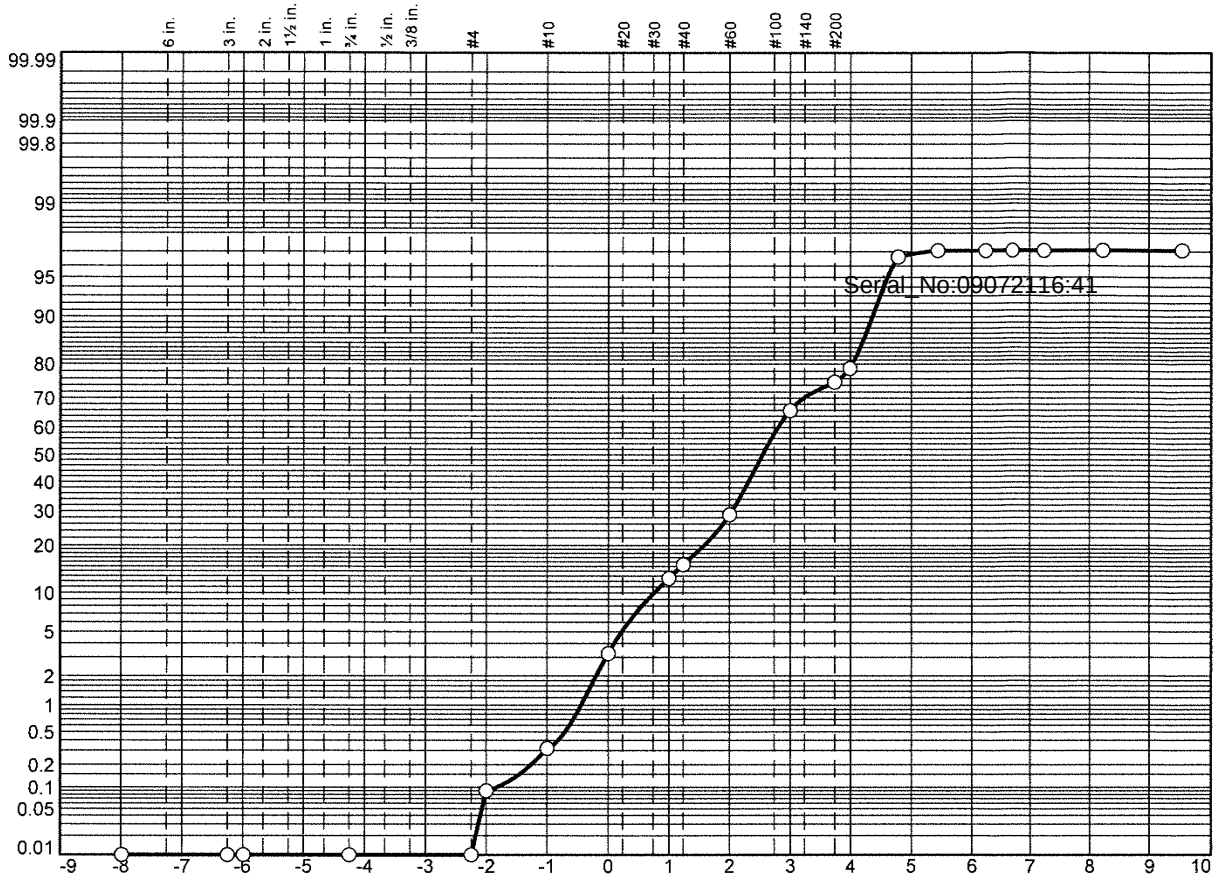
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	0.7	6.6	9.5	36.9	18.8	72.5	22.9	0.2	0.0		23.1	3.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0382	0.0456	0.0506	0.0552	0.0677	0.1063	0.1363	0.1609	0.2320	0.2750	0.4061	0.6146

Fineness Modulus	C_u	C_c
0.65	3.53	0.62

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.2	3.0	9.3	16.3	37.0	13.2	17.8	0.2	0.0		2.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4337	0.2016	0.1712	0.1069	0.0546	0.0487	1.16	4.14

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|097|SED|GS|01 **Sample No.:** L2140926-16

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|097|SED|GS|01

Sample Number: L2140926-16

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 100.59
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
100.59	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.09	0.00	99.9
		#10	0.23	0.00	99.7
		#18	2.95	0.00	96.7
		#35	9.38	0.00	87.4
		#40	2.80	0.00	84.6
		#60	13.59	0.00	71.1
		#120	37.21	0.00	34.1
		#200	9.16	0.00	25.0
		#230	3.89	0.00	21.2

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 21.2
Weight of hydrometer sample =40.16
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	3.3
5.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0231	2.9
15.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0133	2.9
30.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0094	2.9
60.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0067	2.9
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	2.9
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	2.9

Alpha Analytical

Fractional Components

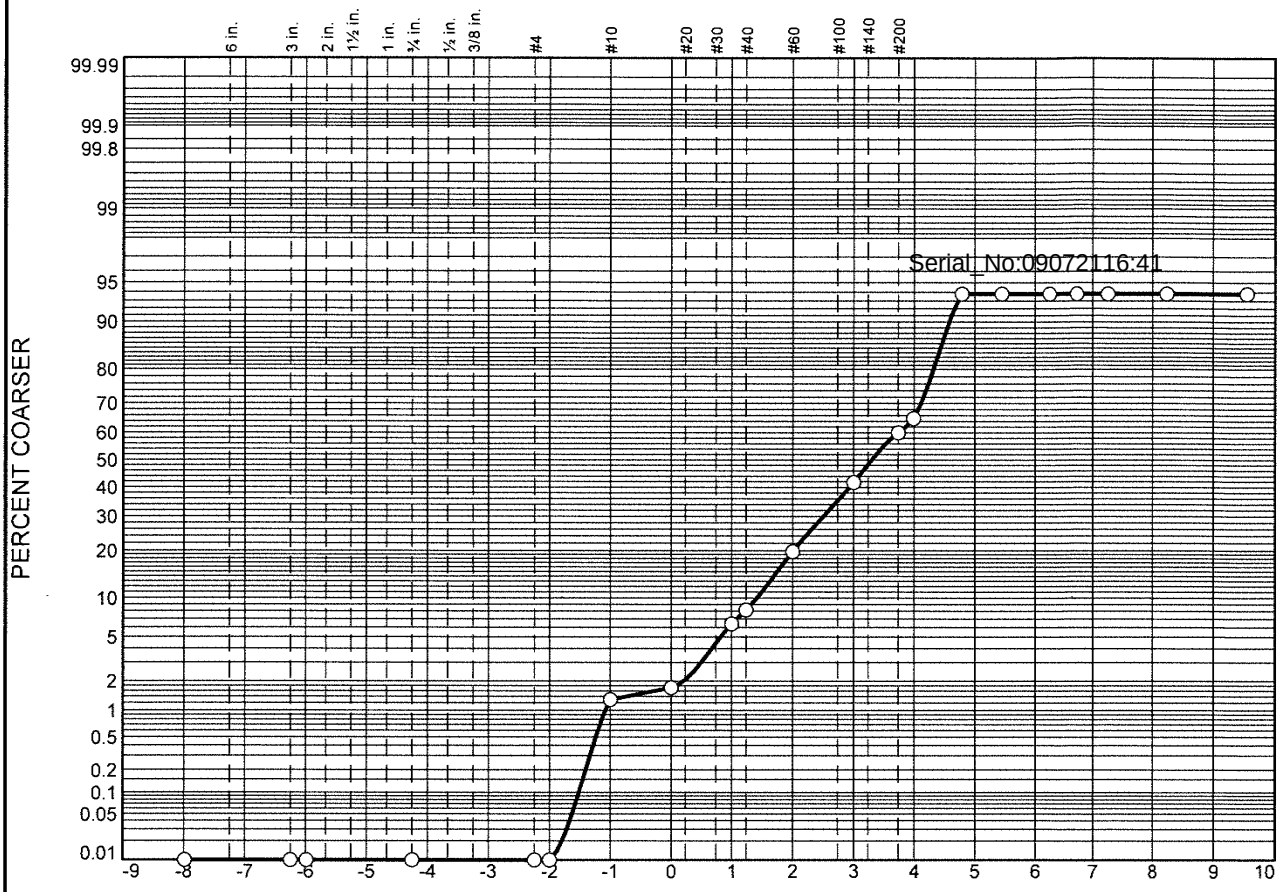
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.2	3.0	9.3	16.3	37.0	13.2	78.8	17.8	0.2	0.0		18.0	2.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0410	0.0487	0.0546	0.0611	0.1069	0.1434	0.1712	0.2016	0.3343	0.4337	0.5919	0.8584

Fineness Modulus	C_u	C_c
0.92	4.14	1.16

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.3	0.4	4.7	13.4	21.9	23.7	28.4	0.0	0.0		6.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2975	0.1308	0.1015	0.0577	0.0464	0.0418	0.61	3.13

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|098|SED|GS|01 **Sample No.:** L2140926-17

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|098|SED|GS|01

Sample Number: L2140926-17

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 64.01
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
64.01	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.83	0.00	98.7
		#18	0.27	0.00	98.3
		#35	3.00	0.00	93.6
		#40	1.13	0.00	91.8
		#60	7.42	0.00	80.2
		#120	14.04	0.00	58.3
		#200	11.72	0.00	40.0
		#230	3.19	0.00	35.0

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 35.0
Weight of hydrometer sample =40.37
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0362	6.2
5.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0229	6.2
15.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0132	6.2
30.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0094	6.2
60.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0066	6.2
240.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0033	6.2
1440.00	23.2	1.0040	1.0044	0.0131	4.0	15.2	0.0013	6.2

Alpha Analytical

Fractional Components

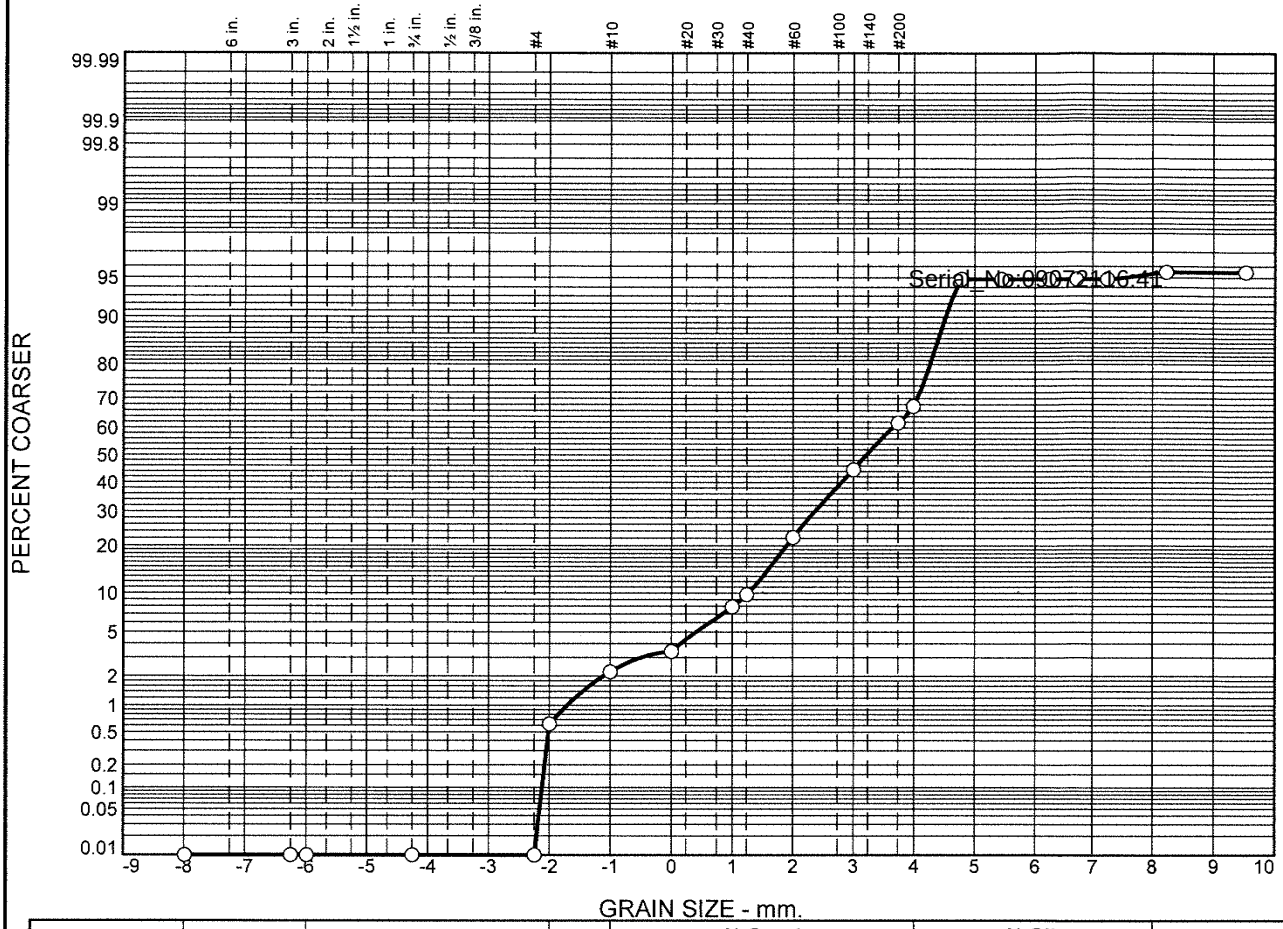
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.3	0.4	4.7	13.4	21.9	23.7	64.1	28.4	0.0	0.0		28.4	6.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0418	0.0464	0.0501	0.0577	0.0750	0.1015	0.1308	0.2479	0.2975	0.3753	0.5685

Fineness Modulus	C_u	C_c
0.57	3.13	0.61

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.6	1.6	1.2	4.6	14.2	22.4	23.2	27.1	0.0	0.0	0.5	4.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3228	0.1430	0.1077	0.0601	0.0481	0.0436	0.58	3.28

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|101|SED|GS|01 **Sample No.:** L2140926-18

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|101|SED|GS|01

Sample Number: L2140926-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 99.21
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
99.21	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.62	0.00	99.4
		#10	1.57	0.00	97.8
		#18	1.19	0.00	96.6
		#35	4.51	0.00	92.0
		#40	1.77	0.00	90.3
		#60	12.40	0.00	77.8
		#120	22.23	0.00	55.4
		#200	16.92	0.00	38.3
		#230	5.66	0.00	32.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 32.6
Weight of hydrometer sample =40.11
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0364	5.1
5.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0230	5.1
15.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0133	5.1
30.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0094	5.1
60.00	23.2	1.0035	1.0039	0.0131	3.5	15.4	0.0066	5.1
240.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0033	4.5
1440.00	23.2	1.0030	1.0034	0.0131	3.0	15.5	0.0014	4.5

Fractional Components

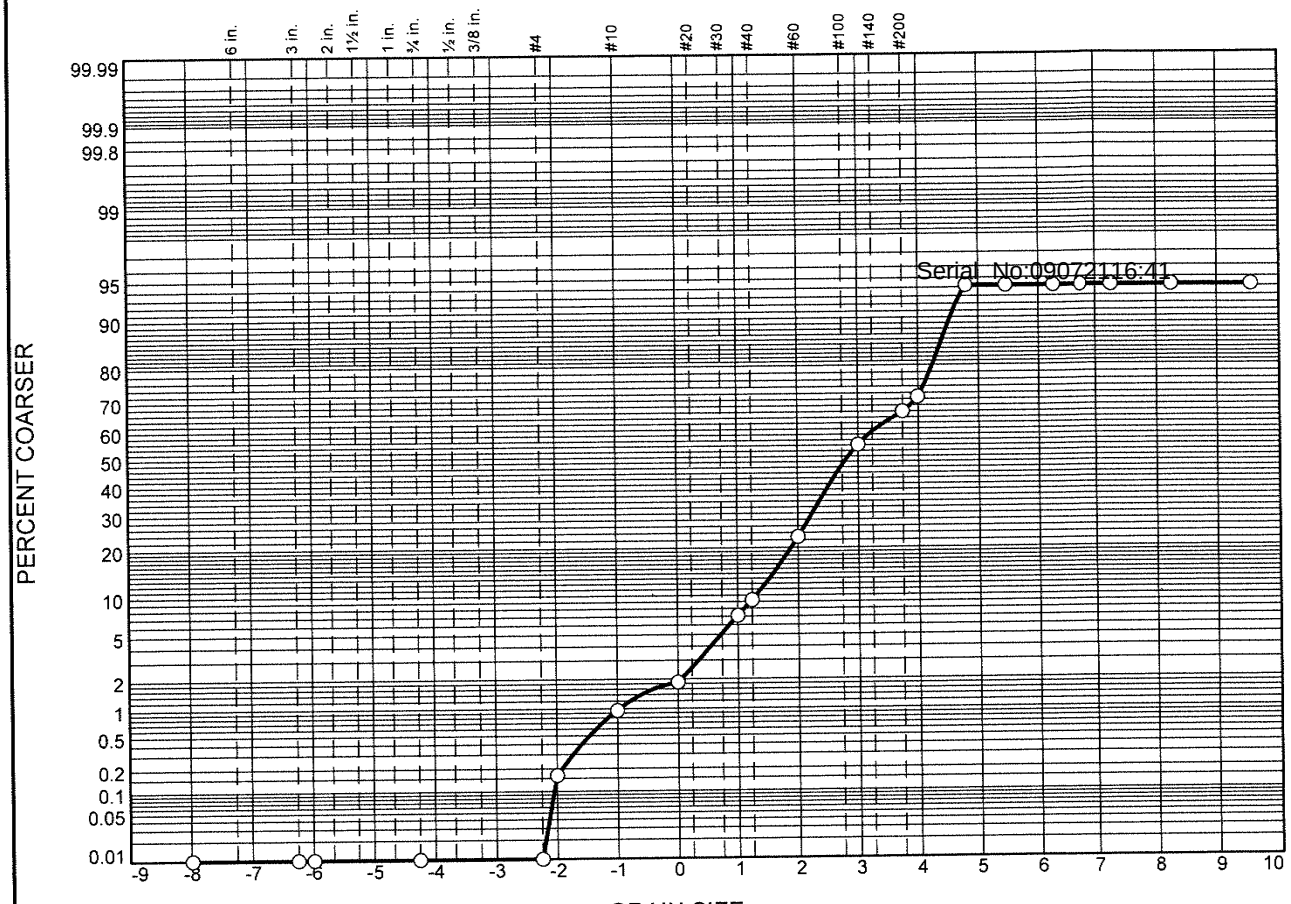
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.6	1.6	1.2	4.6	14.2	22.4	23.2	65.6	27.1	0.0	0.0	0.5	27.6	4.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0055	0.0436	0.0481	0.0519	0.0601	0.0798	0.1077	0.1430	0.2692	0.3228	0.4170	0.7585

Fineness Modulus	C_u	C_c
0.67	3.28	0.58

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.8	0.9	5.2	15.8	31.4	16.8	23.1	0.0	0.0		5.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3192	0.1728	0.1396	0.0642	0.0484	0.0432	0.55	4.00

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|104|SED|GS|01 **Sample No.:** L2140926-19

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|104|SED|GS|01
Sample Number: L2140926-19

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 91.57
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.57	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.15	0.00	99.8
		#10	0.73	0.00	99.0
		#18	0.82	0.00	98.1
		#35	4.81	0.00	92.9
		#40	1.96	0.00	90.8
		#60	12.46	0.00	77.1
		#120	28.75	0.00	45.7
		#200	10.74	0.00	34.0
		#230	4.38	0.00	29.2

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 29.2
Weight of hydrometer sample =40.17
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x** Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0361	5.8
5.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0228	5.8
15.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0132	5.8
30.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0093	5.8
60.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0066	5.8
240.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0033	5.8
1440.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0013	5.8

Fractional Components

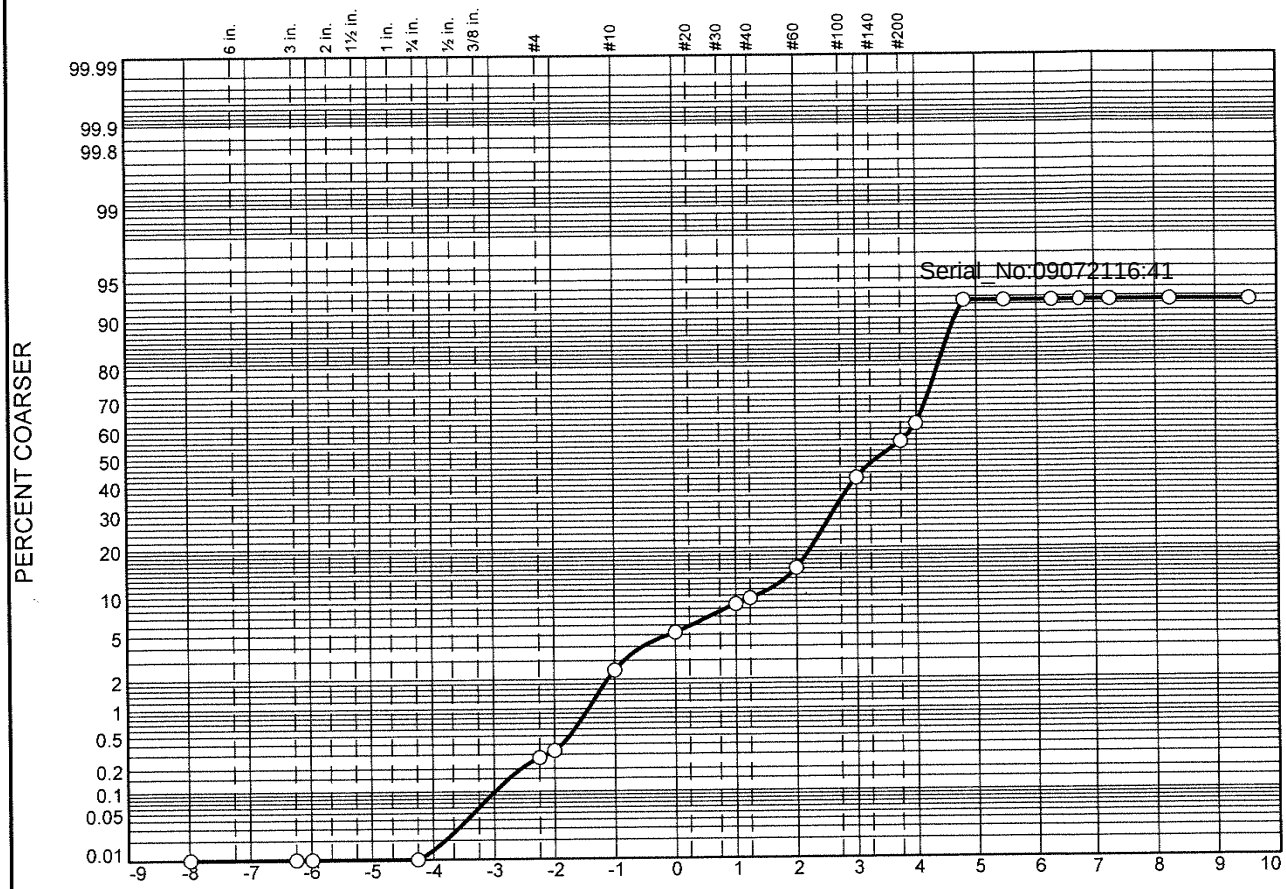
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.8	0.9	5.2	15.8	31.4	16.8	70.1	23.1	0.0	0.0		23.1	5.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0432	0.0484	0.0530	0.0642	0.1018	0.1396	0.1728	0.2703	0.3192	0.4052	0.6086

Fineness Modulus	C_u	C_c
0.71	4.00	0.55

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.3	2.1	2.8	3.4	6.5	27.1	20.1	30.2	0.0	0.0		7.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2517	0.1322	0.0949	0.0557	0.0448	0.0399	0.59	3.31

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|107|SED|GS|01 **Sample No.:** L2140926-20

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|107|SED|GS|01

Sample Number: L2140926-20

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 83.74
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
83.74	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.23	0.00	99.7
		#5	0.05	0.00	99.7
		#10	1.76	0.00	97.6
		#18	2.35	0.00	94.8
		#35	2.85	0.00	91.4
		#40	0.75	0.00	90.5
		#60	4.69	0.00	84.9
		#120	22.65	0.00	57.8
		#200	11.10	0.00	44.6
		#230	5.35	0.00	38.2

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 38.2
Weight of hydrometer sample =40.36
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0361	7.5
5.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0228	7.5
15.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0132	7.5
30.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0093	7.5
60.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0066	7.5
240.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0033	7.5
1440.00	23.2	1.0045	1.0049	0.0131	4.5	15.1	0.0013	7.5

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.3	2.1	2.8	3.4	6.5	27.1	20.1	59.9	30.2	0.0	0.0		30.2	7.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0399	0.0448	0.0486	0.0557	0.0654	0.0949	0.1322	0.2105	0.2517	0.3921	1.0746

Fineness Modulus	C_u	C_c
0.61	3.31	0.59

Serial_No:09072116:41

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L1140926

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|025|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|027|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|033|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|034|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|040|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|040|Sed|GS|02	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|047|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|048|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|049|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|053|Sed|GS|01	7/18/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|054|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|058|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|066|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -01
3664|2021|WTG|067|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -02
3664|2021|WTG|068|Sed|GS|01	7/19/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -03
3664|2021|WTG|074|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -04
3664|2021|WTG|076|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -05
3664|2021|WTG|077|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -06
3664|2021|WTG|078|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -07

Shipper: FEDEX UPS USPS DHL

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21 RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: _____ DATE/TIME: 7/30/21 RECEIVED BY: _____ DATE/TIME: 7/30/21 1135

T. Hudelle 7/30/21 1250

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

AK - AAL 7/30/21 1250

L2140926

7/30/21

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|081|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -08
3664|2021|WTG|083|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -09
3664|2021|WTG|084|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -10
3664|2021|WTG|085|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -11
3664|2021|WTG|087|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -12
3664|2021|WTG|090|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -13
3664|2021|WTG|090|Sed|GS|02	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate -14
3664|2021|WTG|095|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -15
3664|2021|WTG|097|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -16
3664|2021|WTG|098|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -17
3664|2021|WTG|101|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -18
3664|2021|WTG|104|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -19
3664|2021|WTG|107|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -20
3664|2021|WTG|122|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|123|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|128|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|134|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|137|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|150|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21 RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600
RELINQUISHED BY: [signature] DATE/TIME: 7/30/21 RECEIVED BY: [signature] HENDERSON AMR DATE/TIME: 7/30/21 1135
T. Hendrickson 7/30/21 1250

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

[signature] - AR 7/30/21 1200

ANALYTICAL REPORT

Lab Number:	L2140927
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/07/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140927
Report Date: 09/07/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140927-01	3664|2021|WTG|122|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-02	3664|2021|WTG|123|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-03	3664|2021|WTG|128|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-04	3664|2021|WTG|134|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-05	3664|2021|WTG|137|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-06	3664|2021|WTG|150|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140927-07	3664|2021|WTG|150|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140927-08	3664|2021|WTG|157|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-09	3664|2021|WTG|157|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140927-10	3664|2021|WTG|001|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-11	3664|2021|WTG|004|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-12	3664|2021|WTG|006|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-13	3664|2021|WTG|015|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-14	3664|2021|WTG|017|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140927-15	3664|2021|WTG|029|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-16	3664|2021|WTG|032|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-17	3664|2021|WTG|036|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140927-18	3664|2021|WTG|037|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-19	3664|2021|WTG|039|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140927-20	3664|2021|WTG|042|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140927
Project Number:	3664	**Report Date:**	09/07/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140927
Project Number:	3664	**Report Date:**	09/07/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size

The WG1537017-1 Laboratory Duplicate RPD for granule (67%) performed on L2140927-20, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/07/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-01
Client ID: 3664|2021|WTG|122|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	1.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	5.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	16.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	27.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	41.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	6.00		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-02
Client ID: 3664|2021|WTG|123|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	1.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	6.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	17.2		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	26.2		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	40.9		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-03
Client ID: 3664|2021|WTG|128|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	1.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	2.60		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	5.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	44.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	39.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-04
Client ID: 3664|2021|WTG|134|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	4.40		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	15.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	14.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	17.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	40.2		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-05
Client ID: 3664|2021|WTG|137|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.30		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	2.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	6.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	9.00		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	34.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	37.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	7.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-06
Client ID: 3664|2021|WTG|150|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	8.00		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	13.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	8.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	20.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	39.8		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-07
Client ID: 3664|2021|WTG|150|SED|GS|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	8.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	13.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	8.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	20.3		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	39.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	5.60		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-08
Client ID: 3664|2021|WTG|157|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.40		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	4.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	9.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	10.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	21.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	42.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	8.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-09
Client ID: 3664|2021|WTG|157|SED|GS|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	1.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	2.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	3.30		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	7.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	8.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	22.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	47.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	6.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-10
Client ID: 3664|2021|WTG|001|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	5.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	9.40		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	58.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	10.3		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	13.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.20		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-11
Client ID: 3664|2021|WTG|004|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	6.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	10.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	58.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	5.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	15.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-12
Client ID: 3664|2021|WTG|006|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	2.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	8.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	63.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	8.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	12.8		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	1.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-13
Client ID: 3664|2021|WTG|015|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	3.60		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	12.3		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	52.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	12.3		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	15.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	3.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-14
Client ID: 3664|2021|WTG|017|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	4.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	12.2		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	46.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	12.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	19.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-15
Client ID: 3664|2021|WTG|029|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	1.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	4.00		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	9.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	42.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	20.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	19.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-16
Client ID: 3664|2021|WTG|032|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	2.60		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	9.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	41.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	21.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	21.5		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	3.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-17
Client ID: 3664|2021|WTG|036|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	0.600		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.500		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	1.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	6.90		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	47.2		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	24.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	16.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.40		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-18
Client ID: 3664|2021|WTG|037|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	2.50		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	11.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	45.2		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	20.1		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	17.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	2.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-19
Client ID: 3664|2021|WTG|039|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	0.900		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	3.10		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	29.3		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	33.6		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	28.0		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.80		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140927
Report Date: 09/07/21

SAMPLE RESULTS

Lab ID: L2140927-20
Client ID: 3664|2021|WTG|042|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Cobbles	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Coarse Sand	4.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Medium Sand	10.7		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Fine Sand	37.8		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
% Very Fine Sand	13.9		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Silt - (3.9-62.5 um)	27.4		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ
Clay - (<3.9 um)	4.70		%	0.100	NA	1	-	08/19/21 14:25	12,D6913/D7928(M)	SJ

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140927
Report Date: 09/07/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1537017-1 QC Sample: L2140927-20 Client ID: 3664|2021|WTG|042|SED|GS|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	ND	ND	%	NC		20
Granule (2.0-4.0 mm)	0.100	0.200	%	**67**	Q	20
% Very Coarse Sand	0.700	0.600	%	15		20
% Coarse Sand	4.70	4.50	%	4		20
% Medium Sand	10.7	10.0	%	7		20
% Fine Sand	37.8	40.0	%	6		20
% Very Fine Sand	13.9	15.5	%	11		20
Silt - (3.9-62.5 um)	27.4	24.3	%	12		20
Clay - (<3.9 um)	4.70	4.90	%	4		20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140927
Report Date: 09/07/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent
B	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140927-01A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-02A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140927-03A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-04A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-05A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140927
Report Date: 09/07/21

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140927-06A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140927-07A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-08A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140927-09A	Plastic 8oz unpreserved for Grain Size	A	NA		3.0	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140927-10A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-11A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140927
Report Date: 09/07/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140927-12A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2140927-13A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140927-14A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-15A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140927-16A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140927-17A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140927
Report Date: 09/07/21

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140927-18A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140927-19A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2140927-20A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140927
Project Number:	3664	**Report Date:**	09/07/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140927
Project Number:	3664	**Report Date:**	09/07/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140927
Project Number:	3664	**Report Date:**	09/07/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	BEACON WIND	**Lab Number:**	L2140927
Project Number:	3664	**Report Date:**	09/07/21

REFERENCES

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

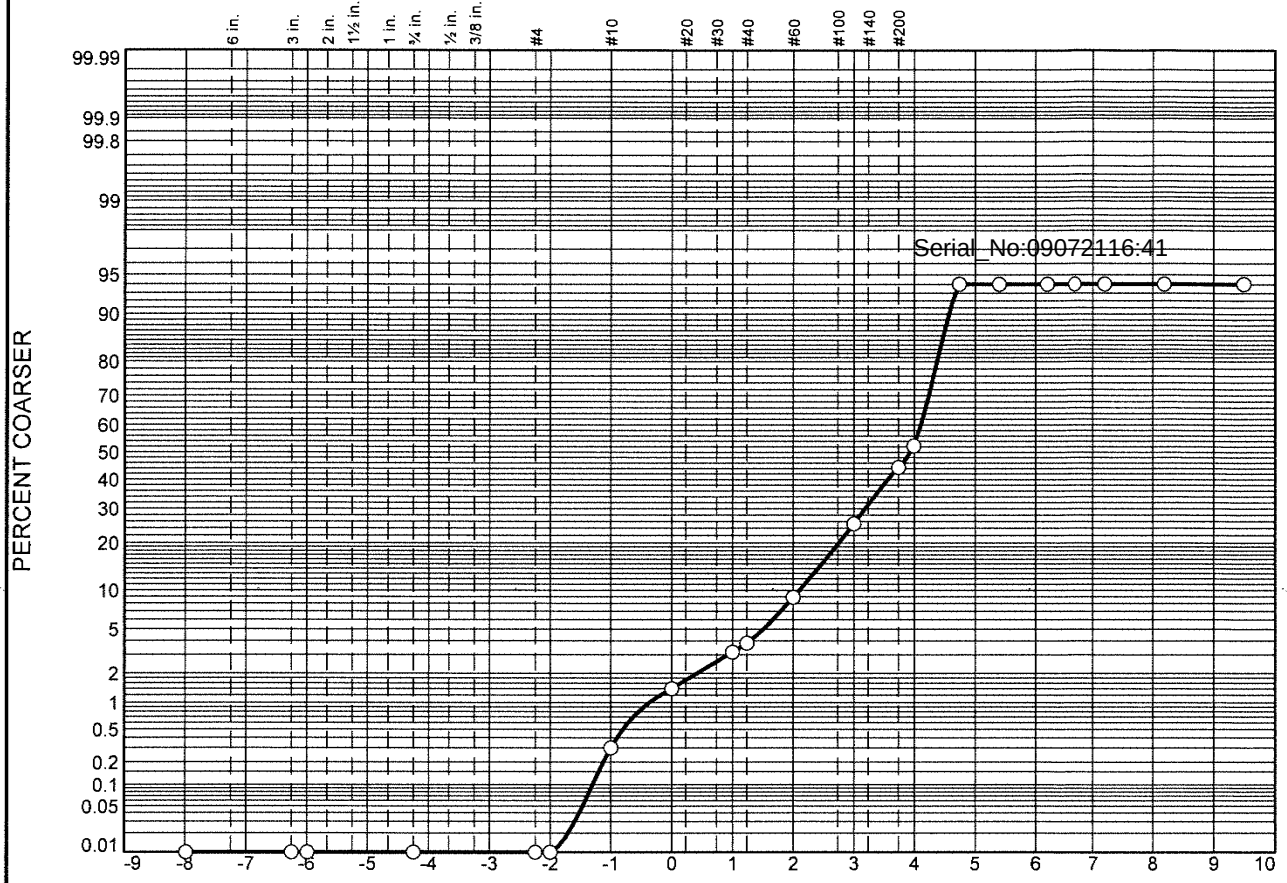
LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

ASTM D6913/D7928
GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	1.1	1.8	5.7	16.4	27.7	41.0	0.0	0.0	0.0	6.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1803	0.0846	0.0653	0.0530	0.0455	0.0421	0.79	2.01

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|122|SED|GS|01 **Sample No.:** L2140927-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|122|SED|GS|01

Sample Number: L2140927-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 79.68
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
79.68	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.24	0.00	99.7
		#18	0.88	0.00	98.6
		#35	1.41	0.00	96.8
		#40	0.51	0.00	96.2
		#60	4.05	0.00	91.1
		#120	13.10	0.00	74.7
		#200	15.14	0.00	55.7
		#230	6.40	0.00	47.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 47.6
Weight of hydrometer sample =40.08
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	6.0
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	6.0
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	6.0
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	6.0
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	6.0
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	6.0
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	6.0

Fractional Components

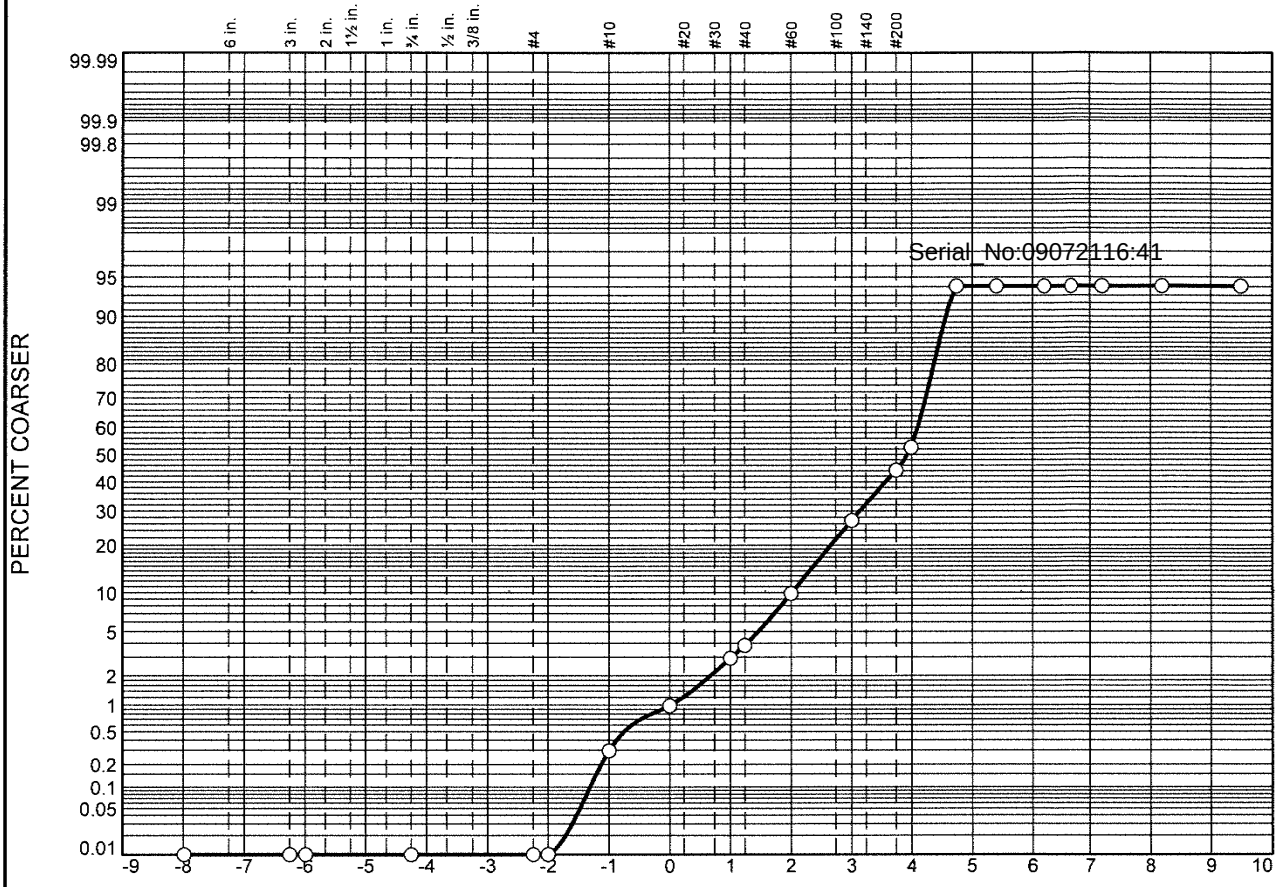
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	1.1	1.8	5.7	16.4	27.7	52.7	41.0	0.0	0.0	0.0	41.0	6.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0421	0.0455	0.0482	0.0530	0.0579	0.0653	0.0846	0.1483	0.1803	0.2330	0.3521

Fineness Modulus	C_u	C_c
0.30	2.01	0.79

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.7	1.9	6.9	17.2	26.3	40.8	0.0	0.0		5.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1932	0.0844	0.0655	0.0532	0.0457	0.0422	0.79	2.00

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|123|SED|GS|01 **Sample No.:** L2140927-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|123|SED|GS|01

Sample Number: L2140927-02

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 74.37
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.37	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.22	0.00	99.7
		#18	0.51	0.00	99.0
		#35	1.45	0.00	97.1
		#40	0.66	0.00	96.2
		#60	4.47	0.00	90.2
		#120	12.76	0.00	73.0
		#200	12.75	0.00	55.9
		#230	6.36	0.00	47.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 47.3
Weight of hydrometer sample =40.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	5.9
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	5.9
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	5.9
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	5.9
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	5.9
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	5.9
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.9

Fractional Components

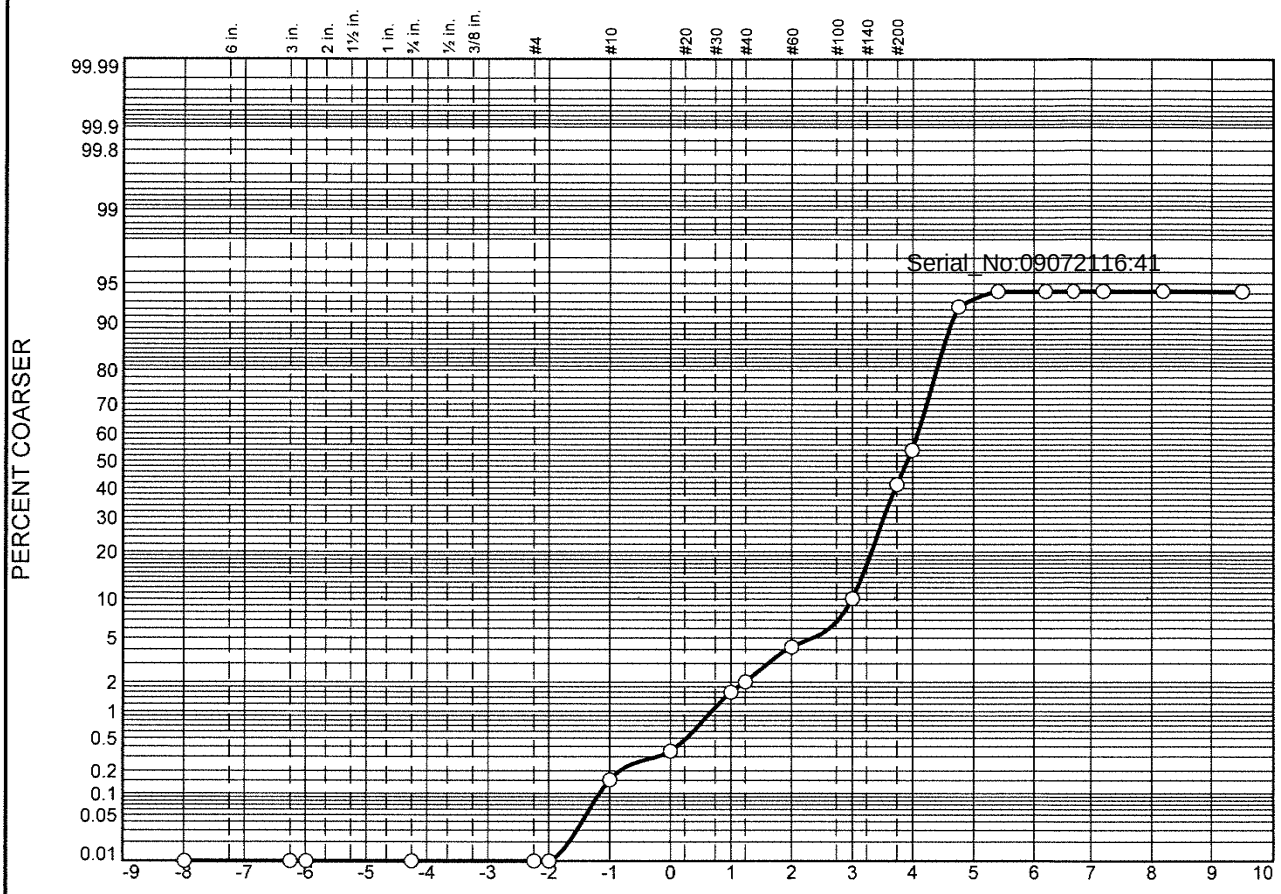
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.7	1.9	6.9	17.2	26.3	53.0	40.8	0.0	0.0		40.8	5.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0422	0.0457	0.0484	0.0532	0.0582	0.0655	0.0844	0.1585	0.1932	0.2475	0.3640

Fineness Modulus	C_u	C_c
0.32	2.00	0.79

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.2	1.2	2.6	5.9	44.6	38.7	0.8	0.0	0.0	5.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1097	0.0764	0.0663	0.0533	0.0445	0.0403	0.92	1.90

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|128|SED|GS|01 **Sample No.:** L2140927-03

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|128|SED|GS|01

Sample Number: L2140927-03

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 85.40
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
85.40	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.13	0.00	99.8
		#18	0.17	0.00	99.6
		#35	1.05	0.00	98.4
		#40	0.37	0.00	98.0
		#60	1.87	0.00	95.8
		#120	5.01	0.00	89.9
		#200	26.73	0.00	58.6
		#230	10.81	0.00	46.0

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 46.0
Weight of hydrometer sample =40.02
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0372	7.6
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	5.8
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	5.8
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	5.8
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	5.8
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	5.8
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.8

Fractional Components

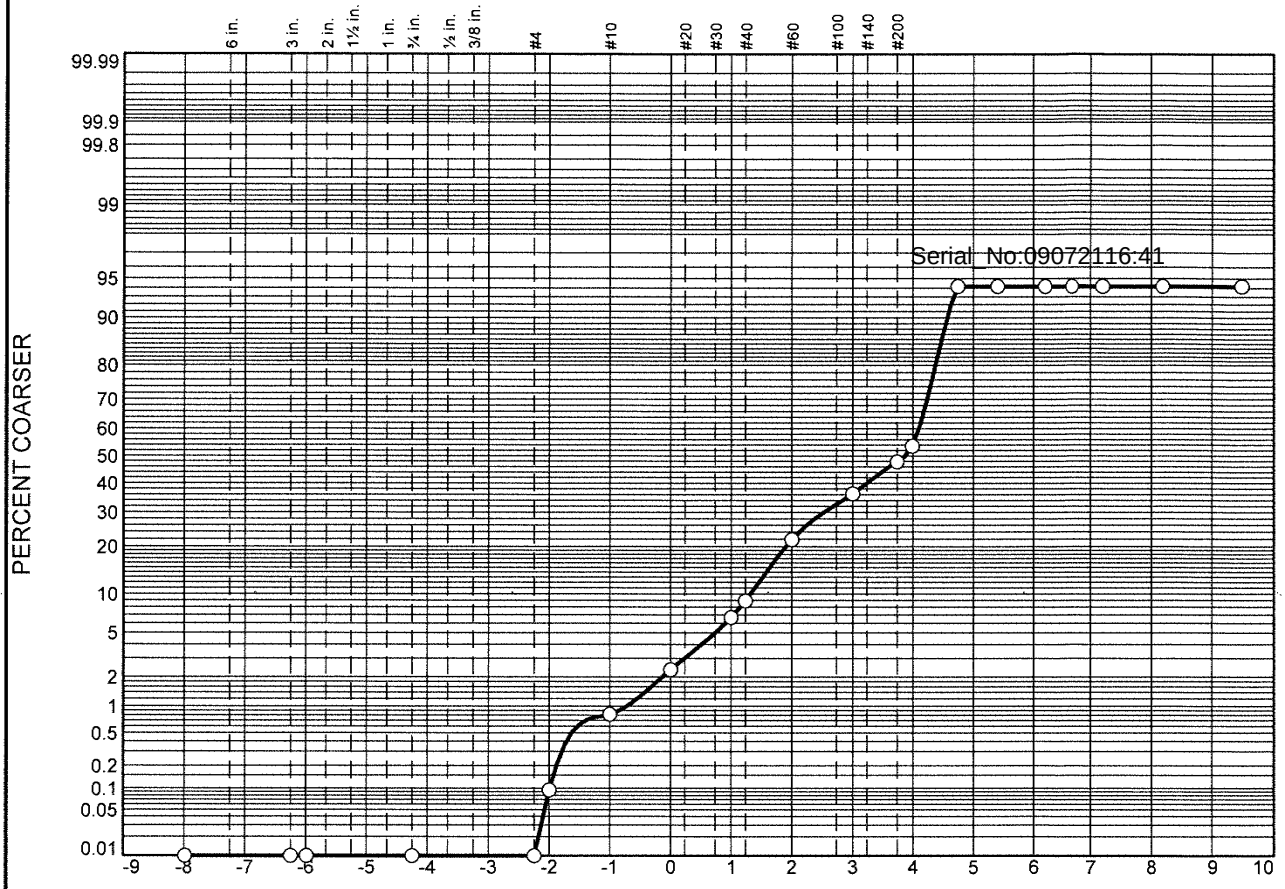
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.2	1.2	2.6	5.9	44.6	54.5	38.7	0.8	0.0	0.0	39.5	5.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0403	0.0445	0.0477	0.0533	0.0590	0.0663	0.0764	0.1002	0.1097	0.1253	0.1964

Fineness Modulus	C_u	C_c
0.12	1.90	0.92

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.7	1.5	4.4	15.1	14.5	17.8	40.1	0.0	0.0		5.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3207	0.1060	0.0681	0.0531	0.0456	0.0422	0.63	2.51

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|134|SED|GS|01 **Sample No.:** L2140927-04

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|134|SED|GS|01

Sample Number: L2140927-04

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 73.82
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
73.82	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.07	0.00	99.9
		#10	0.53	0.00	99.2
		#18	1.13	0.00	97.7
		#35	3.20	0.00	93.3
		#40	1.64	0.00	91.1
		#60	9.52	0.00	78.2
		#120	10.69	0.00	63.7
		#200	8.52	0.00	52.2
		#230	4.28	0.00	46.4

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 46.4
Weight of hydrometer sample =40.07
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	5.8
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	5.8
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	5.8
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	5.8
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	5.8
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	5.8
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.8

Fractional Components

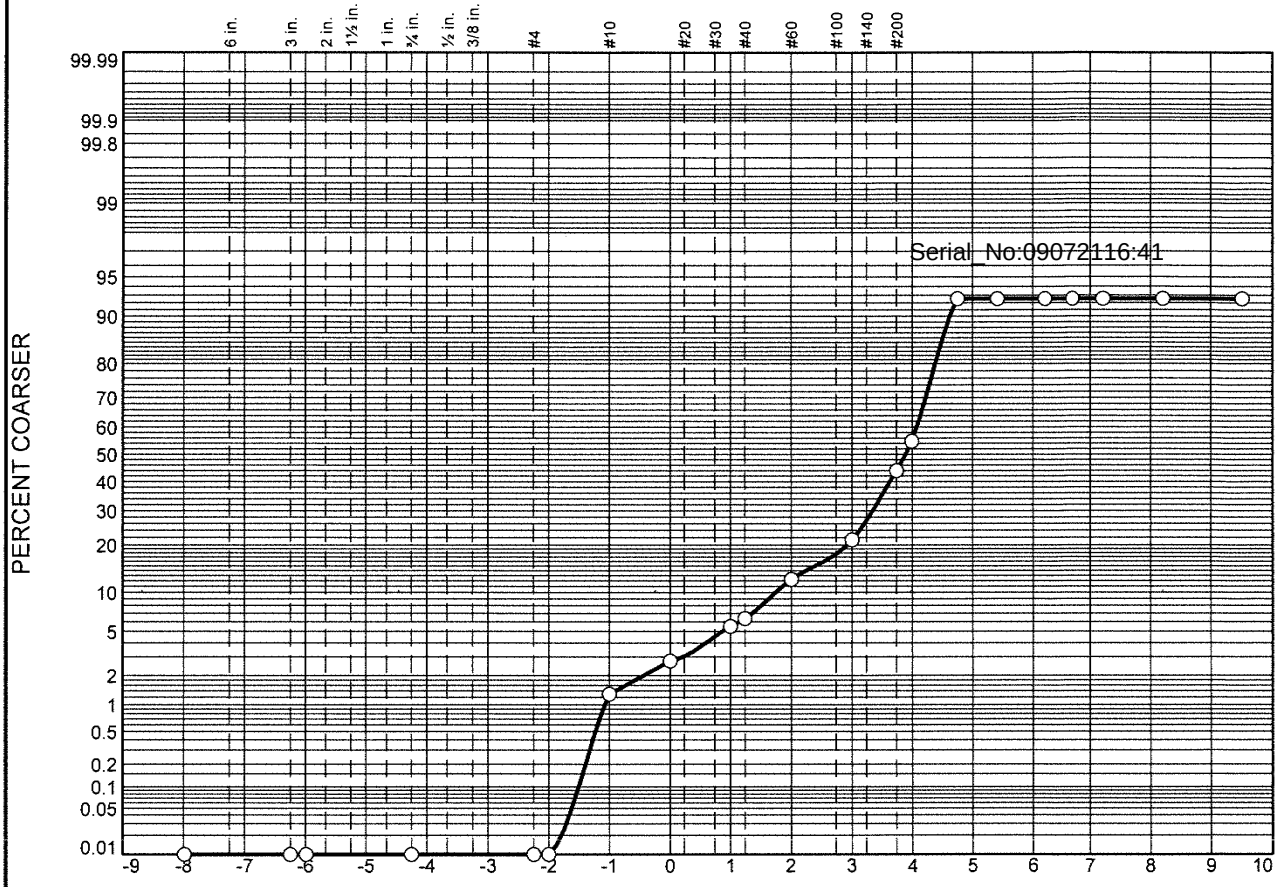
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.7	1.5	4.4	15.1	14.5	17.8	53.3	40.1	0.0	0.0		40.1	5.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0422	0.0456	0.0483	0.0531	0.0583	0.0681	0.1060	0.2671	0.3207	0.3994	0.6004

Fineness Modulus	C_u	C_c
0.57	2.51	0.63

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.3	1.5	2.7	6.8	9.0	34.1	37.1	0.0	0.0	0.0	7.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1901	0.0808	0.0674	0.0536	0.0449	0.0406	0.88	1.99

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|137|SED|GS|01 **Sample No.:** L2140927-05

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|137|SED|GS|01

Sample Number: L2140927-05

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 87.26
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
87.26	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	1.13	0.00	98.7
		#18	1.27	0.00	97.2
		#35	2.40	0.00	94.5
		#40	0.76	0.00	93.6
		#60	5.15	0.00	87.7
		#120	7.90	0.00	78.7
		#200	19.79	0.00	56.0
		#230	9.41	0.00	45.2

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 45.2
Weight of hydrometer sample =40.17
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0372	7.5
5.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0235	7.5
15.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0136	7.5
30.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0096	7.5
60.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0068	7.5
240.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0034	7.5
1440.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0014	7.5

Fractional Components

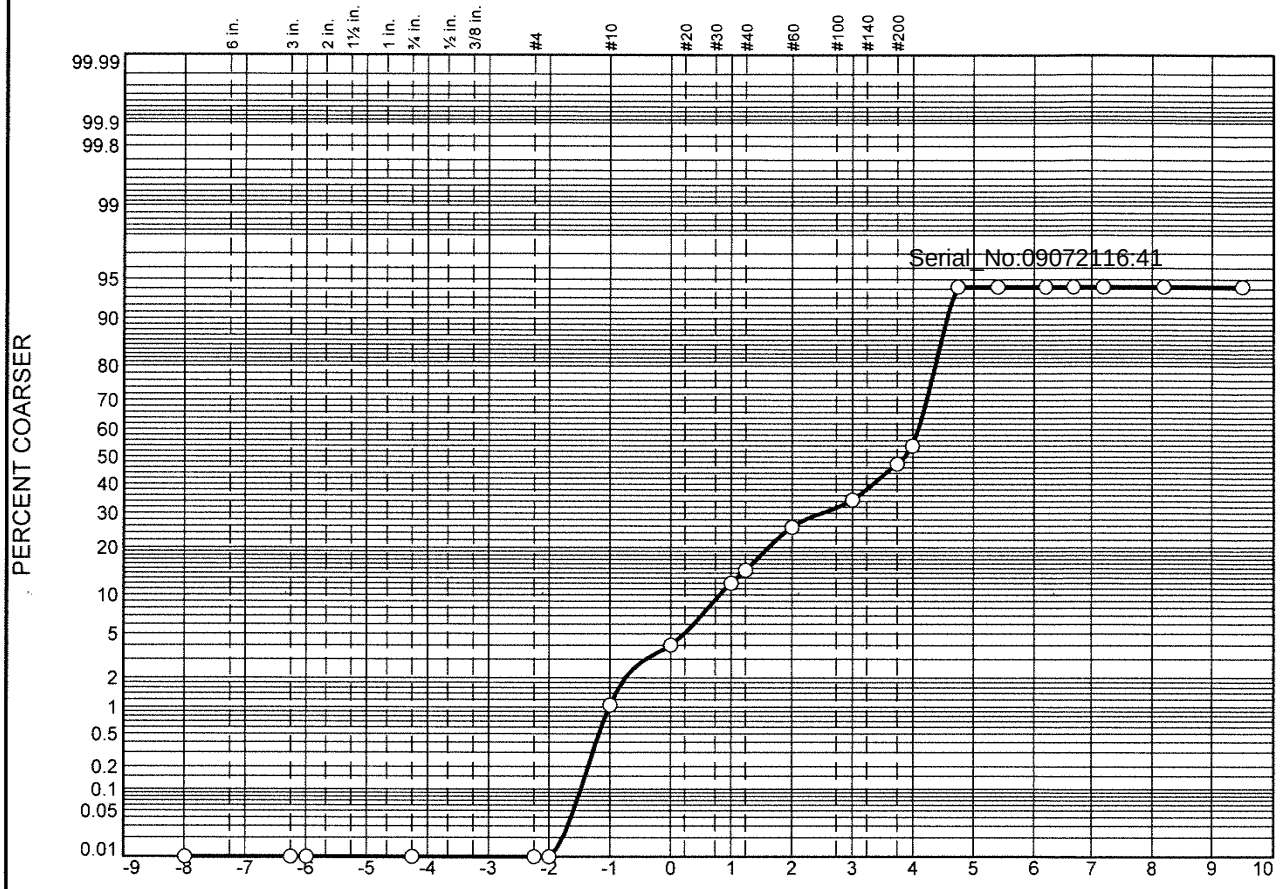
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.3	1.5	2.7	6.8	9.0	34.1	54.1	37.1	0.0	0.0	0.0	37.1	7.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0406	0.0449	0.0481	0.0536	0.0593	0.0674	0.0808	0.1320	0.1901	0.2987	0.5487

Fineness Modulus	C_u	C_c
0.35	1.99	0.88

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.1	2.9	8.0	13.7	8.7	20.2	39.7	0.0	0.0		5.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4155	0.0986	0.0683	0.0534	0.0458	0.0424	0.68	2.33

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|150|SED|GS|01 **Sample No.:** L2140927-06

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|150|SED|GS|01

Sample Number: L2140927-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 80.81
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
80.81	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.85	0.00	98.9
		#18	2.39	0.00	96.0
		#35	6.48	0.00	88.0
		#40	2.08	0.00	85.4
		#60	8.93	0.00	74.3
		#120	7.10	0.00	65.6
		#200	10.47	0.00	52.6
		#230	5.37	0.00	46.0

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 46.0
Weight of hydrometer sample =40.16
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	5.7
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	5.7
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	5.7
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	5.7
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	5.7
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	5.7
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.7

Fractional Components

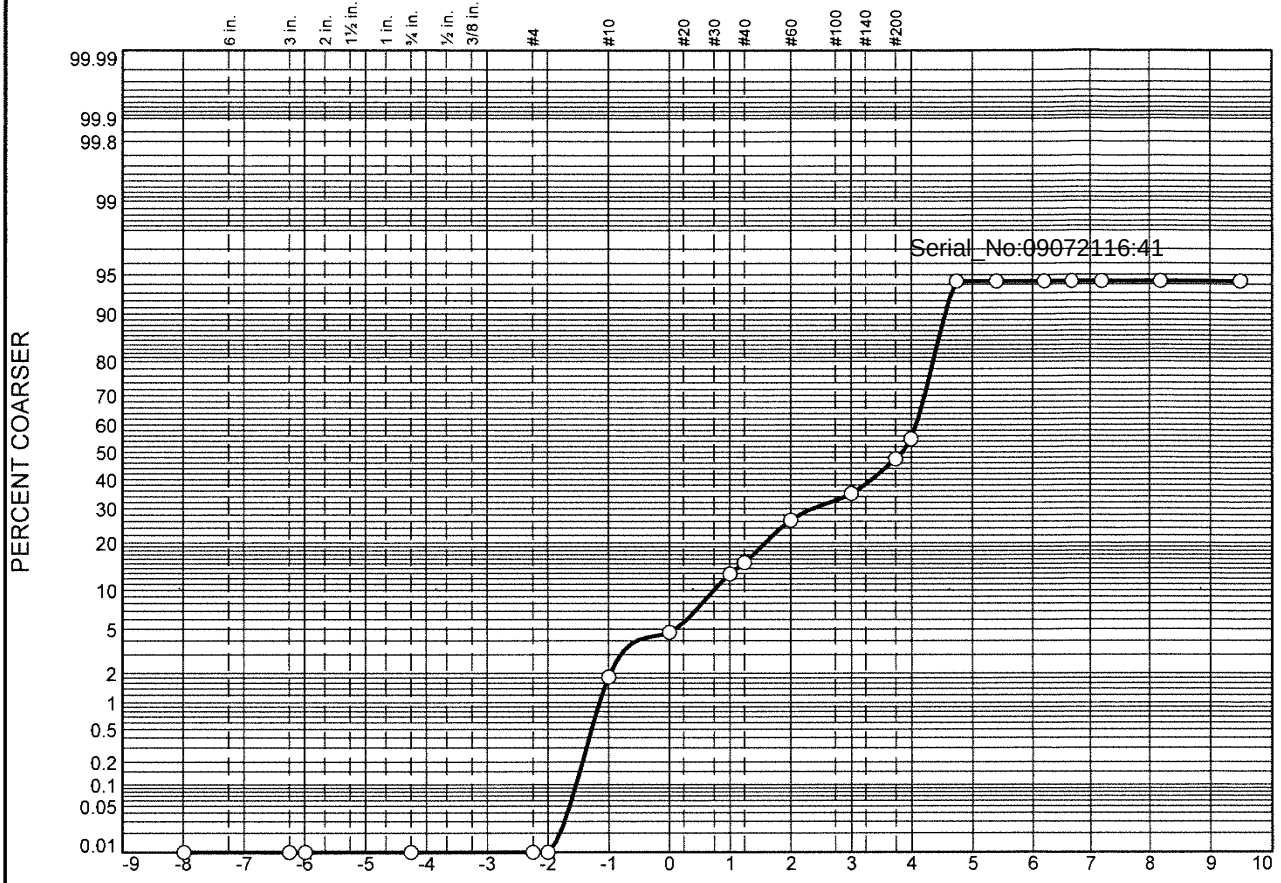
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.1	2.9	8.0	13.7	8.7	20.2	53.5	39.7	0.0	0.0		39.7	5.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0424	0.0458	0.0485	0.0534	0.0586	0.0683	0.0986	0.3262	0.4155	0.5691	0.8575

Fineness Modulus	C_u	C_c
0.67	2.33	0.68

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.8	2.9	8.2	13.4	8.8	20.4	38.9	0.0	0.0		5.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4313	0.0987	0.0692	0.0538	0.0461	0.0426	0.69	2.32

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|150|SED|GS|02 **Sample No.:** L2140927-07

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|150|SED|GS|02

Sample Number: L2140927-07

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 82.89
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
82.89	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	1.52	0.00	98.2
		#18	2.39	0.00	95.3
		#35	6.78	0.00	87.1
		#40	1.93	0.00	84.8
		#60	9.20	0.00	73.7
		#120	7.24	0.00	64.9
		#200	10.29	0.00	52.5
		#230	6.16	0.00	45.1

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 45.1
Weight of hydrometer sample =40.03
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	5.6
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	5.6
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	5.6
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	5.6
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	5.6
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	5.6
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.6

Fractional Components

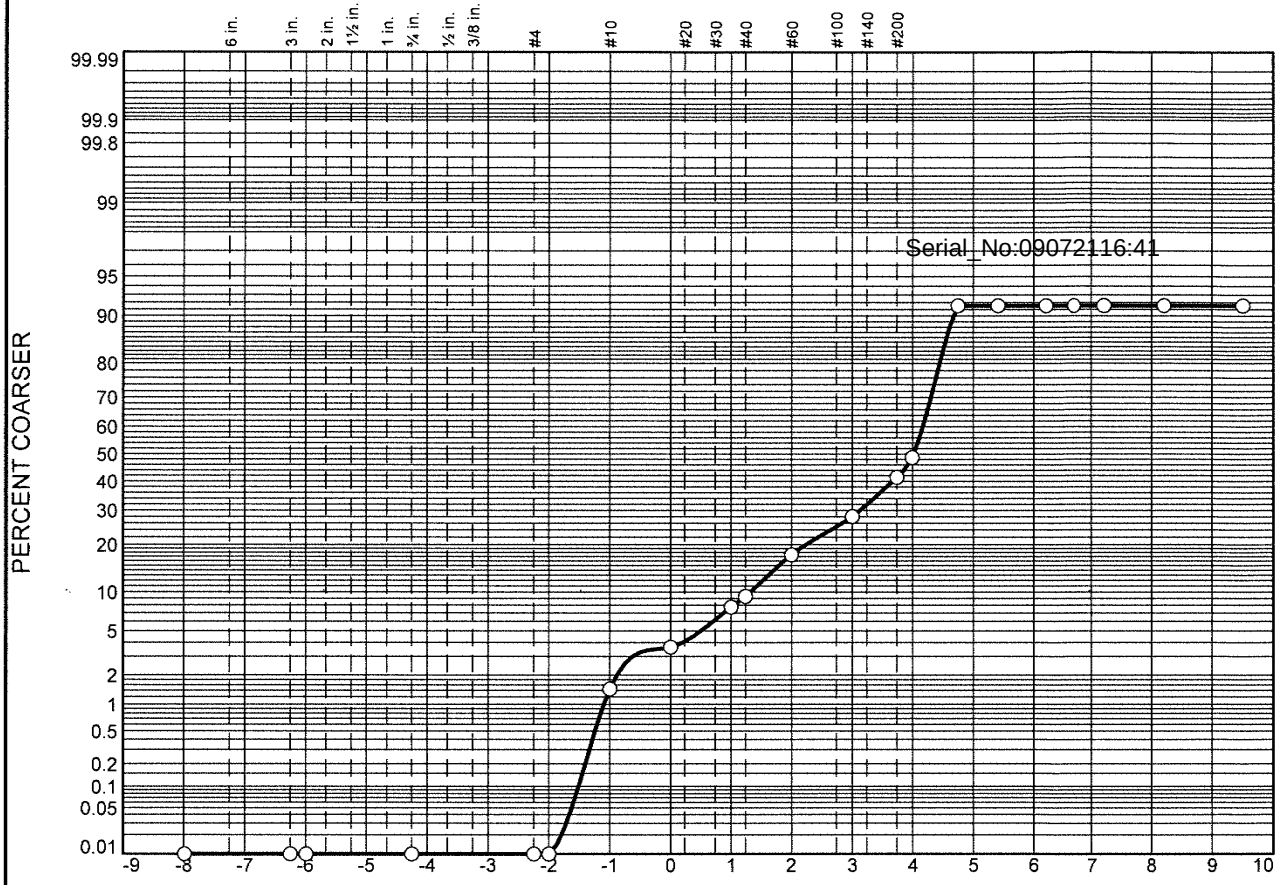
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.8	2.9	8.2	13.4	8.8	20.4	53.7	38.9	0.0	0.0		38.9	5.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0426	0.0461	0.0489	0.0538	0.0593	0.0692	0.0987	0.3329	0.4313	0.6009	0.9392

Fineness Modulus	C_u	C_c
0.70	2.32	0.69

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.4	2.2	4.2	9.7	10.6	21.1	42.3	0.0	0.0	0.0	8.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2887	0.0788	0.0618	0.0508	0.0430	0.0390	0.84	2.02

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|157|SED|GS|01 **Sample No.:** L2140927-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|157|SED|GS|01

Sample Number: L2140927-08

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 75.21
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
75.21	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	1.09	0.00	98.6
		#18	1.64	0.00	96.4
		#35	3.10	0.00	92.2
		#40	1.17	0.00	90.7
		#60	6.13	0.00	82.5
		#120	8.00	0.00	71.9
		#200	10.03	0.00	58.6
		#230	5.43	0.00	51.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 51.3
Weight of hydrometer sample =40.09
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0372	8.5
5.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0235	8.5
15.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0136	8.5
30.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0096	8.5
60.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0068	8.5
240.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0034	8.5
1440.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0014	8.5

Fractional Components

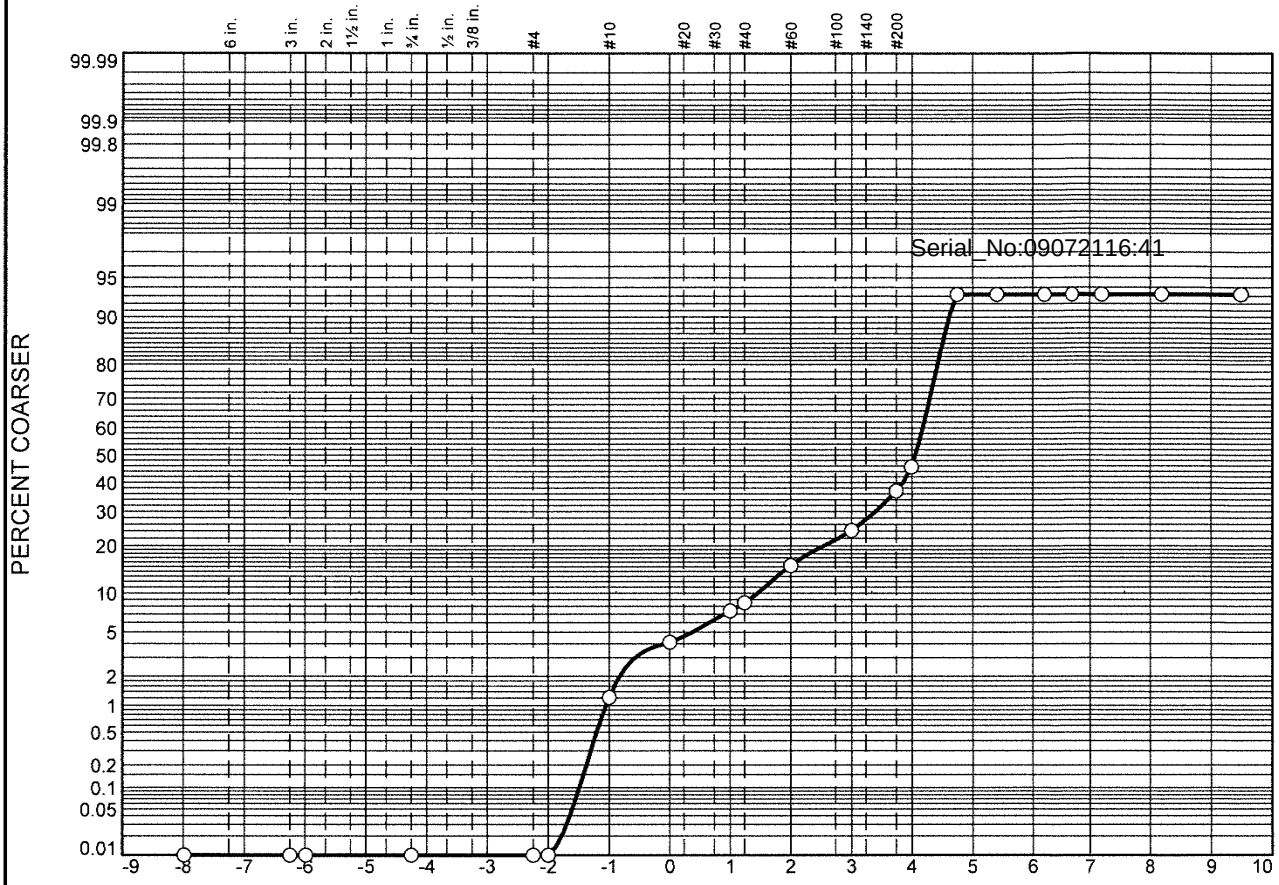
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.4	2.2	4.2	9.7	10.6	21.1	47.8	42.3	0.0	0.0	0.0	42.3	8.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0390	0.0430	0.0459	0.0508	0.0556	0.0618	0.0788	0.2119	0.2887	0.4003	0.7068

Fineness Modulus	C_u	C_c
0.49	2.02	0.84

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.2	2.9	3.3	7.9	8.9	22.1	46.9	0.0	0.0	0.0	6.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2546	0.0692	0.0601	0.0511	0.0443	0.0410	0.92	1.69

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|157|SED|GS|02 **Sample No.:** L2140927-09

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|157|SED|GS|02

Sample Number: L2140927-09

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 63.97
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
63.97	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.78	0.00	98.8
		#18	1.85	0.00	95.9
		#35	2.11	0.00	92.6
		#40	0.70	0.00	91.5
		#60	4.32	0.00	84.7
		#120	5.75	0.00	75.8
		#200	8.13	0.00	63.0
		#230	5.58	0.00	54.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 54.3
Weight of hydrometer sample =40.15
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	6.8
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	6.8
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	6.8
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	6.8
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	6.8
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	6.8
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	6.8

Fractional Components

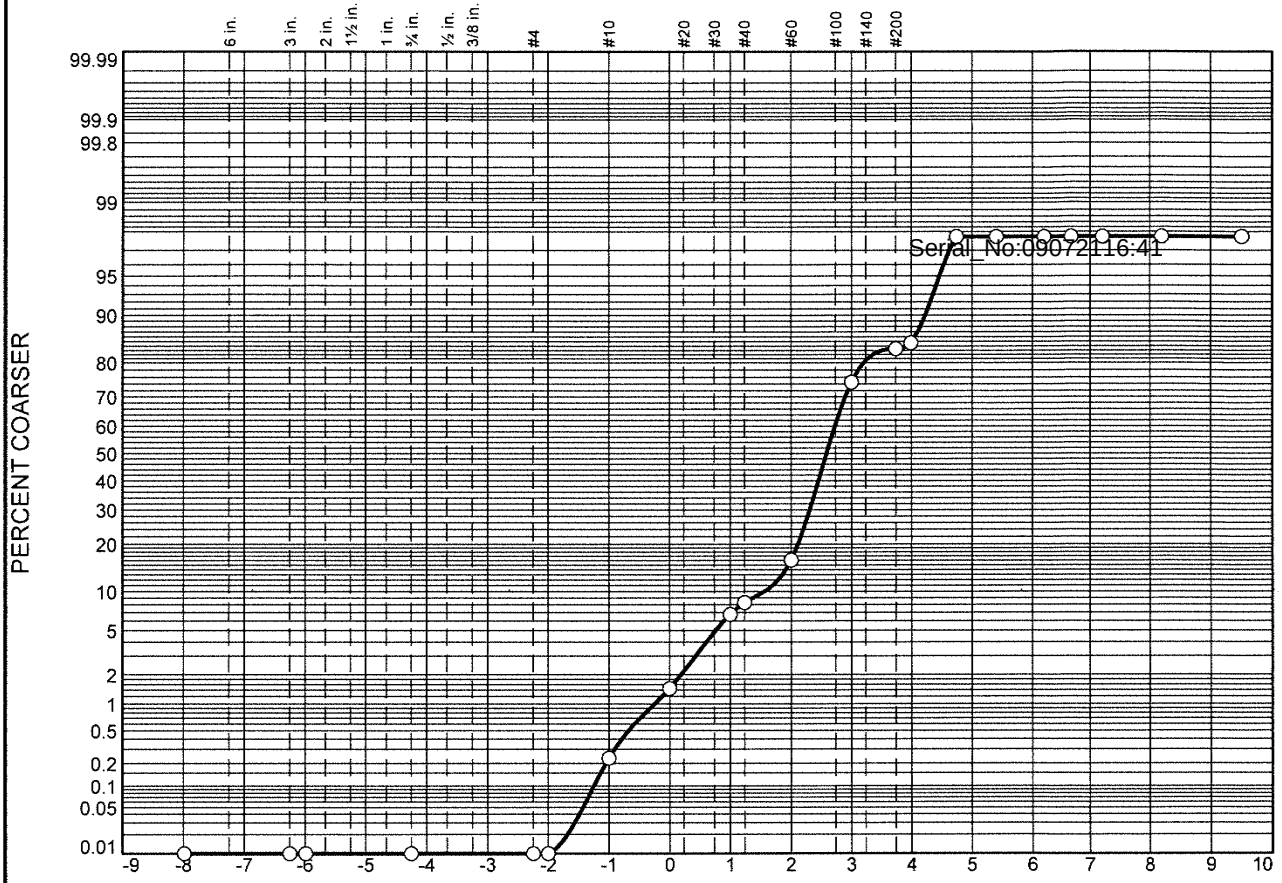
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.2	2.9	3.3	7.9	8.9	22.1	45.1	46.9	0.0	0.0	0.0	46.9	6.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0410	0.0443	0.0468	0.0511	0.0552	0.0601	0.0692	0.1706	0.2546	0.3649	0.7723

Fineness Modulus	C_u	C_c
0.45	1.69	0.92

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	1.3	5.2	9.4	58.4	10.4	12.9	0.0	0.0	0.0	2.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2574	0.1825	0.1663	0.1344	0.0622	0.0534	1.85	3.42

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|001|SED|GS|01 **Sample No.:** L2140927-10

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|001|SED|GS|01

Sample Number: L2140927-10

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 99.29
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
99.29	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.23	0.00	99.8
		#18	1.21	0.00	98.5
		#35	5.26	0.00	93.3
		#40	1.53	0.00	91.7
		#60	7.75	0.00	83.9
		#120	58.04	0.00	25.5
		#200	8.79	0.00	16.6
		#230	1.29	0.00	15.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 15.3
Weight of hydrometer sample =40.05
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0373	2.2
5.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0236	2.2
15.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0136	2.2
30.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0096	2.2
60.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0068	2.2
240.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0034	2.2
1440.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0014	2.2

Fractional Components

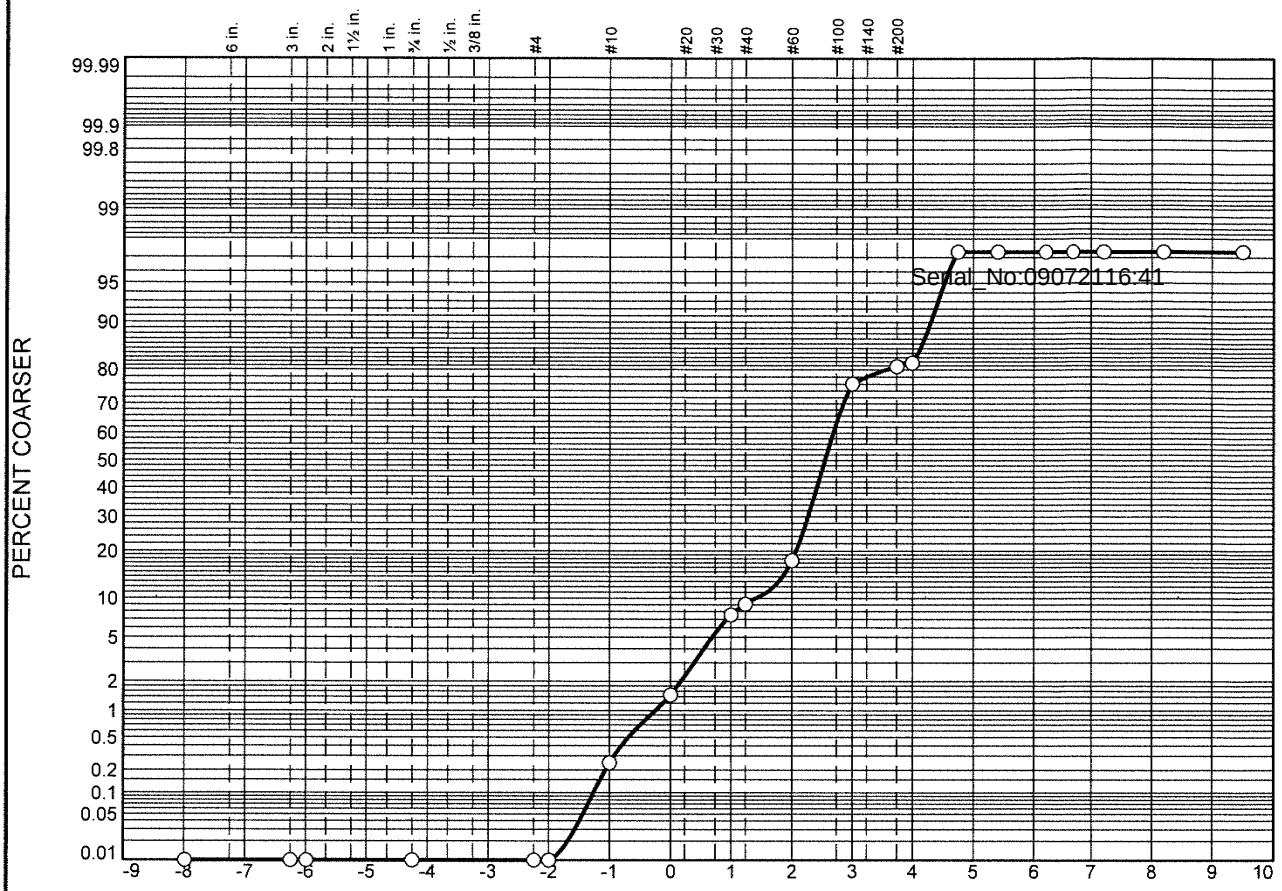
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	1.3	5.2	9.4	58.4	10.4	84.7	12.9	0.0	0.0	0.0	12.9	2.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0454	0.0534	0.0622	0.1085	0.1344	0.1510	0.1663	0.1825	0.2311	0.2574	0.3371	0.5912

Fineness Modulus	C_u	C_c
0.78	3.42	1.85

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	1.3	6.1	10.0	58.5	5.8	15.4	0.0	0.0	0.0	2.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2678	0.1878	0.1713	0.1386	0.0571	0.0508	2.02	3.70

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|004|SED|GS|01 **Sample No.:** L2140927-11

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|004|SED|GS|01

Sample Number: L2140927-11

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 89.51
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
89.51	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.22	0.00	99.8
		#18	1.09	0.00	98.5
		#35	5.45	0.00	92.4
		#40	1.38	0.00	90.9
		#60	7.60	0.00	82.4
		#120	52.38	0.00	23.9
		#200	4.18	0.00	19.2
		#230	0.82	0.00	18.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 18.3
Weight of hydrometer sample =40.11
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0373	2.7
5.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0236	2.7
15.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0136	2.7
30.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0096	2.7
60.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0068	2.7
240.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0034	2.7
1440.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0014	2.7

Fractional Components

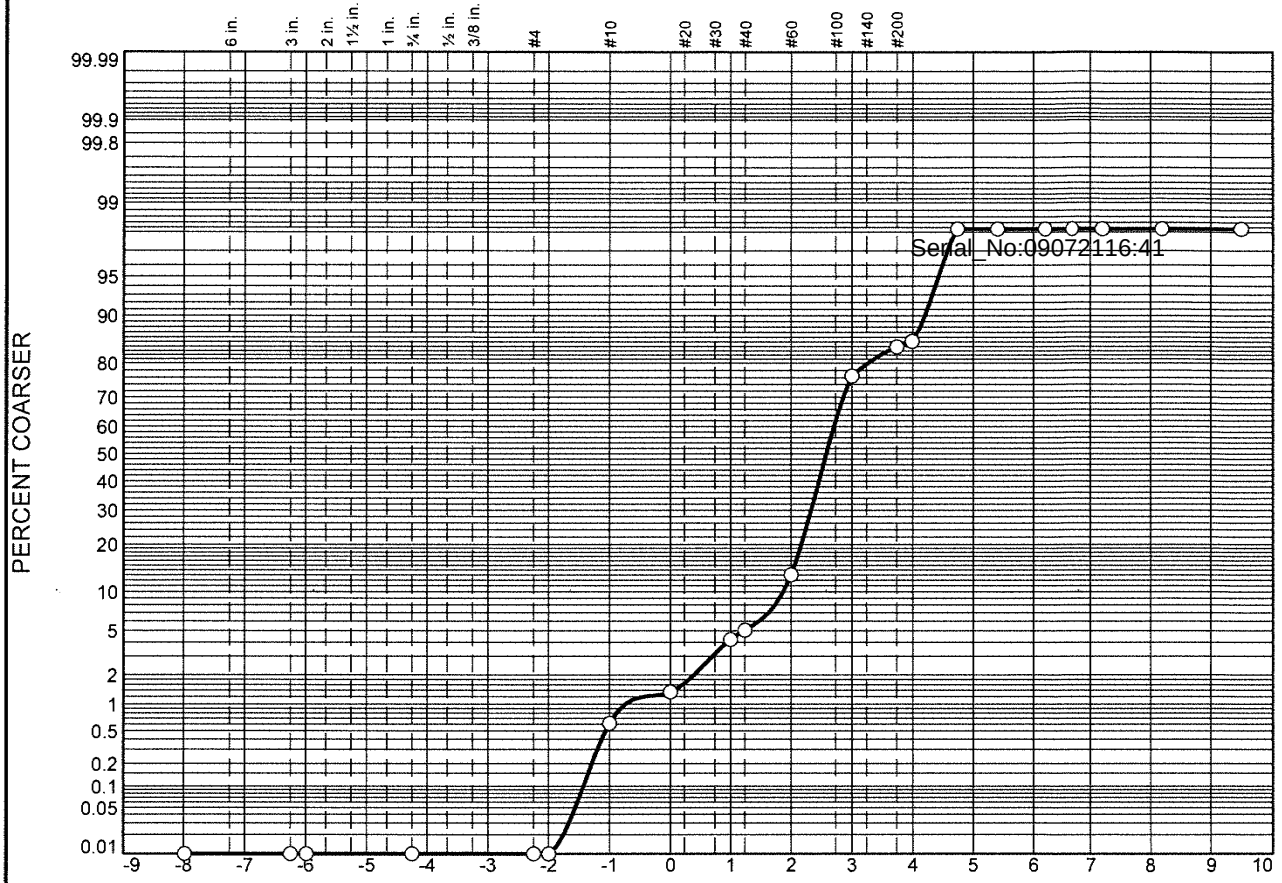
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	1.3	6.1	10.0	58.5	5.8	81.7	15.4	0.0	0.0	0.0	15.4	2.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0436	0.0508	0.0571	0.0841	0.1386	0.1557	0.1713	0.1878	0.2383	0.2678	0.3744	0.6220

Fineness Modulus	C_u	C_c
0.82	3.70	2.02

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	0.7	2.9	8.9	63.4	8.8	12.8	0.0	0.0		1.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2402	0.1815	0.1670	0.1377	0.0645	0.0543	1.92	3.34

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|006|SED|GS|01 **Sample No.:** L2140927-12

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|006|SED|GS|01

Sample Number: L2140927-12

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 104.44
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
104.44	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.64	0.00	99.4
		#18	0.76	0.00	98.7
		#35	3.01	0.00	95.8
		#40	0.89	0.00	94.9
		#60	8.35	0.00	86.9
		#120	66.24	0.00	23.5
		#200	7.75	0.00	16.1
		#230	1.27	0.00	14.9

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 14.9
Weight of hydrometer sample =40.08
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	1.9
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	1.9
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	1.9
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	1.9
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	1.9
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	1.9
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	1.9

Fractional Components

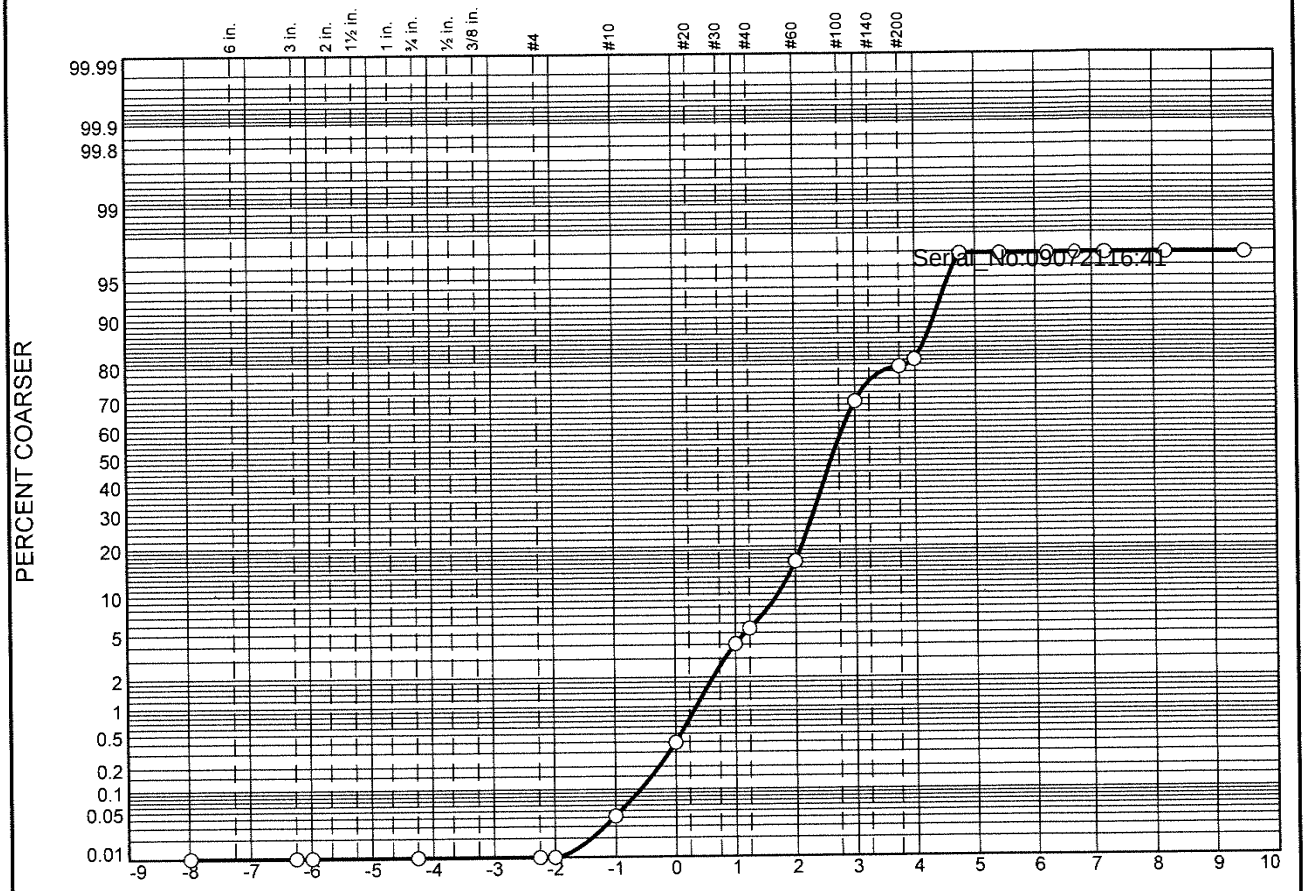
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	0.7	2.9	8.9	63.4	8.8	84.7	12.8	0.0	0.0		12.8	1.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0466	0.0543	0.0645	0.1036	0.1377	0.1530	0.1670	0.1815	0.2220	0.2402	0.2732	0.4314

Fineness Modulus	C_u	C_c
0.75	3.34	1.92

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.4	3.6	12.3	52.7	12.4	15.5	0.0	0.0	0.0	3.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2577	0.1798	0.1614	0.1227	0.0564	0.0500	1.67	3.59

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|015|SED|GS|01 **Sample No.:** L2140927-13

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|015|SED|GS|01

Sample Number: L2140927-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 71.07
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
71.07	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	100.0
		#18	0.25	0.00	99.6
		#35	2.59	0.00	96.0
		#40	0.99	0.00	94.6
		#60	7.72	0.00	83.7
		#120	37.49	0.00	31.0
		#200	7.36	0.00	20.6
		#230	1.25	0.00	18.8

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 18.8
Weight of hydrometer sample =40.06
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0372	3.1
5.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0235	3.1
15.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0136	3.1
30.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0096	3.1
60.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0068	3.1
240.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0034	3.1
1440.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0014	3.1

Fractional Components

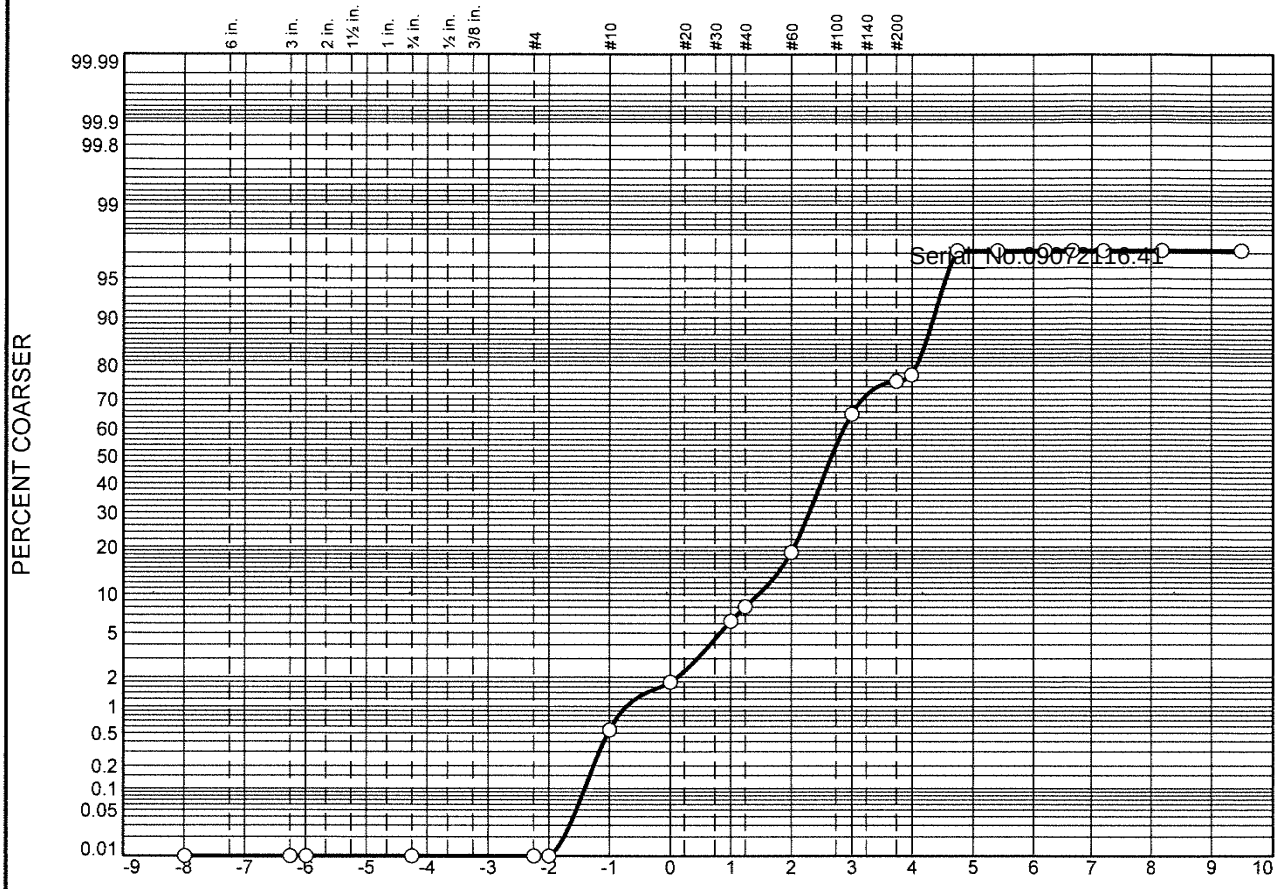
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.4	3.6	12.3	52.7	12.4	81.4	15.5	0.0	0.0	0.0	15.5	3.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0424	0.0500	0.0564	0.0674	0.1227	0.1435	0.1614	0.1798	0.2326	0.2577	0.3047	0.4463

Fineness Modulus	C_u	C_c
0.70	3.59	1.67

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	1.3	4.5	12.2	46.7	12.5	19.5	0.0	0.0	0.0	2.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2781	0.1779	0.1571	0.1112	0.0538	0.0490	1.42	3.63

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|017|SED|GS|01 **Sample No.:** L2140927-14

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|017|SED|GS|01

Sample Number: L2140927-14

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 91.19
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.19	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.50	0.00	99.5
		#18	1.13	0.00	98.2
		#35	4.07	0.00	93.7
		#40	1.67	0.00	91.9
		#60	9.54	0.00	81.5
		#120	42.55	0.00	34.8
		#200	9.50	0.00	24.4
		#230	1.65	0.00	22.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.6
Weight of hydrometer sample =40.02
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	2.8
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	2.8
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	2.8
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	2.8
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	2.8
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	2.8
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	2.8

Fractional Components

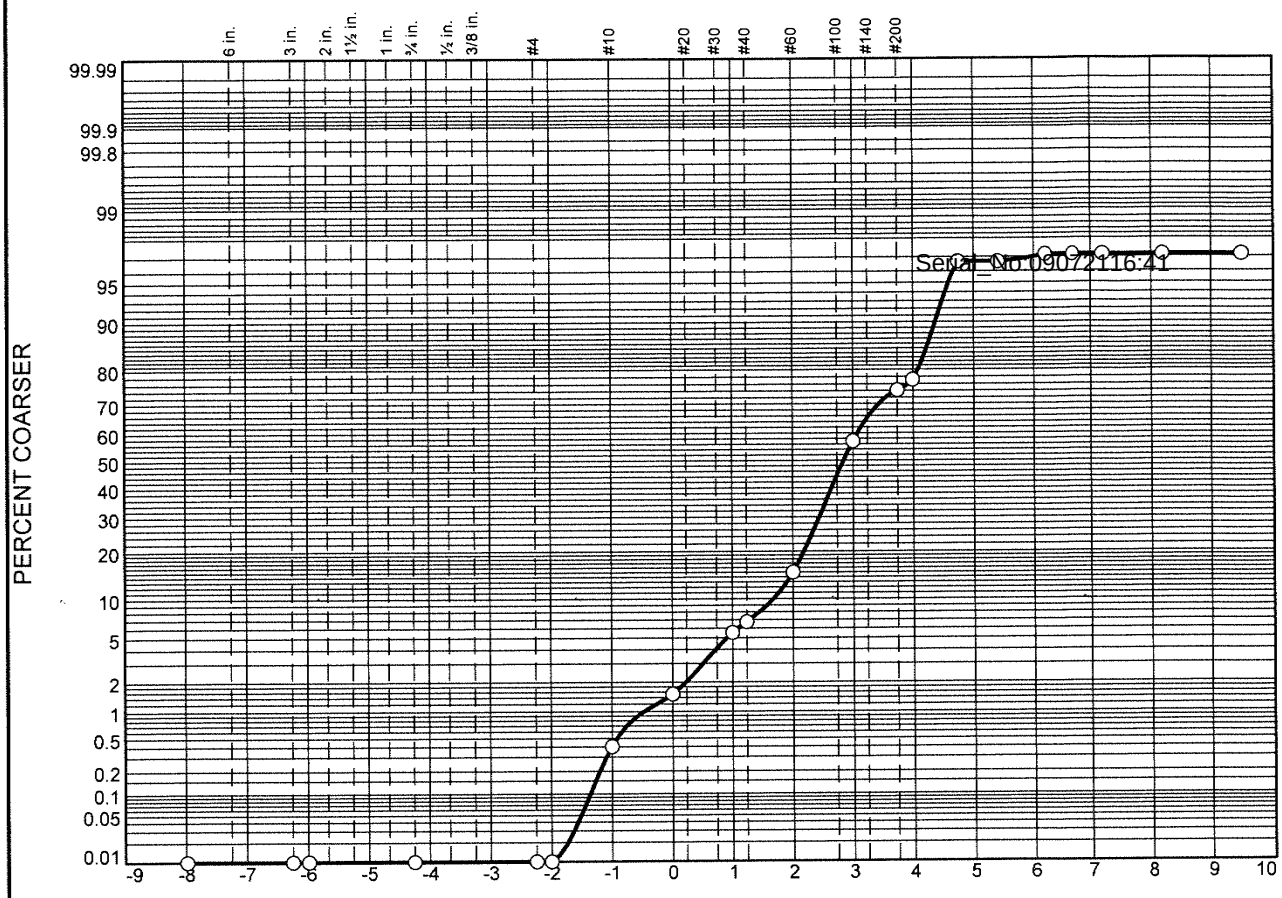
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	1.3	4.5	12.2	46.7	12.5	77.2	19.5	0.0	0.0	0.0	19.5	2.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0427	0.0490	0.0538	0.0591	0.1112	0.1368	0.1571	0.1779	0.2416	0.2781	0.3630	0.5651

Fineness Modulus	C_u	C_c
0.73	3.63	1.42

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	1.1	4.0	9.5	42.0	20.5	19.2	0.3	0.2		2.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2497	0.1600	0.1392	0.0926	0.0536	0.0485	1.11	3.30

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|029|SED|GS|01 **Sample No.:** L2140927-15

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|029|SED|GS|01

Sample Number: L2140927-15

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 102.03
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
102.03	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.41	0.00	99.6
		#18	1.14	0.00	98.5
		#35	4.09	0.00	94.5
		#40	1.25	0.00	93.2
		#60	8.38	0.00	85.0
		#120	42.88	0.00	43.0
		#200	17.55	0.00	25.8
		#230	3.12	0.00	22.7

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.7
Weight of hydrometer sample =40.04
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0373	3.3
5.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0236	3.3
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	2.8
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	2.8
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	2.8
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	2.8
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	2.8

Fractional Components

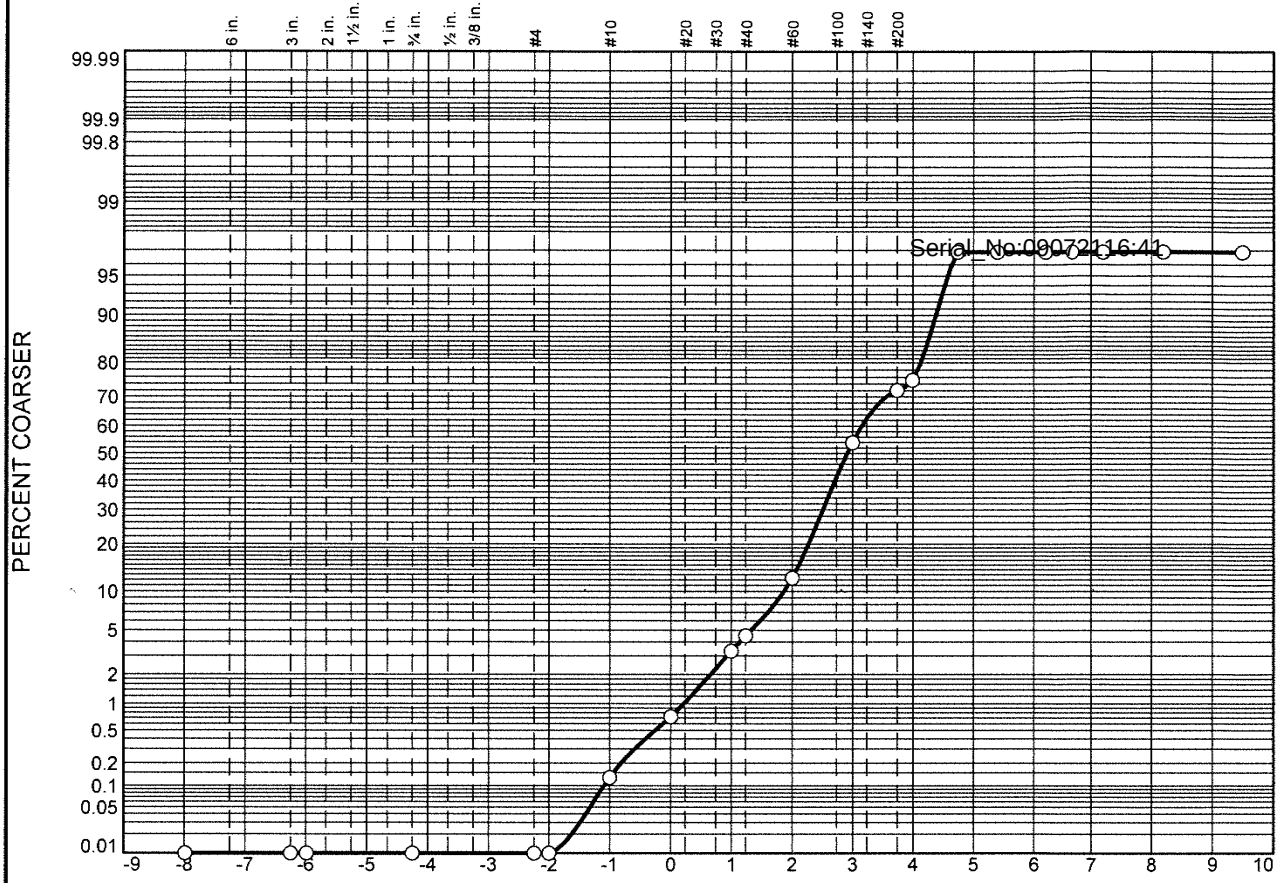
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	1.1	4.0	9.5	42.0	20.5	77.1	19.2	0.3	0.2		19.7	2.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0417	0.0485	0.0536	0.0590	0.0926	0.1185	0.1392	0.1600	0.2200	0.2497	0.3120	0.5346

Fineness Modulus	C_u	C_c
0.61	3.30	1.11

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.6	2.6	9.1	41.5	21.6	21.4	0.0	0.0		3.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2313	0.1526	0.1327	0.0850	0.0527	0.0481	0.98	3.17

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|032|SED|GS|01 **Sample No.:** L2140927-16

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|032|SED|GS|01

Sample Number: L2140927-16

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 92.88
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
92.88	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.12	0.00	99.9
		#18	0.55	0.00	99.3
		#35	2.40	0.00	96.7
		#40	1.11	0.00	95.5
		#60	7.30	0.00	87.6
		#120	38.58	0.00	46.1
		#200	16.90	0.00	27.9
		#230	2.85	0.00	24.8

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 24.8
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	3.1
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	3.1
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	3.1
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	3.1
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	3.1
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	3.1
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	3.1

Fractional Components

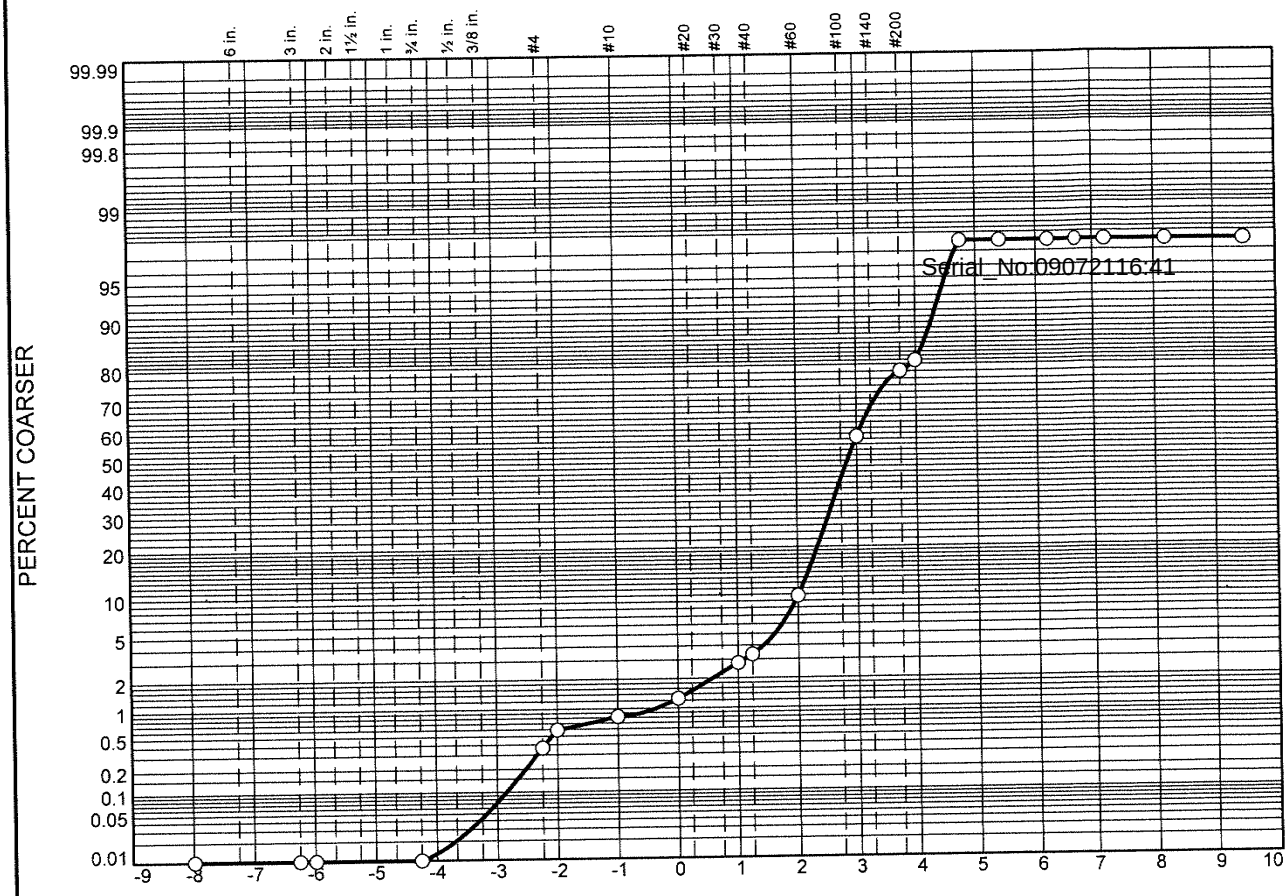
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.6	2.6	9.1	41.5	21.6	75.4	21.4	0.0	0.0		21.4	3.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0419	0.0481	0.0527	0.0572	0.0850	0.1122	0.1327	0.1526	0.2070	0.2313	0.2743	0.4002

Fineness Modulus	C_u	C_c
0.52	3.17	0.98

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.6	0.2	0.5	1.5	6.9	47.2	24.2	16.5	0.0	0.0		2.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2176	0.1532	0.1363	0.1005	0.0568	0.0511	1.29	3.00

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|036|SED|GS|01 **Sample No.:** L2140927-17

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|036|SED|GS|01

Sample Number: L2140927-17

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 98.23
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
98.23	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.36	0.00	99.6
		#5	0.22	0.00	99.4
		#10	0.23	0.00	99.2
		#18	0.43	0.00	98.7
		#35	1.50	0.00	97.2
		#40	0.52	0.00	96.7
		#60	6.30	0.00	90.3
		#120	46.33	0.00	43.1
		#200	20.92	0.00	21.8
		#230	2.61	0.00	19.1

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 19.1
Weight of hydrometer sample =40.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0375	2.4
5.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0237	2.4
15.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0137	2.4
30.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0097	2.4
60.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0068	2.4
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	2.4
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	2.4

Fractional Components

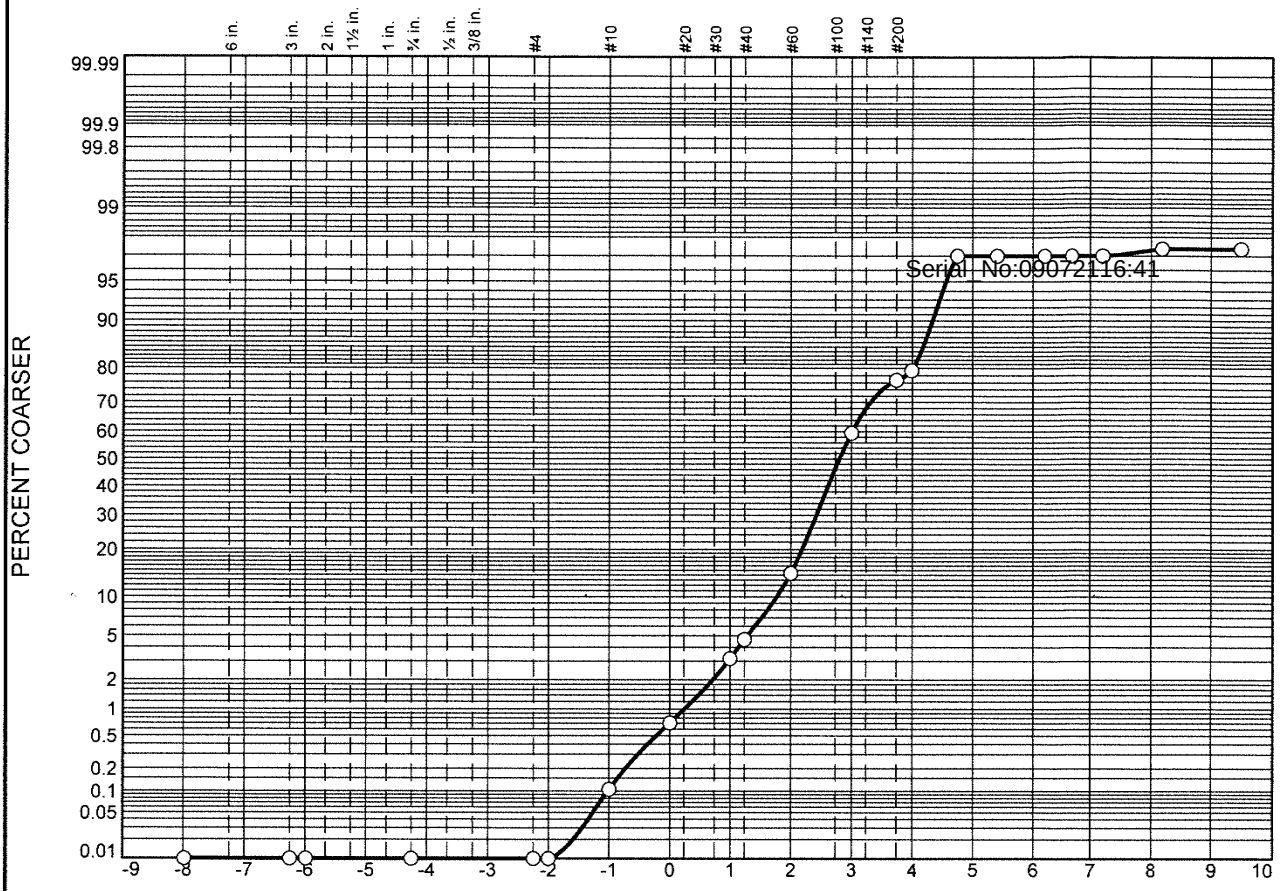
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.6	0.2	0.5	1.5	6.9	47.2	24.2	80.3	16.5	0.0	0.0		16.5	2.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0443	0.0511	0.0568	0.0652	0.1005	0.1197	0.1363	0.1532	0.1985	0.2176	0.2477	0.3266

Fineness Modulus	C_u	C_c
0.52	3.00	1.29

Serial_No:09072116:41

Particle Size Distribution Report



GRAIN SIZE - mm.

	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.6	2.5	11.1	45.2	20.1	17.4	0.0	0.0	0.3	2.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2455	0.1632	0.1434	0.1007	0.0552	0.0496	1.25	3.29

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|037|SED|GS|01 **Sample No.:** L2140927-18

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|037|SED|GS|01

Sample Number: L2140927-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 103.88
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
103.88	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.11	0.00	99.9
		#18	0.62	0.00	99.3
		#35	2.55	0.00	96.8
		#40	1.55	0.00	95.4
		#60	10.07	0.00	85.7
		#120	46.90	0.00	40.5
		#200	17.88	0.00	23.3
		#230	2.79	0.00	20.6

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 20.6
Weight of hydrometer sample =40.01
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0373	3.0
5.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0236	3.0
15.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0136	3.0
30.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0096	3.0
60.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0068	3.0
240.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0034	2.6
1440.00	21.1	1.0030	1.0031	0.0135	3.0	15.5	0.0014	2.6

Fractional Components

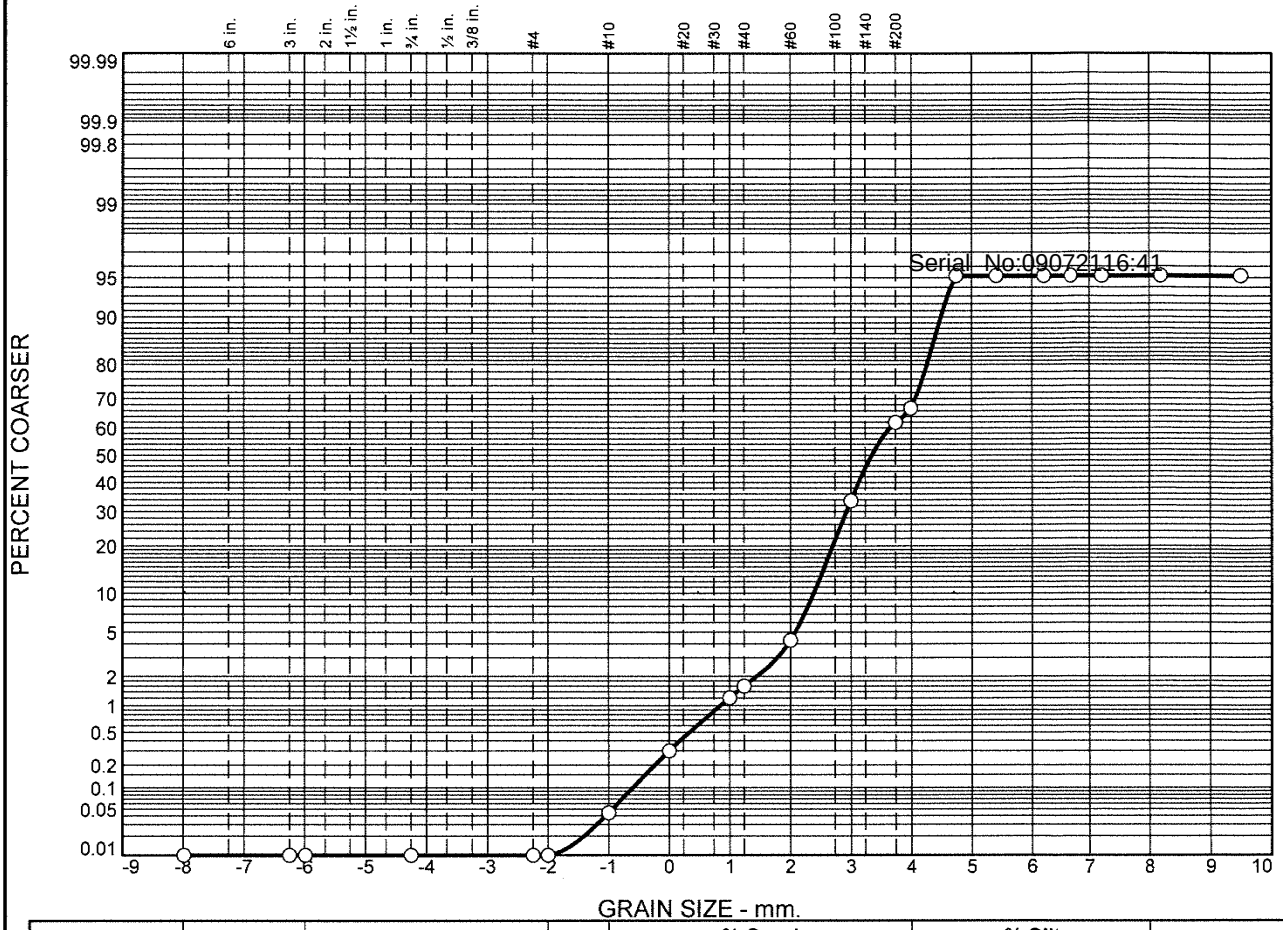
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.6	2.5	11.1	45.2	20.1	79.5	17.4	0.0	0.0	0.3	17.7	2.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0426	0.0496	0.0552	0.0618	0.1007	0.1240	0.1434	0.1632	0.2195	0.2455	0.2927	0.4112

Fineness Modulus	C_u	C_c
0.59	3.29	1.25

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.3	0.9	3.1	29.3	33.7	27.9	0.0	0.0		4.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1688	0.1143	0.0983	0.0596	0.0486	0.0445	0.70	2.57

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|039|SED|GS|01 **Sample No.:** L2140927-19

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|039|SED|GS|01

Sample Number: L2140927-19

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.13
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.13	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	100.0
		#18	0.23	0.00	99.7
		#35	0.82	0.00	98.8
		#40	0.35	0.00	98.4
		#60	2.41	0.00	95.7
		#120	26.43	0.00	66.4
		#200	25.51	0.00	38.1
		#230	4.49	0.00	33.1

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 33.1
Weight of hydrometer sample =40.03
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0373	4.8
5.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0236	4.8
15.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0136	4.8
30.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0096	4.8
60.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0068	4.8
240.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0034	4.8
1440.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0014	4.8

Fractional Components

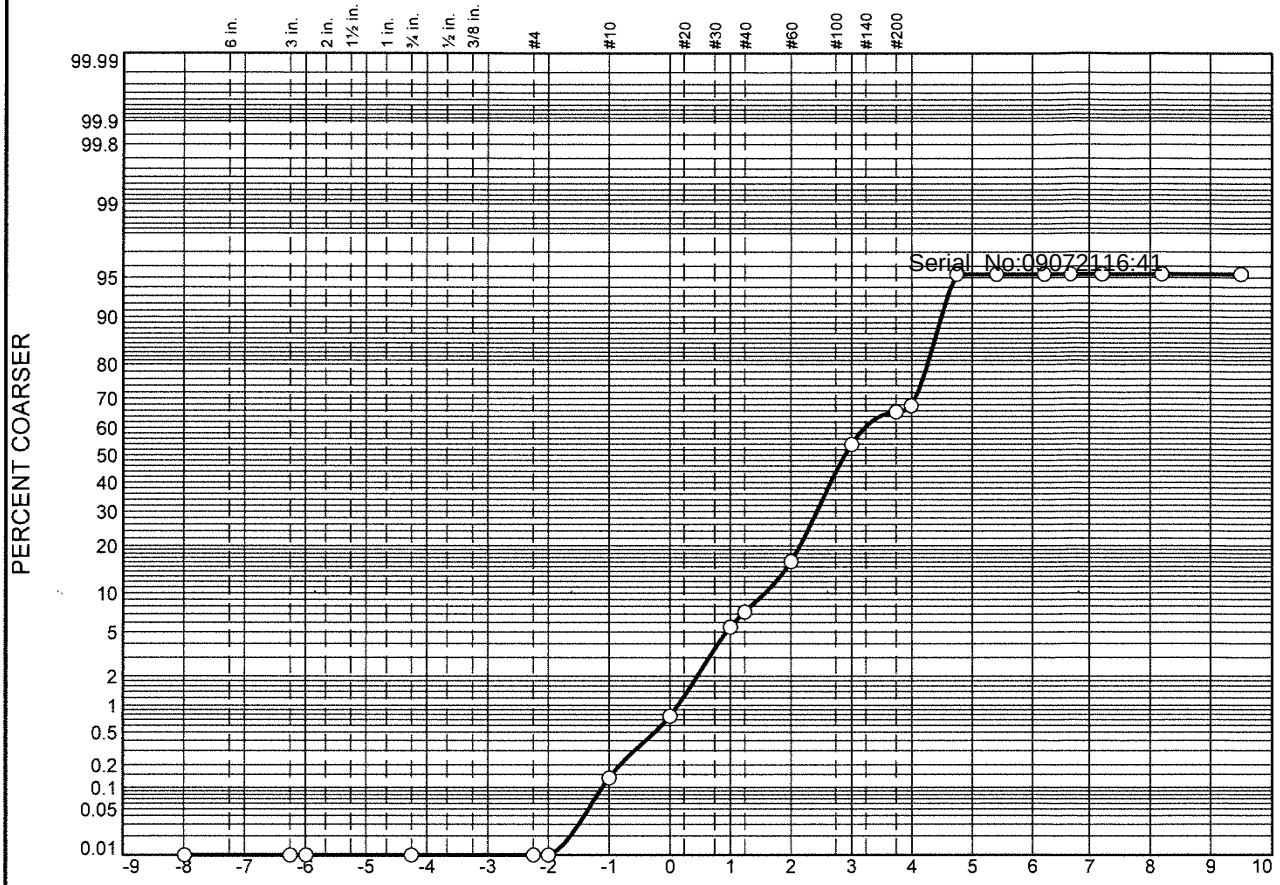
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.3	0.9	3.1	29.3	33.7	67.3	27.9	0.0	0.0		27.9	4.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0378	0.0445	0.0486	0.0521	0.0596	0.0799	0.0983	0.1143	0.1536	0.1688	0.1912	0.2367

Fineness Modulus	C_u	C_c
0.25	2.57	0.70

Serial_No:09072116:41

Particle Size Distribution Report



GRAIN SIZE - mm.

	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.7	4.7	10.7	37.8	14.0	27.3	0.0	0.0	0.0	4.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2599	0.1586	0.1348	0.0600	0.0485	0.0445	0.51	3.57

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|042|SED|GS|01 **Sample No.:** L2140927-20

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|042|SED|GS|01

Sample Number: L2140927-20

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 44.52
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
44.52	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.06	0.00	99.9
		#18	0.28	0.00	99.2
		#35	2.11	0.00	94.5
		#40	0.78	0.00	92.7
		#60	3.96	0.00	83.8
		#120	16.84	0.00	46.0
		#200	5.15	0.00	34.5
		#230	0.95	0.00	32.3

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 32.3
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0373	4.7
5.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0236	4.7
15.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0136	4.7
30.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0096	4.7
60.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0068	4.7
240.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0034	4.7
1440.00	21.1	1.0035	1.0036	0.0135	3.5	15.4	0.0014	4.7

Fractional Components

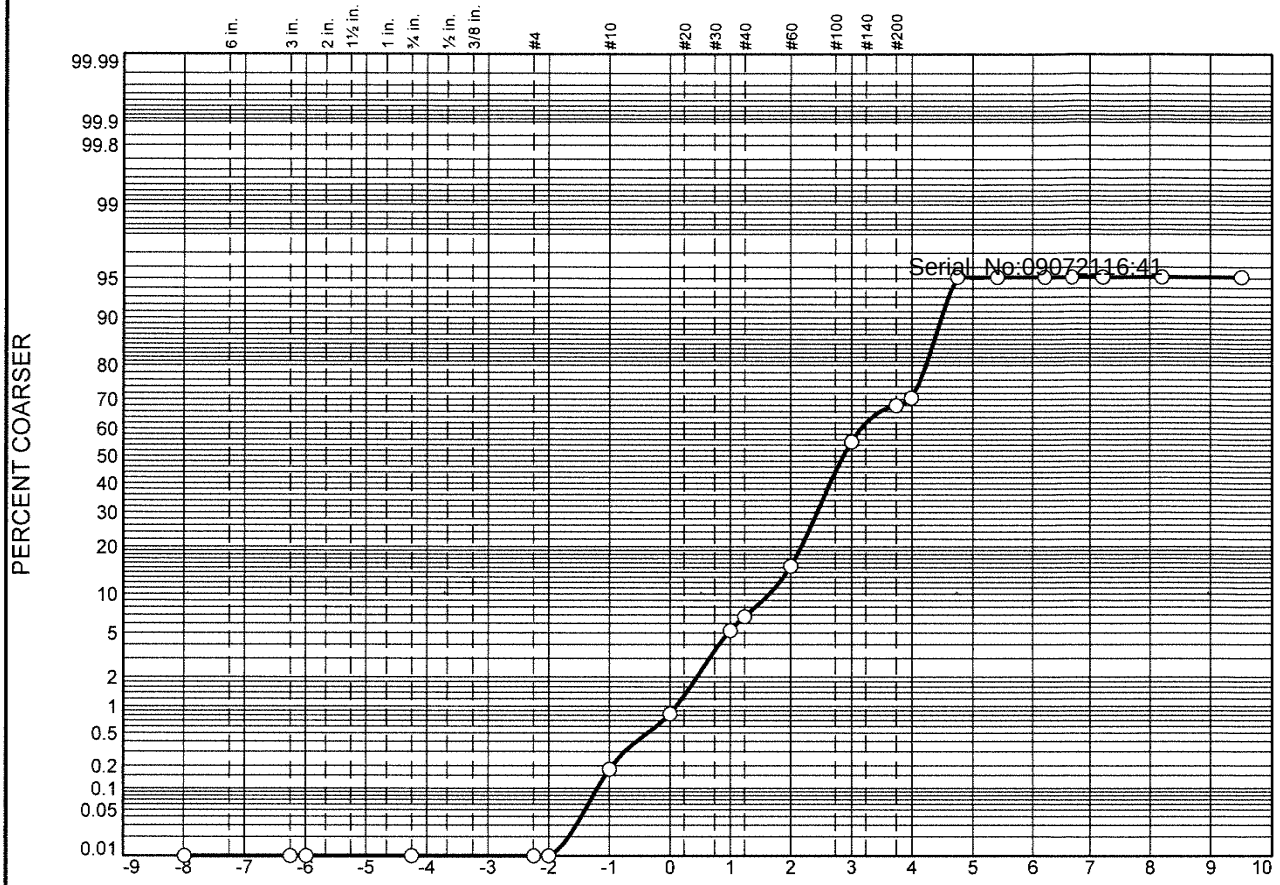
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	4.7	10.7	37.8	14.0	67.9	27.3	0.0	0.0	0.0	27.3	4.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0381	0.0445	0.0485	0.0520	0.0600	0.1074	0.1348	0.1586	0.2253	0.2599	0.3364	0.5235

Fineness Modulus	C_u	C_c
0.60	3.57	0.51

Serial_No:09072116:41

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.6	4.5	10.0	40.0	15.5	24.3	0.0	0.0		4.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2523	0.1595	0.1372	0.0640	0.0492	0.0447	0.58	3.57

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|042|SED|GS|01 **Sample No.:** WG1537017-1

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/7/2021

Location: 3664|2021|WTG|042|SED|GS|01

Sample Number: WG1537017-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 44.56
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
44.56	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.8
		#18	0.29	0.00	99.2
		#35	1.97	0.00	94.7
		#40	0.68	0.00	93.2
		#60	3.79	0.00	84.7
		#120	17.82	0.00	44.7
		#200	5.67	0.00	32.0
		#230	1.13	0.00	29.5

Serial_No:09072116:41

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 29.5
Weight of hydrometer sample =40.11
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0372	4.9
5.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0235	4.9
15.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0136	4.9
30.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.9
60.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.9
240.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0034	4.9
1440.00	21.1	1.0040	1.0041	0.0135	4.0	15.2	0.0014	4.9

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.6	4.5	10.0	40.0	15.5	70.6	24.3	0.0	0.0		24.3	4.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0375	0.0447	0.0492	0.0532	0.0640	0.1124	0.1372	0.1595	0.2215	0.2523	0.3183	0.5130

Fineness Modulus	C_u	C_c
0.59	3.57	0.58

Serial_No:09072116:41

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140927

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|081|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 ~~-01~~
3664|2021|WTG|083|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|084|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|085|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|087|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|090|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|090|Sed|GS|02	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate
3664|2021|WTG|095|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|097|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|098|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|101|Sed|GS|01	7/20/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|104|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|107|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|122|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1
3664|2021|WTG|123|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -01
3664|2021|WTG|128|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -02
3664|2021|WTG|134|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -03
3664|2021|WTG|137|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -04
3664|2021|WTG|150|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -05
						Priority; Cooler #1 -06

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21 RECEIVED BY: _____ DATE/TIME: 7/29/21 1600
RELINQUISHED BY: T. Hudelle 7/30/21 1250 DATE/TIME: 7/30/21 RECEIVED BY: HENDERSON AMC DATE/TIME: 7/30/21 0835

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

AMC - AL 7/30/21 1299

7/30/21

L2140927

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|150|Sed|GS|02	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate -07
3664|2021|WTG|157|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1 -08
3664|2021|WTG|157|Sed|GS|02	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Priority; Cooler #1; QC duplicate -09
3664|2021|WTG|001|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|004|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|006|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|015|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|017|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|029|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|032|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|036|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|037|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|039|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|042|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|045|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|051|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|056|Sed|TOC|01	7/23/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|059|Sed|TOC|01	7/22/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3

Shipper: FEDEX UPS USPS DHL
Custody Seal: Intact Broken None
Sample Conditions: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/24/21
RECEIVED BY: _____ DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hudak 7/30/21 1250 DATE/TIME: 7/30/21
RECEIVED BY: T. Henderson AAR DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

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AAR 7/30/21 1250

7/30/21

L2140927

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|142|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|143|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|146|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|152|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|155|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|001|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -10
3664|2021|WTG|004|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -11
3664|2021|WTG|006|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -12
3664|2021|WTG|015|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -13
3664|2021|WTG|017|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -14
3664|2021|WTG|029|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -15
3664|2021|WTG|032|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -16
3664|2021|WTG|036|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -17
3664|2021|WTG|037|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -18
3664|2021|WTG|039|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -19
3664|2021|WTG|042|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -20
3664|2021|WTG|045|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -
3664|2021|WTG|051|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2

Shipper: FEDEX UPS USPS DHL
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21
RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600
RELINQUISHED BY: T. Hurwitz 7/30/21 1250 DATE/TIME: 7/30/21
RECEIVED BY: [signature] DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

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[signature] AAC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140928
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/09/21

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320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140928
Report Date: 09/09/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140928-01	3664|2021|WTG|045|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140928-02	3664|2021|WTG|051|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-03	3664|2021|WTG|056|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140928-04	3664|2021|WTG|059|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-05	3664|2021|WTG|061|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-06	3664|2021|WTG|065|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140928-07	3664|2021|WTG|071|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-08	3664|2021|WTG|072|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-09	3664|2021|WTG|075|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140928-10	3664|2021|WTG|086|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140928-11	3664|2021|WTG|088|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-12	3664|2021|WTG|092|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/23/21 00:00	07/30/21
L2140928-13	3664|2021|WTG|094|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140928-14	3664|2021|WTG|103|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140928-15	3664|2021|WTG|105|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140928-16	3664|2021|WTG|108|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-17	3664|2021|WTG|111|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140928-18	3664|2021|WTG|115|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140928-19	3664|2021|WTG|119|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140928-20	3664|2021|WTG|126|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140928
Project Number:	3664	**Report Date:**	09/09/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140928
Project Number:	3664	**Report Date:**	09/09/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size

The WG1539448-1 Laboratory Duplicate RPD for % very coarse sand (86%), performed on L2140928-09, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/09/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-01
Client ID: 3664|2021|WTG|045|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	0.800		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	2.80		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	23.2		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	43.9		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	24.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.70		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-02
Client ID: 3664|2021|WTG|051|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	3.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	10.6		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	33.9		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	38.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	10.8		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.50		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-03
Client ID: 3664|2021|WTG|056|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.900		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	3.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	14.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	41.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.9		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.10		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-04
Client ID: 3664|2021|WTG|059|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	13.1		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	15.2		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	48.6		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	16.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.70		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-05
Client ID: 3664|2021|WTG|061|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	1.50		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	2.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	9.60		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	50.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.1		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-06
Client ID: 3664|2021|WTG|065|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	3.10		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	10.6		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	41.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	34.1		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.80		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-07
Client ID: 3664|2021|WTG|071|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.90		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	3.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	15.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	43.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	28.9		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.70		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-08
Client ID: 3664|2021|WTG|072|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	3.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	4.90		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	25.1		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	34.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	25.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-09
Client ID: 3664|2021|WTG|075|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	4.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	14.8		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	26.8		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	12.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	35.1		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.90		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-10
Client ID: 3664|2021|WTG|086|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	3.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	11.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	26.8		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	15.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	35.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.10		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-11
Client ID: 3664|2021|WTG|088|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	9.10		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	28.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	27.8		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	27.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-12
Client ID: 3664|2021|WTG|092|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/23/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	0.700		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	2.30		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	8.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	52.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	29.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.80		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-13
Client ID: 3664|2021|WTG|094|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	3.80		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	15.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	37.8		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	16.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	22.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.90		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-14
Client ID: 3664|2021|WTG|103|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	7.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	18.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	18.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	16.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	34.4		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.10		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-15
Client ID: 3664|2021|WTG|105|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	6.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	20.6		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	18.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	44.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-16
Client ID: 3664|2021|WTG|108|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.800		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.80		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	11.2		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	17.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	30.9		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	31.0		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-17
Client ID: 3664|2021|WTG|111|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.900		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.70		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	3.80		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	19.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	27.2		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	39.6		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.90		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-18
Client ID: 3664|2021|WTG|115|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.800		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	2.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	4.10		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	25.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	19.9		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	40.4		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-19
Client ID: 3664|2021|WTG|119|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	5.20		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	14.6		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	33.5		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	37.7		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140928
Report Date: 09/09/21

SAMPLE RESULTS

Lab ID: L2140928-20
Client ID: 3664|2021|WTG|126|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Medium Sand	1.40		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Fine Sand	4.60		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
% Very Fine Sand	29.3		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	53.1		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	9.00		%	0.100	NA	1	-	08/26/21 10:11	12,D6913/D7928(M)	SM

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140928
Report Date: 09/09/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1539448-1 QC Sample: L2140928-09 Client ID: 3664|2021|WTG|075|SED|GS|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	ND	0.100	%	NC		20
Granule (2.0-4.0 mm)	0.300	0.300	%	0		20
% Very Coarse Sand	0.200	0.500	%	**86**	Q	20
% Coarse Sand	4.20	4.70	%	11		20
% Medium Sand	14.8	16.4	%	10		20
% Fine Sand	26.8	29.2	%	9		20
% Very Fine Sand	12.7	13.8	%	8		20
Silt - (3.9-62.5 um)	35.1	29.9	%	16		20
Clay - (<3.9 um)	5.90	5.10	%	15		20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140928
Report Date: 09/09/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
B	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140928-01A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140928-02A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2140928-03A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140928-04A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140928-05A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140928
Report Date: 09/09/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140928-06A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140928-07A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140928-08A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140928-09A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2140928-10A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2140928-11A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140928-12A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140928
Report Date: 09/09/21

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140928-13A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140928-14A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140928-15A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140928-16A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140928-17A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140928-18A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2140928-19A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140928
Report Date: 09/09/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140928-20A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140928
Project Number:	3664	**Report Date:**	09/09/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140928
Project Number:	3664	**Report Date:**	09/09/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140928
Project Number:	3664	**Report Date:**	09/09/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	BEACON WIND	**Lab Number:**	L2140928
Project Number:	3664	**Report Date:**	09/09/21

REFERENCES

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

LIMITATION OF LIABILITIES

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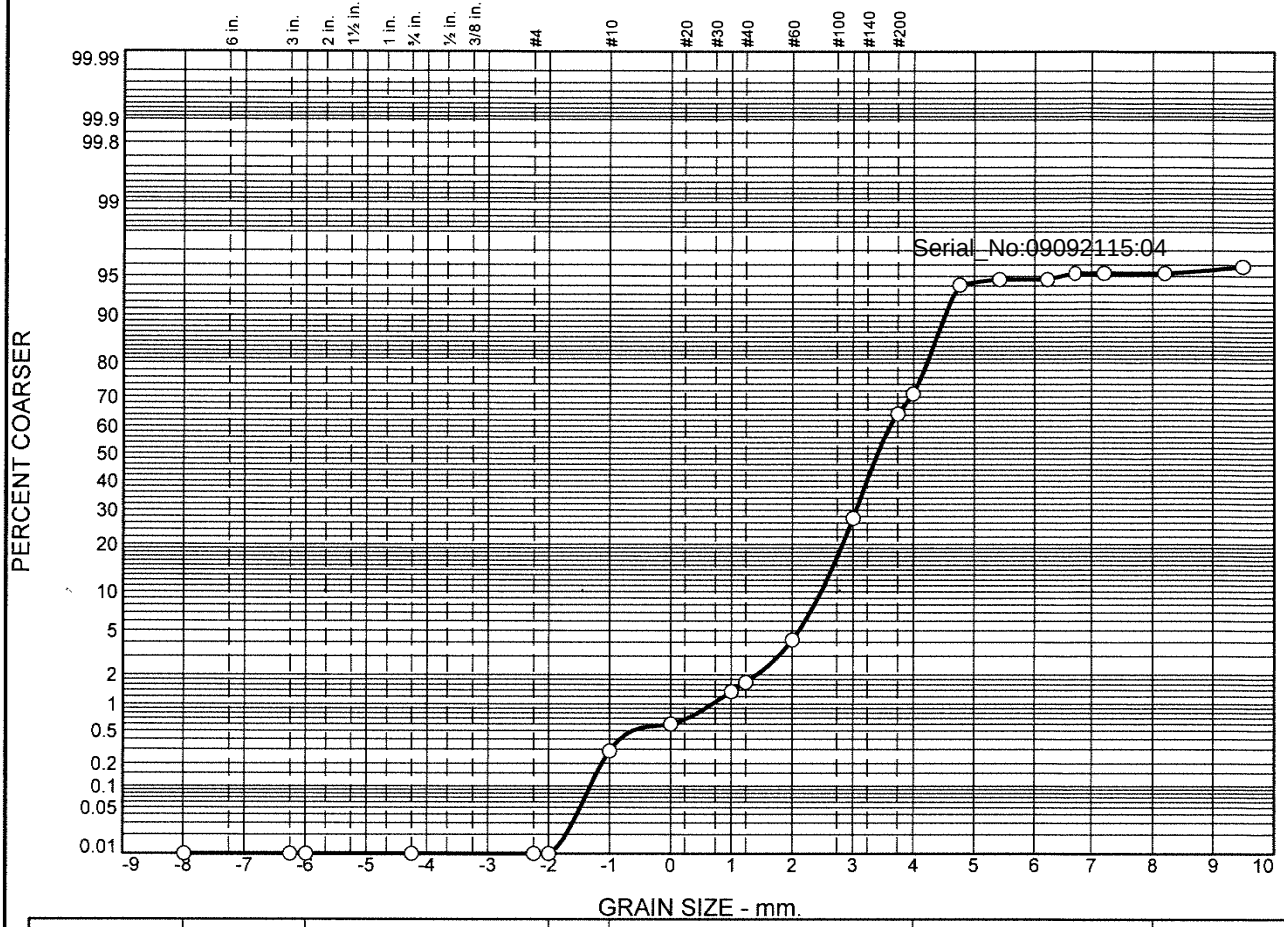
We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Serial_No:09092115:04

ASTM D6913/D7928
GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.3	0.8	2.8	23.2	44.0	23.0	0.3	0.6		4.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1559	0.1065	0.0943	0.0645	0.0489	0.0437	0.89	2.44

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|045|SED|GS|01 **Sample No.:** L2140928-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|045|SED|GS|01

Sample Number: L2140928-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 76.80
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
76.80	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.22	0.00	99.7
		#18	0.24	0.00	99.4
		#35	0.58	0.00	98.6
		#40	0.25	0.00	98.3
		#60	1.92	0.00	95.8
		#120	17.87	0.00	72.6
		#200	28.40	0.00	35.6
		#230	5.05	0.00	29.0

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 29.0
Weight of hydrometer sample =40.27
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	5.9
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	5.3
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	5.3
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.7
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.7
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	4.7
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	4.2

Fractional Components

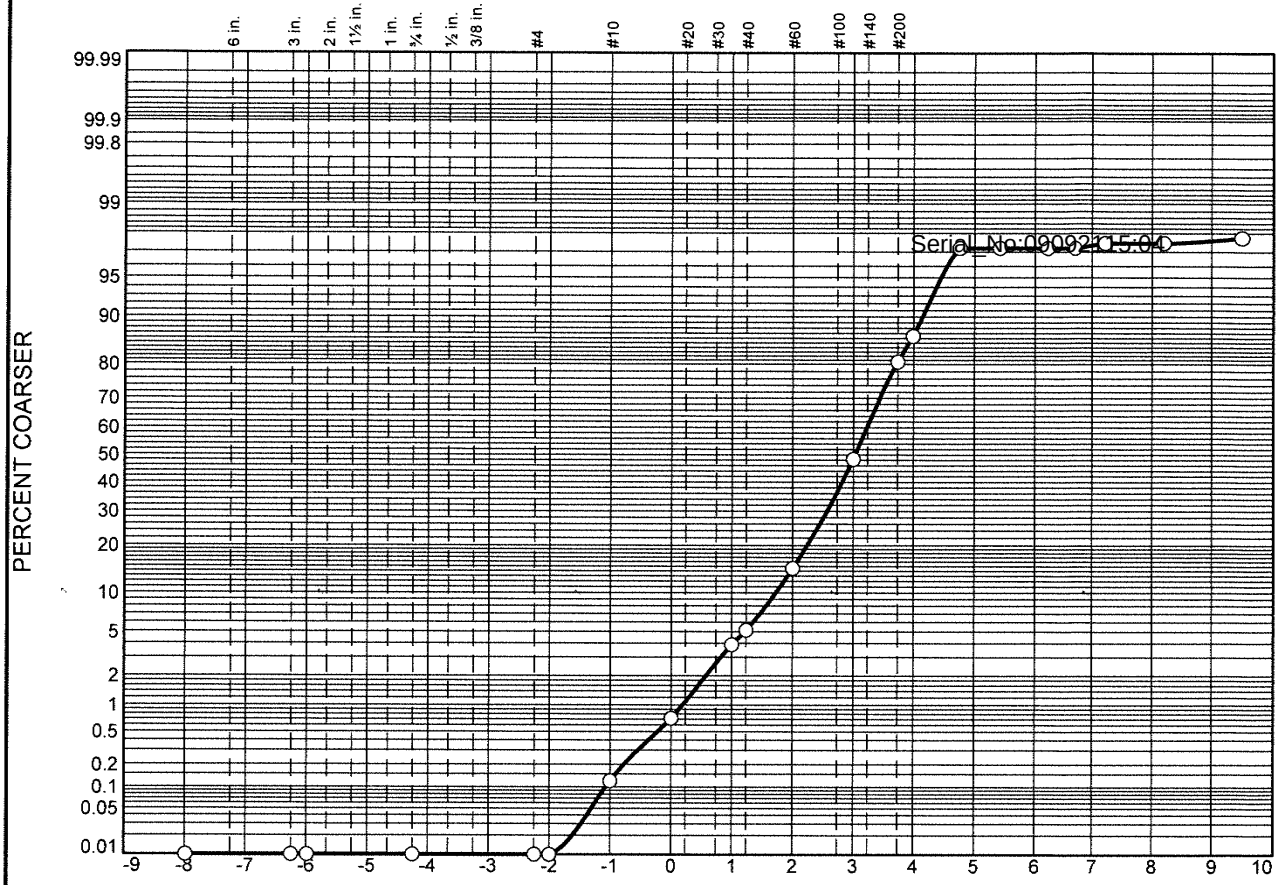
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.3	0.8	2.8	23.2	44.0	71.1	23.0	0.3	0.6		23.9	4.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0115	0.0437	0.0489	0.0535	0.0645	0.0818	0.0943	0.1065	0.1407	0.1559	0.1797	0.2321

Fineness Modulus	C_u	C_c
0.21	2.44	0.89

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.6	3.2	10.6	33.9	38.3	10.5	0.0	0.2	0.1	2.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2459	0.1415	0.1222	0.0921	0.0659	0.0563	1.06	2.51

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|051|SED|GS|01 **Sample No.:** L2140928-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|051|SED|GS|01

Sample Number: L2140928-02

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.99
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09092115:04

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.99	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.11	0.00	99.9
		#18	0.54	0.00	99.3
		#35	2.87	0.00	96.1
		#40	1.18	0.00	94.8
		#60	8.52	0.00	85.5
		#120	30.79	0.00	51.6
		#200	29.28	0.00	19.5
		#230	5.35	0.00	13.6

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 13.6
Weight of hydrometer sample =40.22
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	2.8
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	2.8
15.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0135	2.8
30.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0095	2.8
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	2.5
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	2.5
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	2.2

Fractional Components

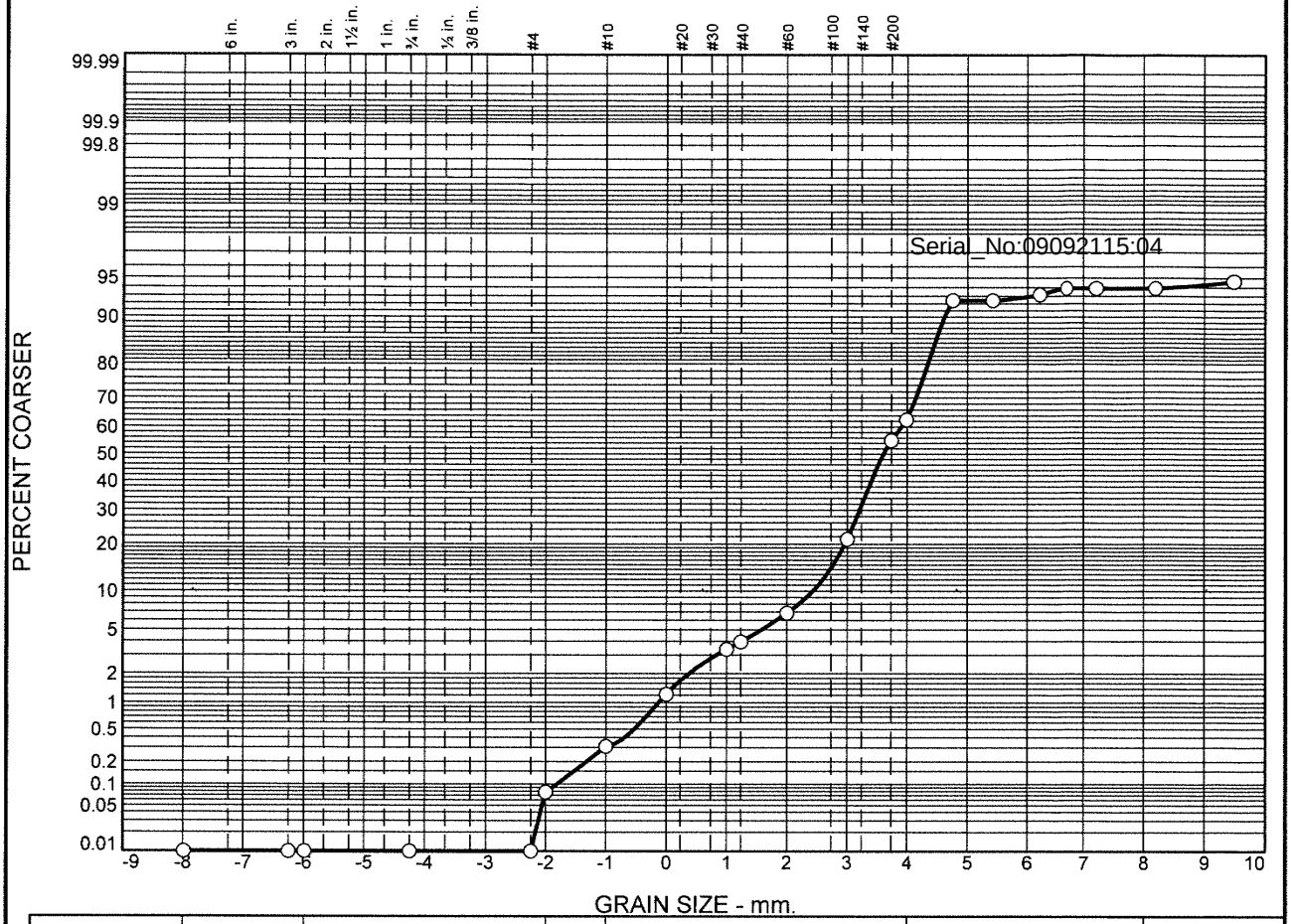
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.6	3.2	10.6	33.9	38.3	86.6	10.5	0.0	0.2	0.1	10.8	2.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0457	0.0563	0.0659	0.0760	0.0921	0.1066	0.1222	0.1415	0.2112	0.2459	0.3019	0.4329

Fineness Modulus	C_U	C_C
0.50	2.51	1.06

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.2	0.9	2.2	3.4	14.5	41.7	29.4	0.5	1.0		6.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1466	0.0946	0.0821	0.0564	0.0455	0.0406	0.83	2.33

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|056|SED|GS|01 **Sample No.:** L2140928-03

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|056|SED|GS|01

Sample Number: L2140928-03

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.25
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09092115:04

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.25	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.07	0.00	99.9
		#10	0.21	0.00	99.7
		#18	0.83	0.00	98.8
		#35	1.94	0.00	96.6
		#40	0.51	0.00	96.1
		#60	2.62	0.00	93.2
		#120	13.03	0.00	78.7
		#200	30.46	0.00	45.0
		#230	6.82	0.00	37.4

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 37.4
Weight of hydrometer sample =40.31
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	7.6
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	7.6
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	6.8
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	6.1
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	6.1
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	6.1
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	5.4

Fractional Components

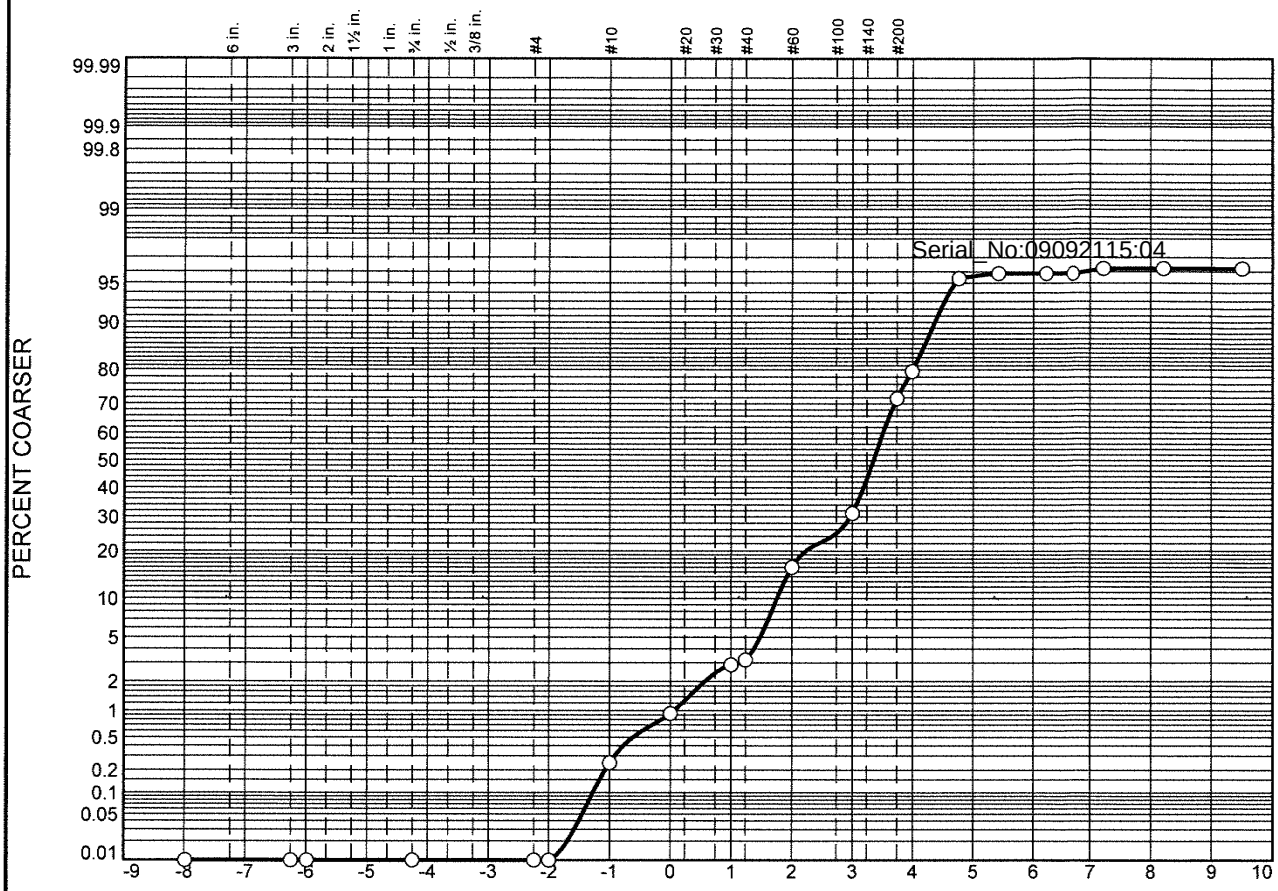
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.2	0.9	2.2	3.4	14.5	41.7	62.7	29.4	0.5	1.0		30.9	6.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0406	0.0455	0.0493	0.0564	0.0665	0.0821	0.0946	0.1284	0.1466	0.1850	0.3348

Fineness Modulus	C_u	C_c
0.24	2.33	0.83

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.7	2.0	13.1	15.2	48.7	15.7	0.2	0.3	0.2	3.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2577	0.1099	0.0981	0.0772	0.0555	0.0485	1.12	2.26

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|059|SED|GS|01 **Sample No.:** L2140928-04

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|059|SED|GS|01

Sample Number: L2140928-04

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 85.12
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
85.12	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.8
		#18	0.58	0.00	99.1
		#35	1.65	0.00	97.1
		#40	0.27	0.00	96.8
		#60	10.93	0.00	84.0
		#120	12.89	0.00	68.8
		#200	34.52	0.00	28.3
		#230	6.65	0.00	20.5

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 20.5
Weight of hydrometer sample =40.3
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0368	4.6
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	4.2
15.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0135	4.2
30.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0095	4.2
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	3.7
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	3.7
1440.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0014	3.7

Fractional Components

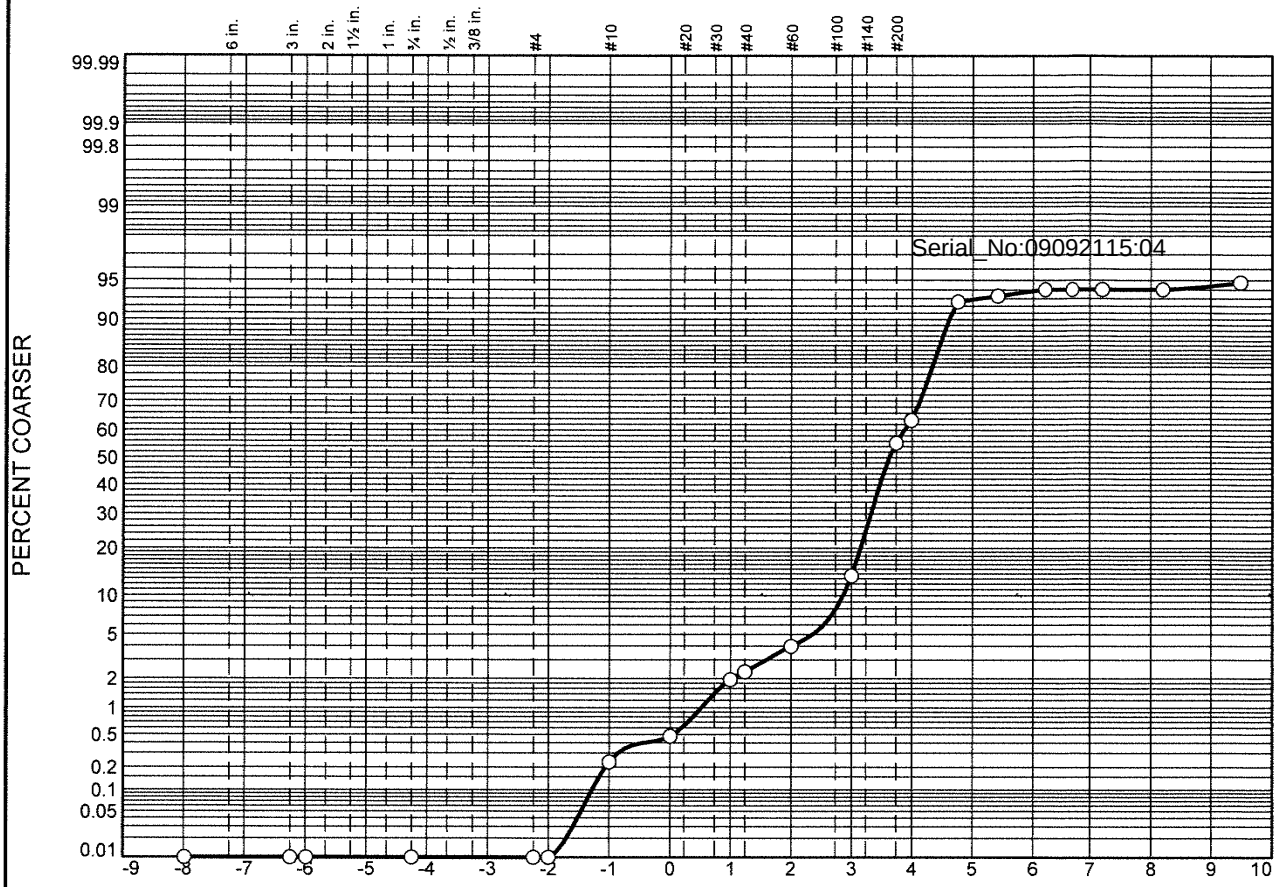
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.7	2.0	13.1	15.2	48.7	79.7	15.7	0.2	0.3	0.2	16.4	3.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0384	0.0485	0.0555	0.0623	0.0772	0.0880	0.0981	0.1099	0.2130	0.2577	0.2962	0.3589

Fineness Modulus	C_u	C_c
0.38	2.26	1.12

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.3	1.5	2.0	9.6	50.3	29.0	1.0	0.1	0.0	6.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1216	0.0903	0.0810	0.0569	0.0457	0.0408	0.88	2.21

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|061|SED|GS|01 **Sample No.:** L2140928-05

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|061|SED|GS|01

Sample Number: L2140928-05

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 77.39
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09092115:04

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
77.39	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.18	0.00	99.8
		#18	0.19	0.00	99.5
		#35	1.14	0.00	98.0
		#40	0.29	0.00	97.7
		#60	1.27	0.00	96.0
		#120	7.46	0.00	86.4
		#200	32.30	0.00	44.7
		#230	6.31	0.00	36.5

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.5
Weight of hydrometer sample =40.19
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	7.4
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	6.7
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	6.0
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	6.0
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	6.0
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	6.0
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	5.2

Fractional Components

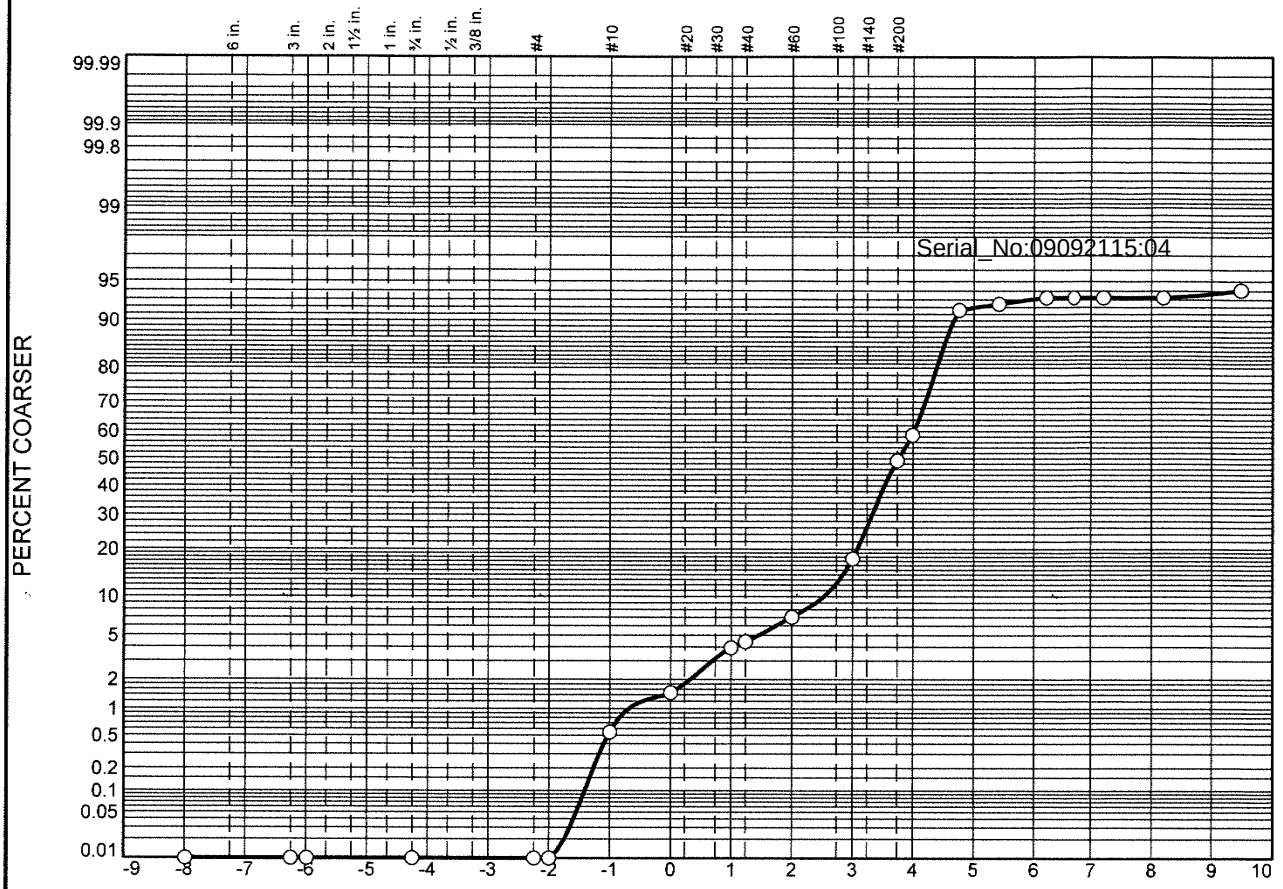
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.3	1.5	2.0	9.6	50.3	63.7	29.0	1.0	0.1	0.0	30.1	6.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0408	0.0457	0.0495	0.0569	0.0679	0.0810	0.0903	0.1124	0.1216	0.1375	0.1949

Fineness Modulus	C_u	C_c
0.13	2.21	0.88

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	1.0	2.4	3.1	10.6	41.5	32.8	1.2	0.1	0.0	6.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1347	0.0867	0.0740	0.0544	0.0442	0.0393	0.87	2.20

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|065|SED|GS|01 **Sample No.:** L2140928-06

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|065|SED|GS|01

Sample Number: L2140928-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 82.01
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
82.01	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.45	0.00	99.5
		#18	0.76	0.00	98.5
		#35	2.01	0.00	96.1
		#40	0.42	0.00	95.6
		#60	2.13	0.00	93.0
		#120	8.67	0.00	82.4
		#200	25.96	0.00	50.7
		#230	7.68	0.00	41.4

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 41.4
Weight of hydrometer sample =40.29
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	8.4
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	7.6
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	6.8
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	6.8
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	6.8
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	6.8
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	5.9

Fractional Components

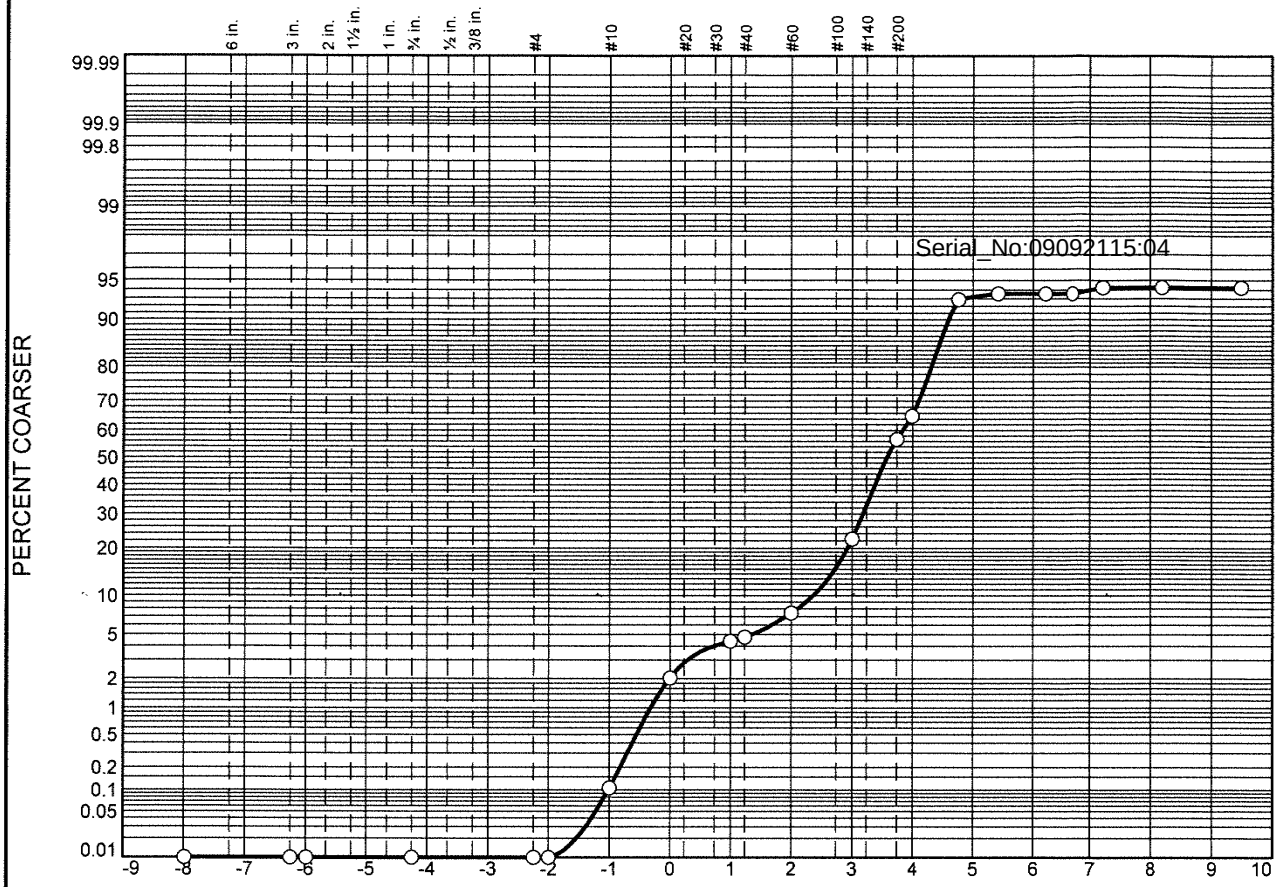
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	1.0	2.4	3.1	10.6	41.5	58.6	32.8	1.2	0.1	0.0	34.1	6.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0393	0.0442	0.0479	0.0544	0.0617	0.0740	0.0867	0.1184	0.1347	0.1728	0.3661

Fineness Modulus	C_u	C_c
0.23	2.20	0.87

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.9	2.4	3.0	15.0	43.1	27.7	0.4	0.4	0.3	5.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1515	0.0961	0.0838	0.0582	0.0464	0.0414	0.85	2.32

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|071|SED|GS|01 **Sample No.:** L2140928-07

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|071|SED|GS|01

Sample Number: L2140928-07

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 74.80
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09092115:04

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.80	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	1.44	0.00	98.0
		#35	1.77	0.00	95.6
		#40	0.28	0.00	95.2
		#60	1.98	0.00	92.6
		#120	11.24	0.00	77.6
		#200	25.63	0.00	43.3
		#230	6.21	0.00	35.0

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 35.0
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	7.1
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	6.4
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	6.4
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	6.4
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	5.7
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	5.7
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	5.7

Fractional Components

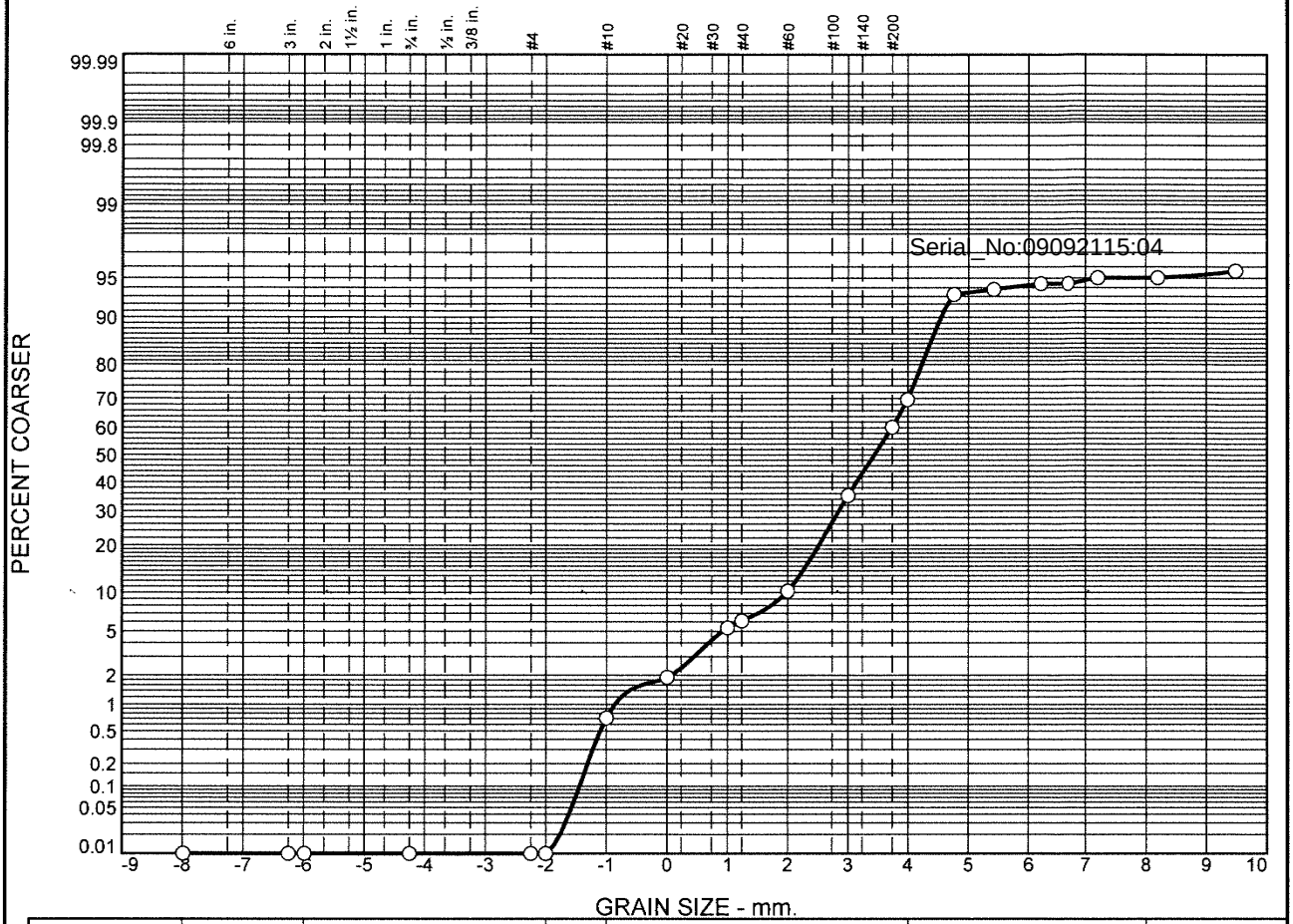
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.9	2.4	3.0	15.0	43.1	65.4	27.7	0.4	0.4	0.3	28.8	5.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0414	0.0464	0.0504	0.0582	0.0699	0.0838	0.0961	0.1316	0.1515	0.1944	0.3938

Fineness Modulus	C_u	C_c
0.27	2.32	0.85

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.7	1.2	3.4	4.9	25.1	34.8	23.4	0.8	0.5	0.2	5.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2019	0.1134	0.0922	0.0626	0.0485	0.0427	0.81	2.65

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664\|2021\|WTG\|072\|SED\|GS\|01 **Sample No.:** L2140928-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|072|SED|GS|01

Sample Number: L2140928-08

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 40.96
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
40.96	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.29	0.00	99.3
		#18	0.49	0.00	98.1
		#35	1.41	0.00	94.7
		#40	0.31	0.00	93.9
		#60	1.69	0.00	89.8
		#120	10.25	0.00	64.7
		#200	10.20	0.00	39.8
		#230	3.87	0.00	30.4

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 30.4
Weight of hydrometer sample =40.28
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0368	6.8
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	6.2
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	5.6
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	5.6
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	5.0
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	5.0
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	4.4

Fractional Components

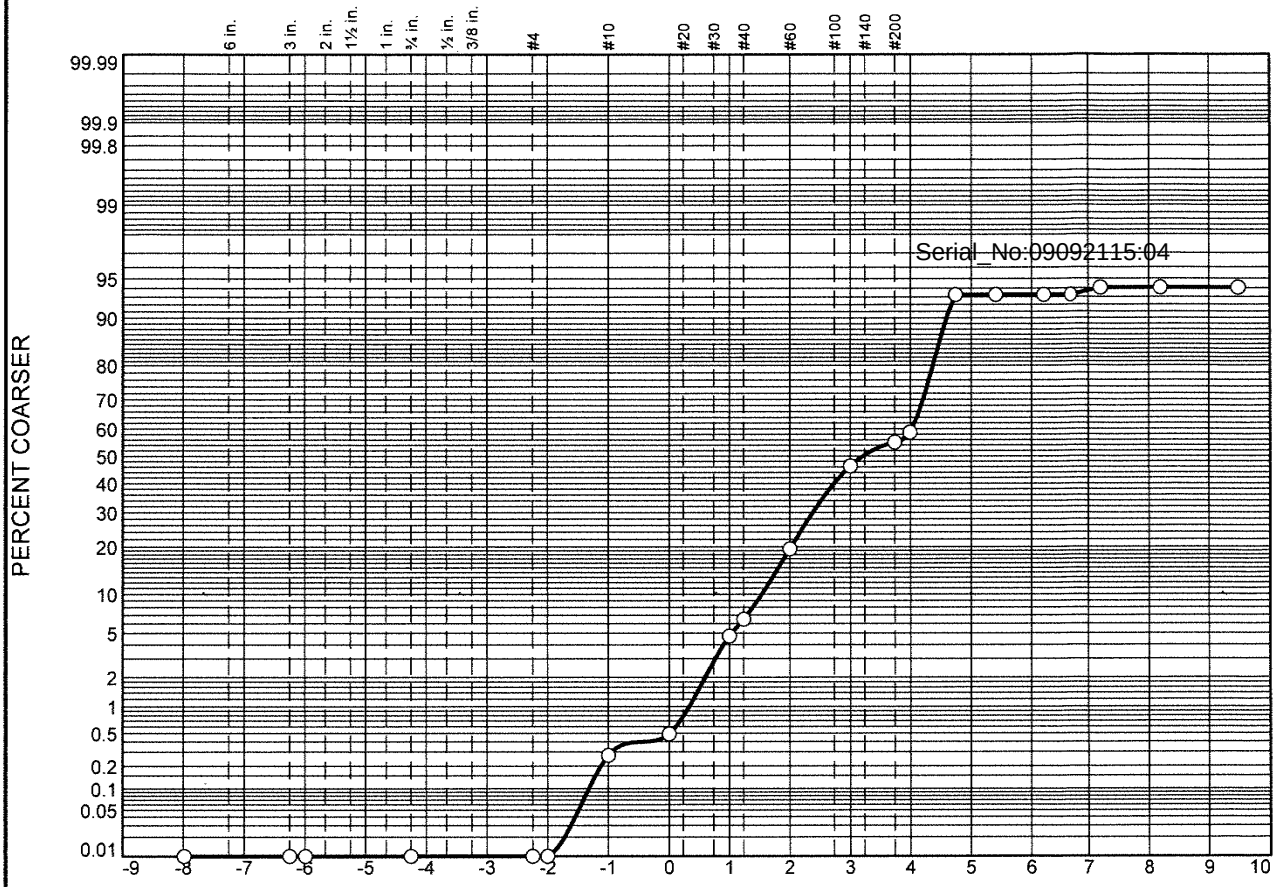
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.7	1.2	3.4	4.9	25.1	34.8	69.4	23.4	0.8	0.5	0.2	24.9	5.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0070	0.0427	0.0485	0.0532	0.0626	0.0752	0.0922	0.1134	0.1743	0.2019	0.2537	0.5306

Fineness Modulus	C_u	C_c
0.41	2.65	0.81

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.2	4.2	14.8	26.8	12.8	34.2	0.0	0.4	0.4	5.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2850	0.1504	0.1080	0.0541	0.0453	0.0414	0.47	3.64

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664\|2021\|WTG\|075\|SED\|GS\|01 **Sample No.:** L2140928-09

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|075|SED|GS|01

Sample Number: L2140928-09

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 40.48
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
40.48	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.11	0.00	99.7
		#18	0.09	0.00	99.5
		#35	1.72	0.00	95.3
		#40	0.71	0.00	93.5
		#60	5.25	0.00	80.5
		#120	10.86	0.00	53.7
		#200	3.56	0.00	44.9
		#230	1.45	0.00	41.3

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 41.3
Weight of hydrometer sample =40.3
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0372	6.7
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	6.7
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	6.7
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	6.7
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	5.9
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	5.9
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	5.9

Fractional Components

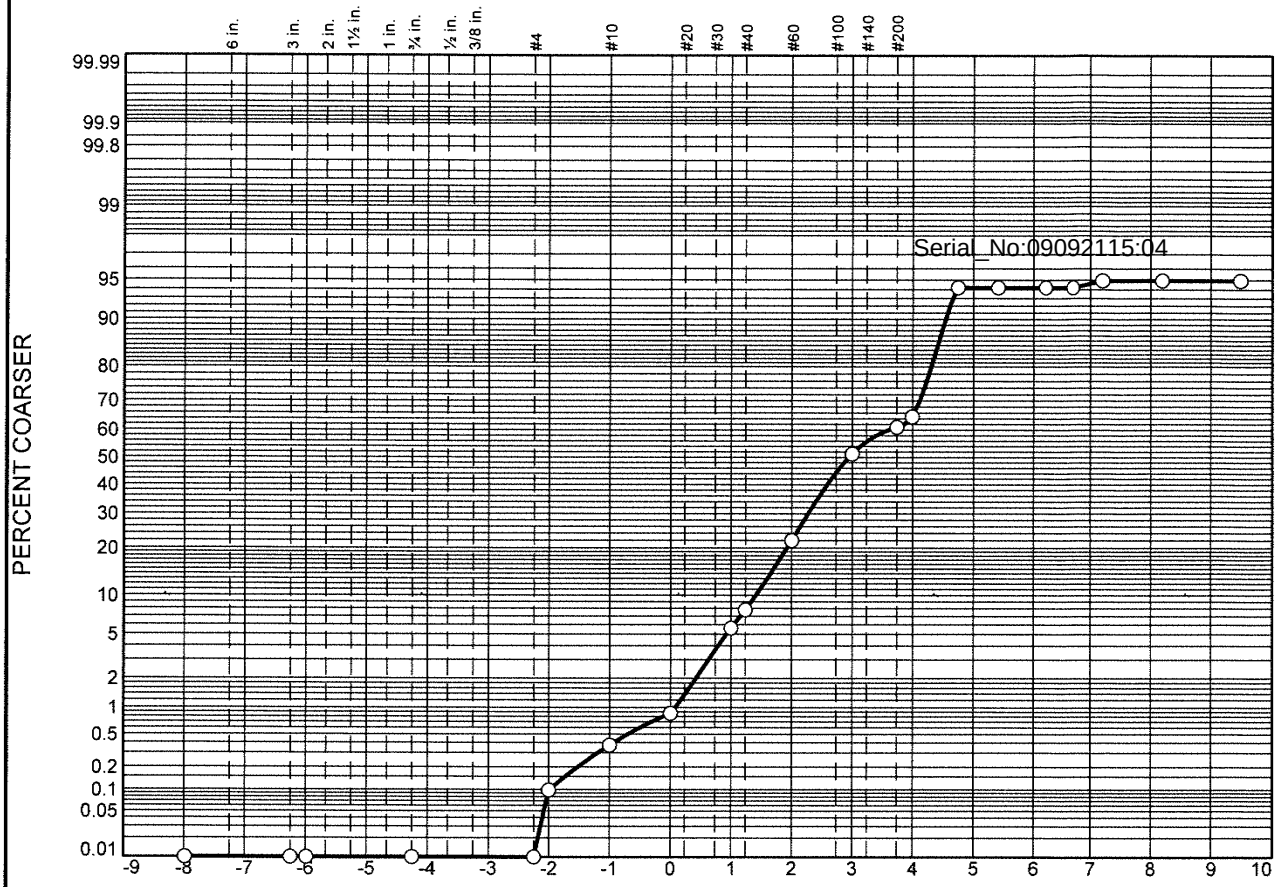
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.2	4.2	14.8	26.8	12.8	58.8	34.2	0.0	0.4	0.4	35.0	5.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0414	0.0453	0.0484	0.0541	0.0615	0.1080	0.1504	0.2464	0.2850	0.3445	0.4880

Fineness Modulus	C_u	C_c
0.57	3.64	0.47

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.3	0.5	4.7	16.4	29.2	13.8	29.2	0.0	0.5	0.2	5.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3066	0.1661	0.1297	0.0576	0.0471	0.0430	0.46	3.86

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|075|SED|GS|01 **Sample No.:** WG1539448-1

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|075|SED|GS|01

Sample Number: WG1539448-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 40.50
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Serial_No:09092115:04

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
40.50	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.04	0.00	99.9
		#10	0.11	0.00	99.6
		#18	0.20	0.00	99.1
		#35	1.93	0.00	94.4
		#40	0.88	0.00	92.2
		#60	5.74	0.00	78.0
		#120	11.85	0.00	48.8
		#200	3.97	0.00	39.0
		#230	1.47	0.00	35.3

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 35.3
Weight of hydrometer sample =40.31
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0372	5.8
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	5.8
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	5.8
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	5.8
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	5.1
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	5.1
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	5.1

Fractional Components

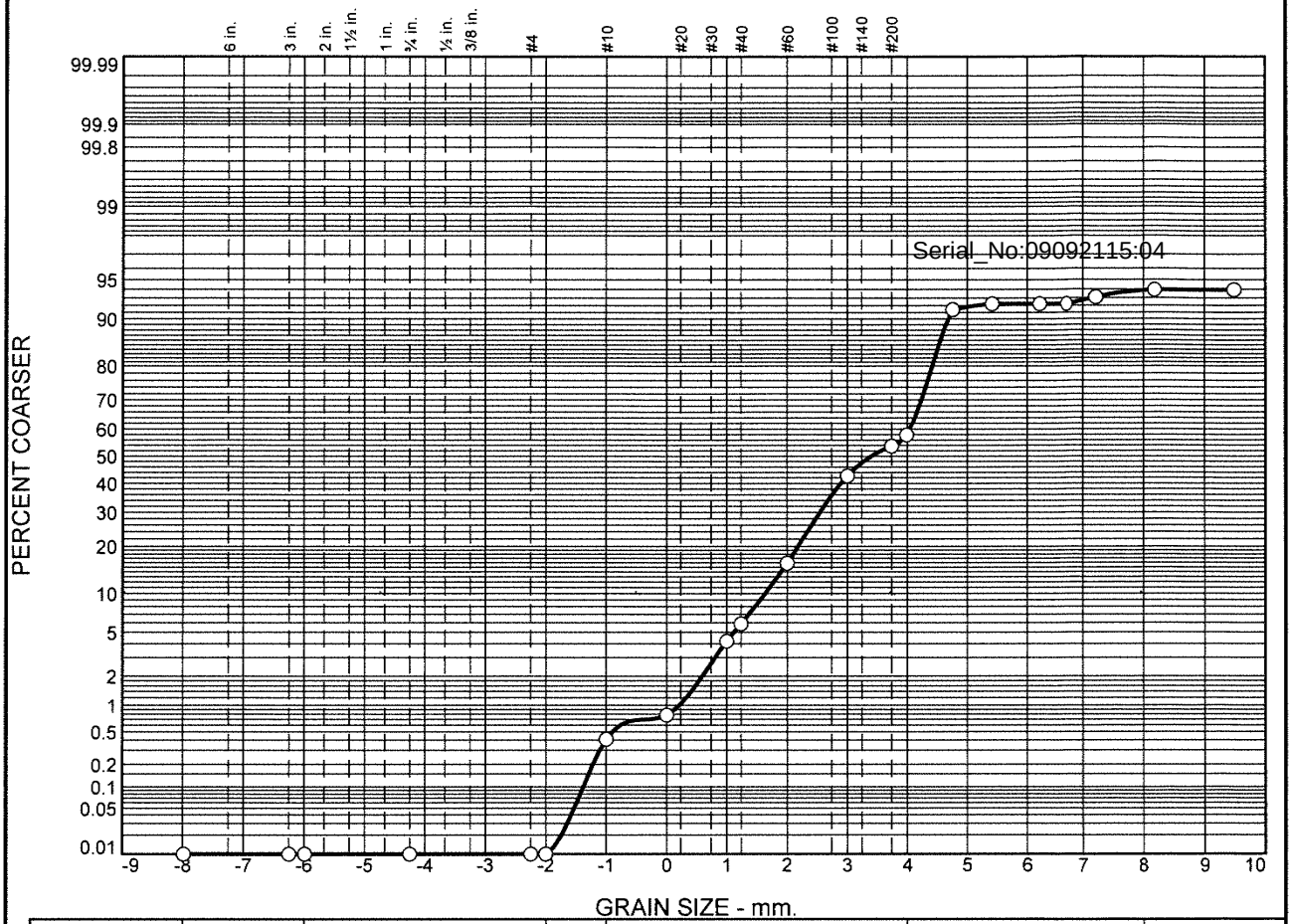
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.3	0.5	4.7	16.4	29.2	13.8	64.6	29.2	0.0	0.5	0.2	29.9	5.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0430	0.0471	0.0506	0.0576	0.0825	0.1297	0.1661	0.2634	0.3066	0.3754	0.5275

Fineness Modulus	C_u	C_c
0.65	3.86	0.46

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.4	3.4	11.7	26.8	15.5	33.6	0.4	0.5	1.2	6.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2581	0.1347	0.0948	0.0531	0.0435	0.0389	0.54	3.47

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|086|SED|GS|01 **Sample No.:** L2140928-10

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|086|SED|GS|01

Sample Number: L2140928-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 56.46
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
56.46	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.23	0.00	99.6
		#18	0.21	0.00	99.2
		#35	1.93	0.00	95.8
		#40	0.95	0.00	94.1
		#60	5.66	0.00	84.1
		#120	15.13	0.00	57.3
		#200	6.22	0.00	46.3
		#230	2.34	0.00	42.1

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.1
Weight of hydrometer sample =40.11
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	8.6
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	7.8
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	7.8
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	7.8
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	6.9
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	6.1
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	6.1

Fractional Components

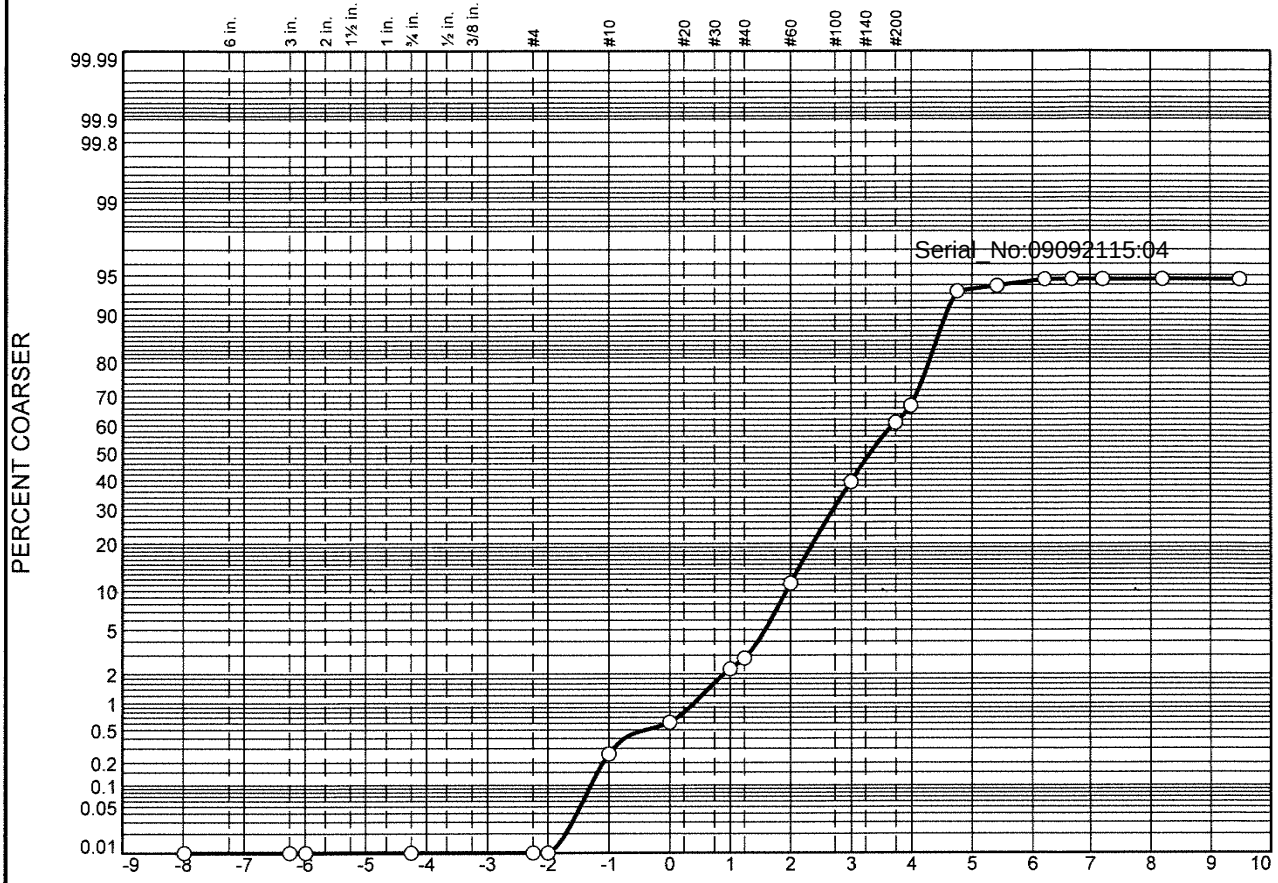
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.4	3.4	11.7	26.8	15.5	57.8	33.6	0.4	0.5	1.2	35.7	6.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0389	0.0435	0.0469	0.0531	0.0606	0.0948	0.1347	0.2204	0.2581	0.3213	0.4610

Fineness Modulus	C_u	C_c
0.51	3.47	0.54

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.3	1.6	9.1	28.0	27.9	26.3	0.9	0.2	0.0	5.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2220	0.1233	0.0999	0.0594	0.0469	0.0420	0.68	2.94

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|088|SED|GS|01 **Sample No.:** L2140928-11

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|088|SED|GS|01

Sample Number: L2140928-11

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 81.66
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
81.66	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.7
		#18	0.29	0.00	99.4
		#35	1.32	0.00	97.8
		#40	0.48	0.00	97.2
		#60	6.91	0.00	88.7
		#120	22.92	0.00	60.7
		#200	17.67	0.00	39.0
		#230	4.76	0.00	33.2

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 33.2
Weight of hydrometer sample =40.32
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	6.7
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	6.1
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	5.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	5.4
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	5.4
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	5.4
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	5.4

Fractional Components

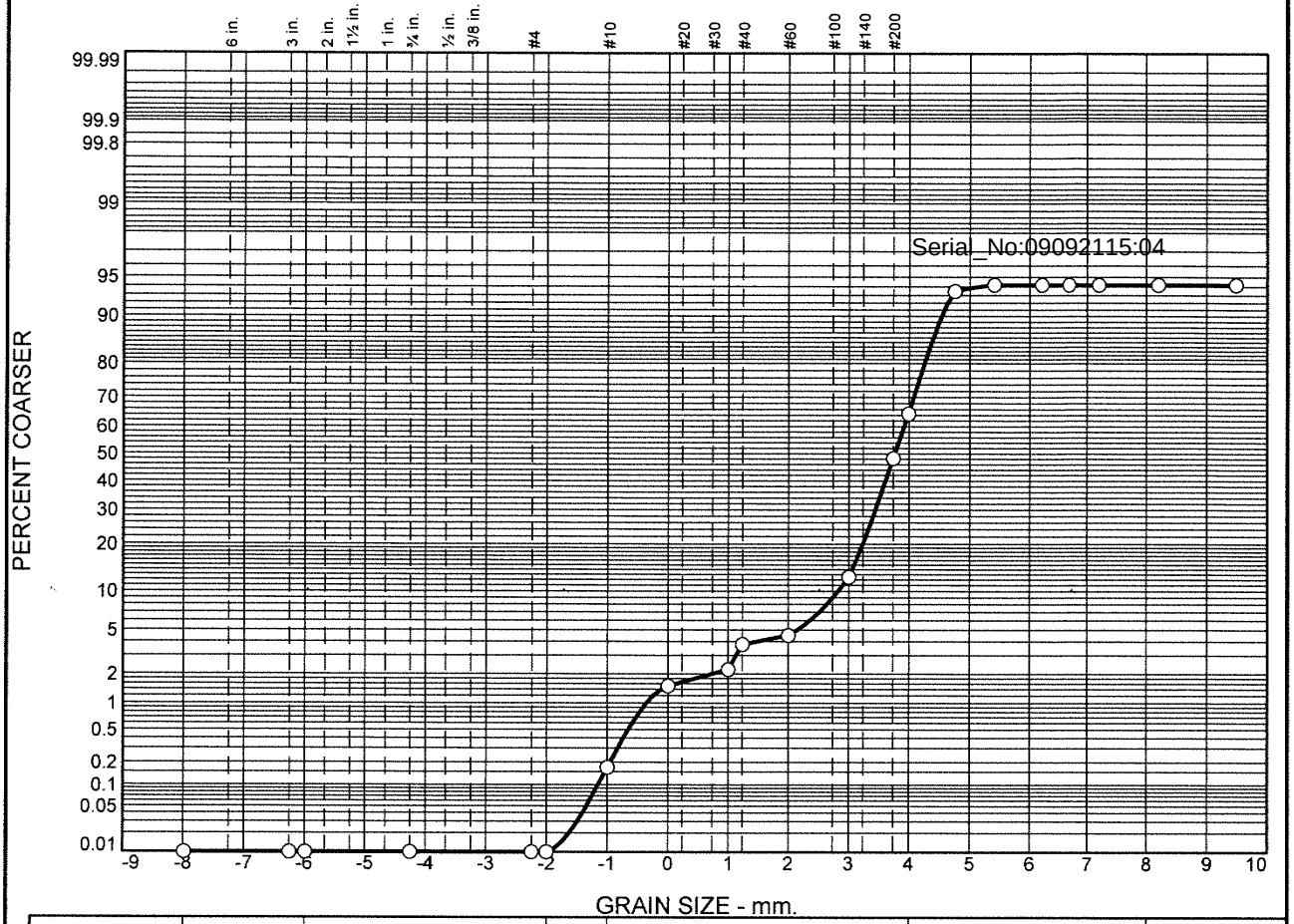
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.3	1.6	9.1	28.0	27.9	66.9	26.3	0.9	0.2	0.0	27.4	5.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0420	0.0469	0.0510	0.0594	0.0775	0.0999	0.1233	0.1935	0.2220	0.2617	0.3343

Fineness Modulus	C_u	C_c
0.40	2.94	0.68

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	1.3	0.7	2.3	8.0	52.7	28.7	0.3	0.0	0.0	5.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1173	0.0820	0.0736	0.0593	0.0483	0.0431	0.99	1.90

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|092|SED|GS|01 **Sample No.:** L2140928-12

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|092|SED|GS|01

Sample Number: L2140928-12

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 81.94
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
81.94	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.14	0.00	99.8
		#18	1.10	0.00	98.5
		#35	0.57	0.00	97.8
		#40	1.27	0.00	96.2
		#60	0.62	0.00	95.5
		#120	6.53	0.00	87.5
		#200	29.32	0.00	51.7
		#230	13.30	0.00	35.5

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 35.5
Weight of hydrometer sample =40.26
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	6.5
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	5.8
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	5.8
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	5.8
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	5.8
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	5.8
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	5.8

Fractional Components

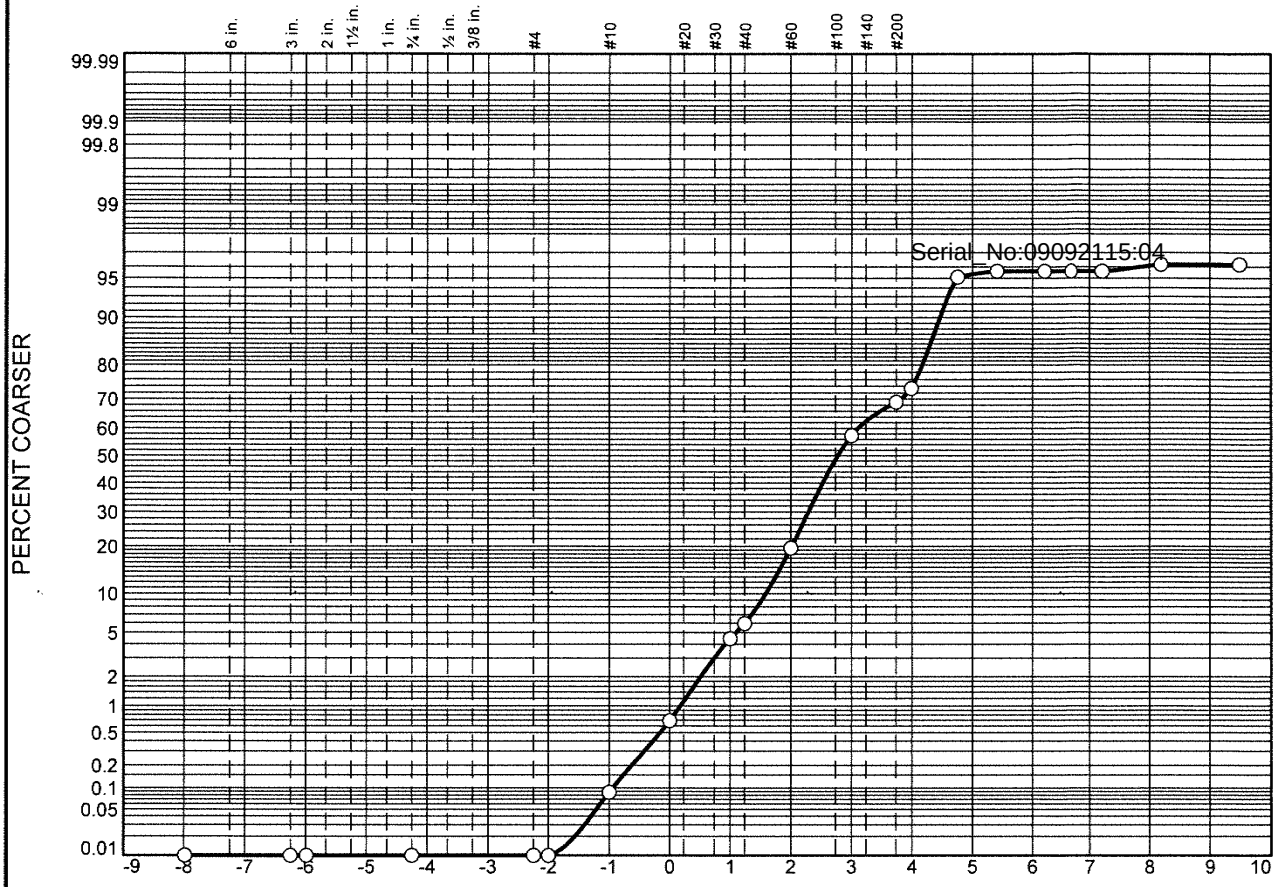
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	1.3	0.7	2.3	8.0	52.7	65.0	28.7	0.3	0.0	0.0	29.0	5.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0431	0.0483	0.0523	0.0593	0.0661	0.0736	0.0820	0.1063	0.1173	0.1412	0.2259

Fineness Modulus	C_u	C_c
0.17	1.90	0.99

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.6	3.8	15.0	37.8	16.4	21.7	0.2	0.0	0.5	3.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2797	0.1734	0.1461	0.0708	0.0505	0.0454	0.64	3.82

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|094|SED|GS|01 **Sample No.:** L2140928-13

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|094|SED|GS|01

Sample Number: L2140928-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 91.62
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.62	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	0.55	0.00	99.3
		#35	3.46	0.00	95.5
		#40	1.35	0.00	94.1
		#60	12.42	0.00	80.5
		#120	34.67	0.00	42.7
		#200	10.65	0.00	31.0
		#230	4.02	0.00	26.7

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 26.7
Weight of hydrometer sample =40.16
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	4.9
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	4.4
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	4.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.4
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.4
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	3.8
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.8

Fractional Components

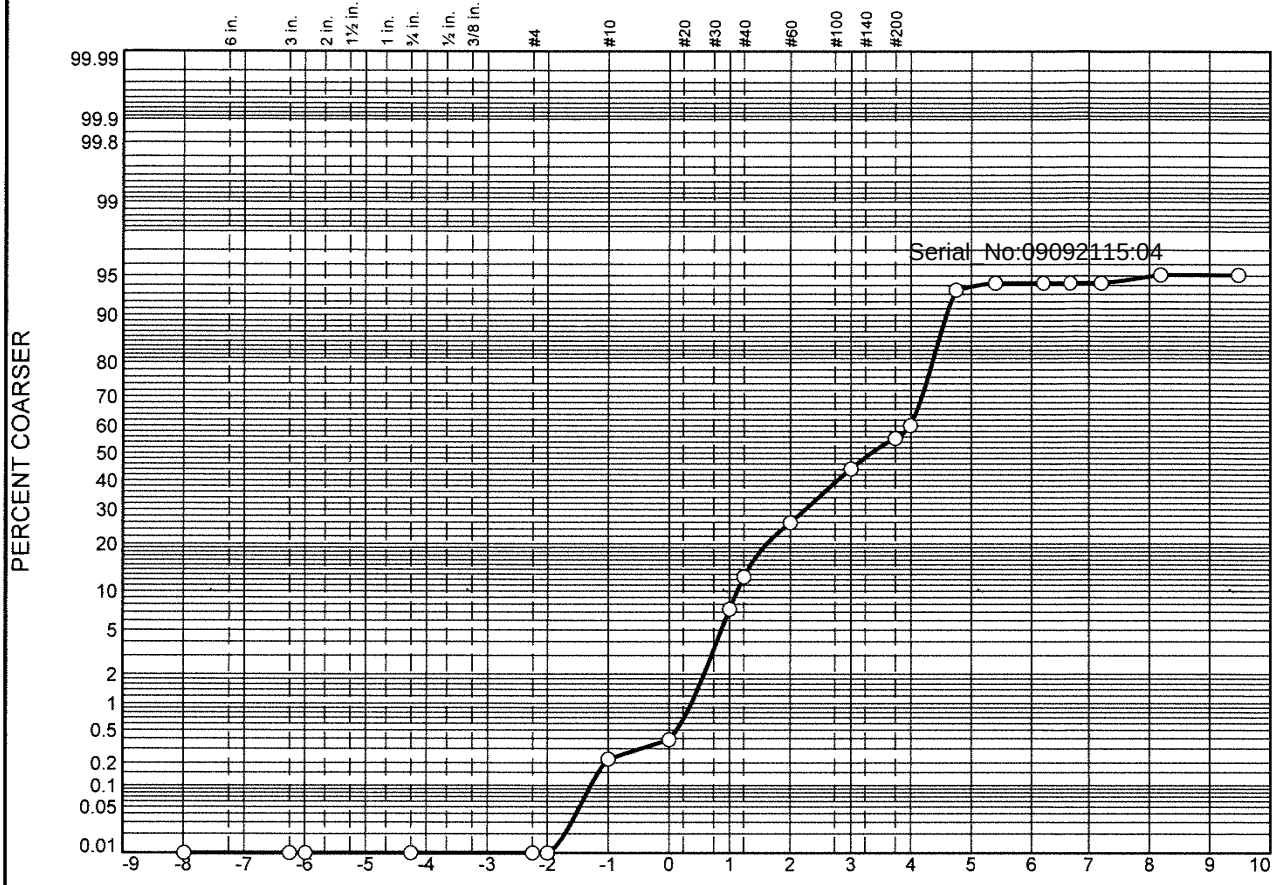
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.6	3.8	15.0	37.8	16.4	73.6	21.7	0.2	0.0	0.5	22.4	3.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0374	0.0454	0.0505	0.0553	0.0708	0.1160	0.1461	0.1734	0.2472	0.2797	0.3321	0.4690

Fineness Modulus	C_u	C_c
0.65	3.82	0.64

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.2	7.0	18.5	18.3	16.3	33.4	0.4	0.0	0.6	5.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3926	0.1456	0.0989	0.0550	0.0457	0.0417	0.50	3.49

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|103|SED|GS|01 **Sample No.:** L2140928-14

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|103|SED|GS|01

Sample Number: L2140928-14

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 85.54
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
85.54	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.19	0.00	99.8
		#18	0.14	0.00	99.6
		#35	5.98	0.00	92.6
		#40	4.37	0.00	87.5
		#60	11.50	0.00	74.1
		#120	15.60	0.00	55.8
		#200	9.63	0.00	44.6
		#230	4.02	0.00	39.9

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 39.9
Weight of hydrometer sample =40.21
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0372	6.5
5.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0237	5.7
15.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0137	5.7
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	5.7
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	5.7
240.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0034	4.9
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	4.9

Fractional Components

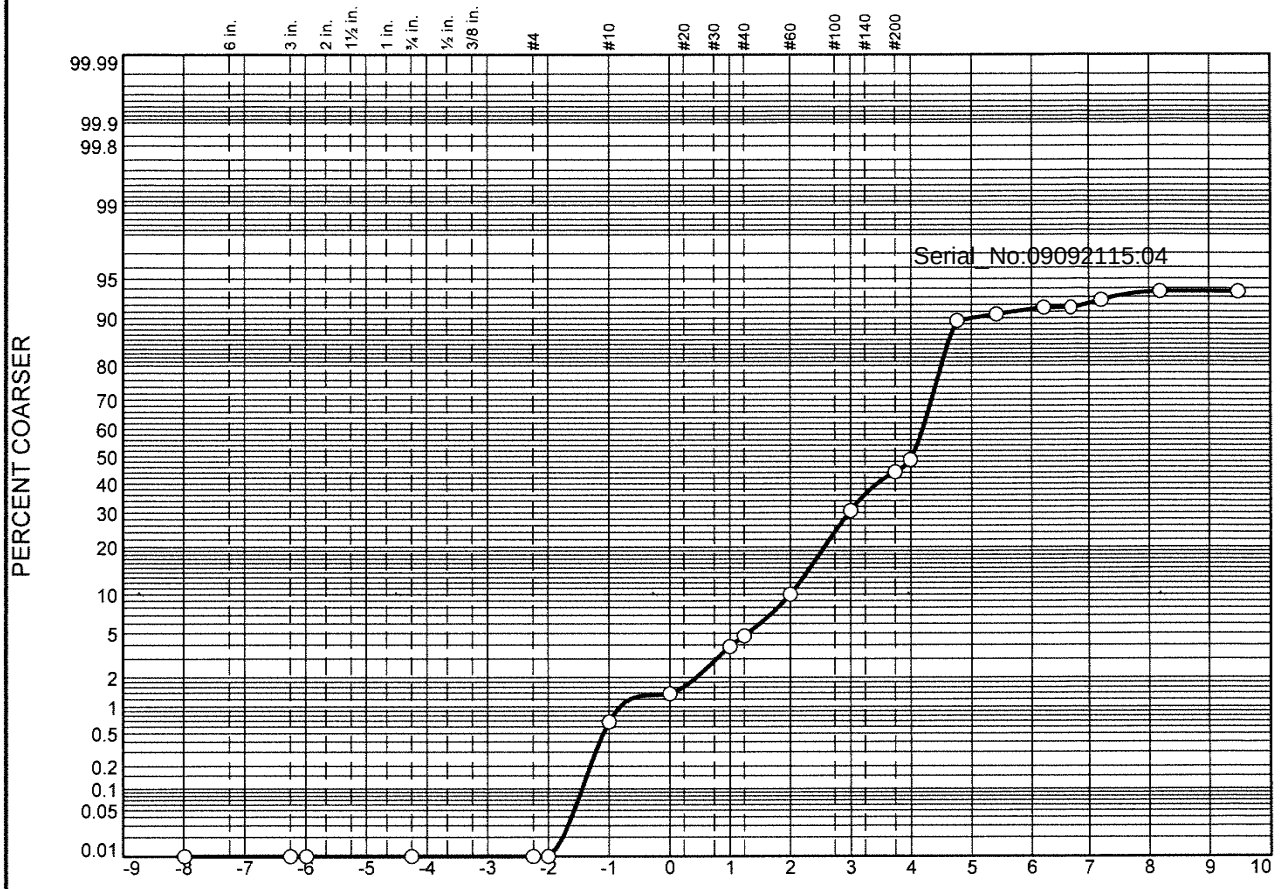
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.2	7.0	18.5	18.3	16.3	60.3	33.4	0.4	0.0	0.6	34.4	5.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0037	0.0417	0.0457	0.0489	0.0550	0.0632	0.0989	0.1456	0.3273	0.3926	0.4585	0.5502

Fineness Modulus	C_u	C_c
0.65	3.49	0.50

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.7	0.7	2.4	6.2	20.6	18.5	40.9	1.4	0.8	1.4	6.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1987	0.0919	0.0616	0.0494	0.0411	0.0304	0.87	3.02

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|105|SED|GS|01 **Sample No.:** L2140928-15

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|105|SED|GS|01

Sample Number: L2140928-15

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 58.81
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
58.81	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.40	0.00	99.3
		#18	0.41	0.00	98.6
		#35	1.45	0.00	96.2
		#40	0.55	0.00	95.2
		#60	3.06	0.00	90.0
		#120	12.15	0.00	69.4
		#200	7.93	0.00	55.9
		#230	2.69	0.00	51.3

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 51.3
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	10.5
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	9.4
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	8.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	8.4
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	7.4
240.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0034	6.4
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	6.4

Fractional Components

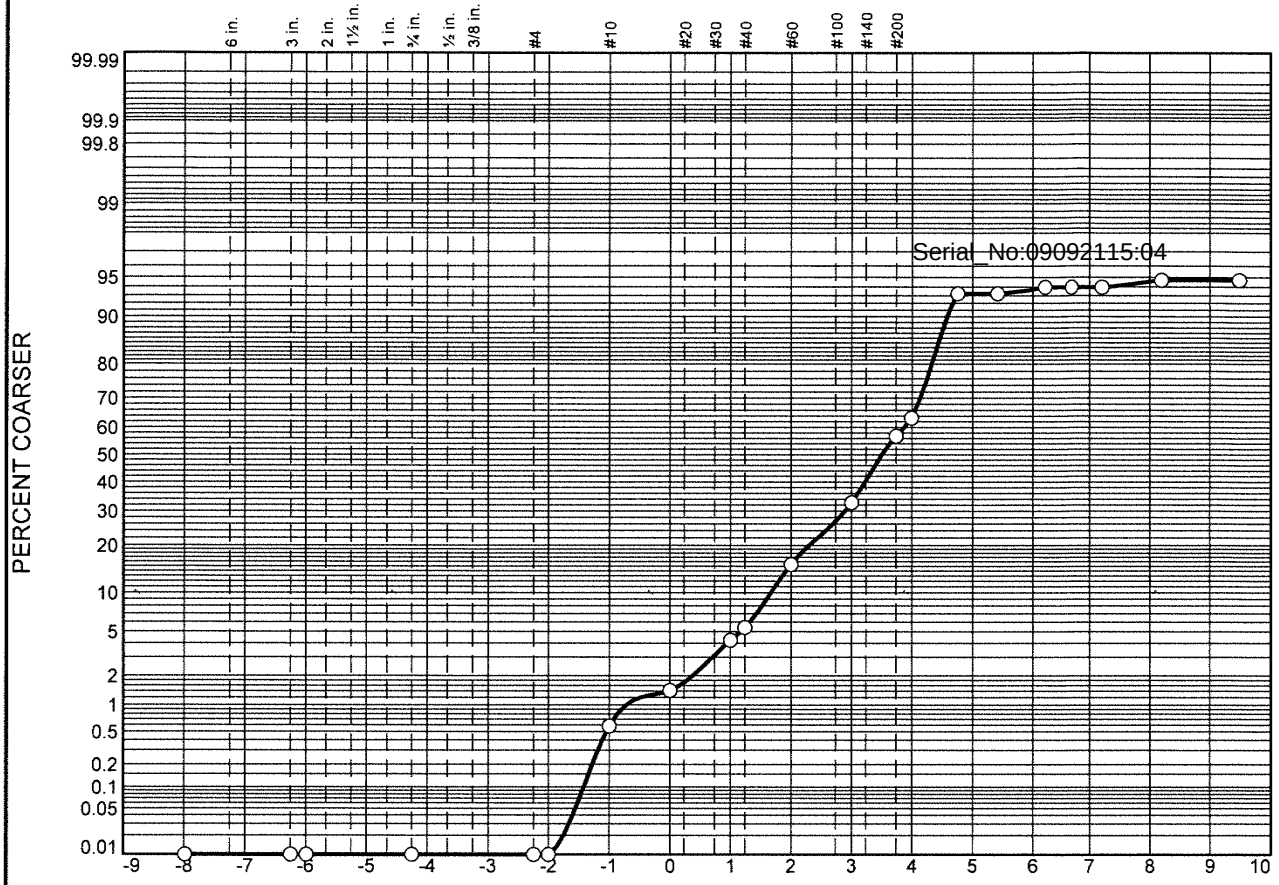
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.7	0.7	2.4	6.2	20.6	18.5	48.4	40.9	1.4	0.8	1.4	44.5	6.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0304	0.0411	0.0443	0.0494	0.0546	0.0616	0.0919	0.1685	0.1987	0.2497	0.4100

Fineness Modulus	C_u	C_c
0.36	3.02	0.87

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	0.8	2.8	11.2	17.3	31.0	29.5	0.5	0.3	0.6	5.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2541	0.1069	0.0881	0.0569	0.0463	0.0418	0.72	2.56

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|108|SED|GS|01 **Sample No.:** L2140928-16

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|108|SED|GS|01

Sample Number: L2140928-16

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 74.07
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.07	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.43	0.00	99.4
		#18	0.62	0.00	98.6
		#35	2.08	0.00	95.8
		#40	0.87	0.00	94.6
		#60	7.40	0.00	84.6
		#120	12.85	0.00	67.3
		#200	17.83	0.00	43.2
		#230	4.75	0.00	36.8

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.8
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	6.8
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	6.8
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	6.0
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	6.0
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	6.0
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	5.3
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	5.3

Fractional Components

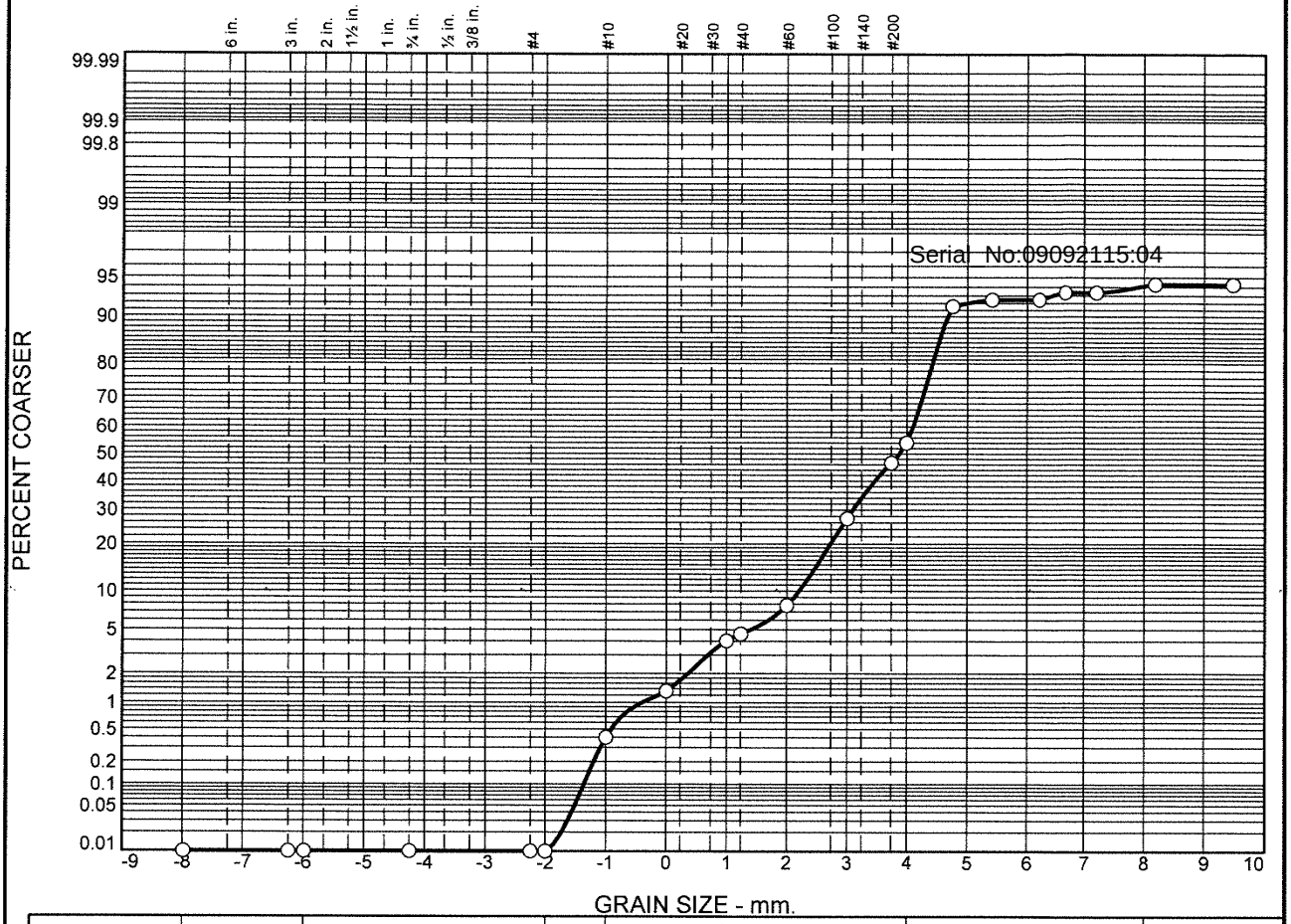
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	0.8	2.8	11.2	17.3	31.0	63.1	29.5	0.5	0.3	0.6	30.9	5.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0418	0.0463	0.0499	0.0569	0.0679	0.0881	0.1069	0.2028	0.2541	0.3146	0.4459

Fineness Modulus	C_u	C_c
0.43	2.56	0.72

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.9	2.7	3.8	19.5	27.2	37.5	0.5	0.9	0.7	5.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1756	0.0906	0.0682	0.0523	0.0435	0.0391	0.77	2.32

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|111|SED|GS|01 **Sample No.:** L2140928-17

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|111|SED|GS|01

Sample Number: L2140928-17

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 52.64
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
52.64	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.6
		#18	0.49	0.00	98.7
		#35	1.41	0.00	96.0
		#40	0.31	0.00	95.4
		#60	1.69	0.00	92.2
		#120	10.25	0.00	72.7
		#200	10.20	0.00	53.3
		#230	3.87	0.00	46.0

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 46.0
Weight of hydrometer sample =40.1
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	8.5
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	7.5
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	7.5
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	6.6
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	6.6
240.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0034	5.7
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.7

Fractional Components

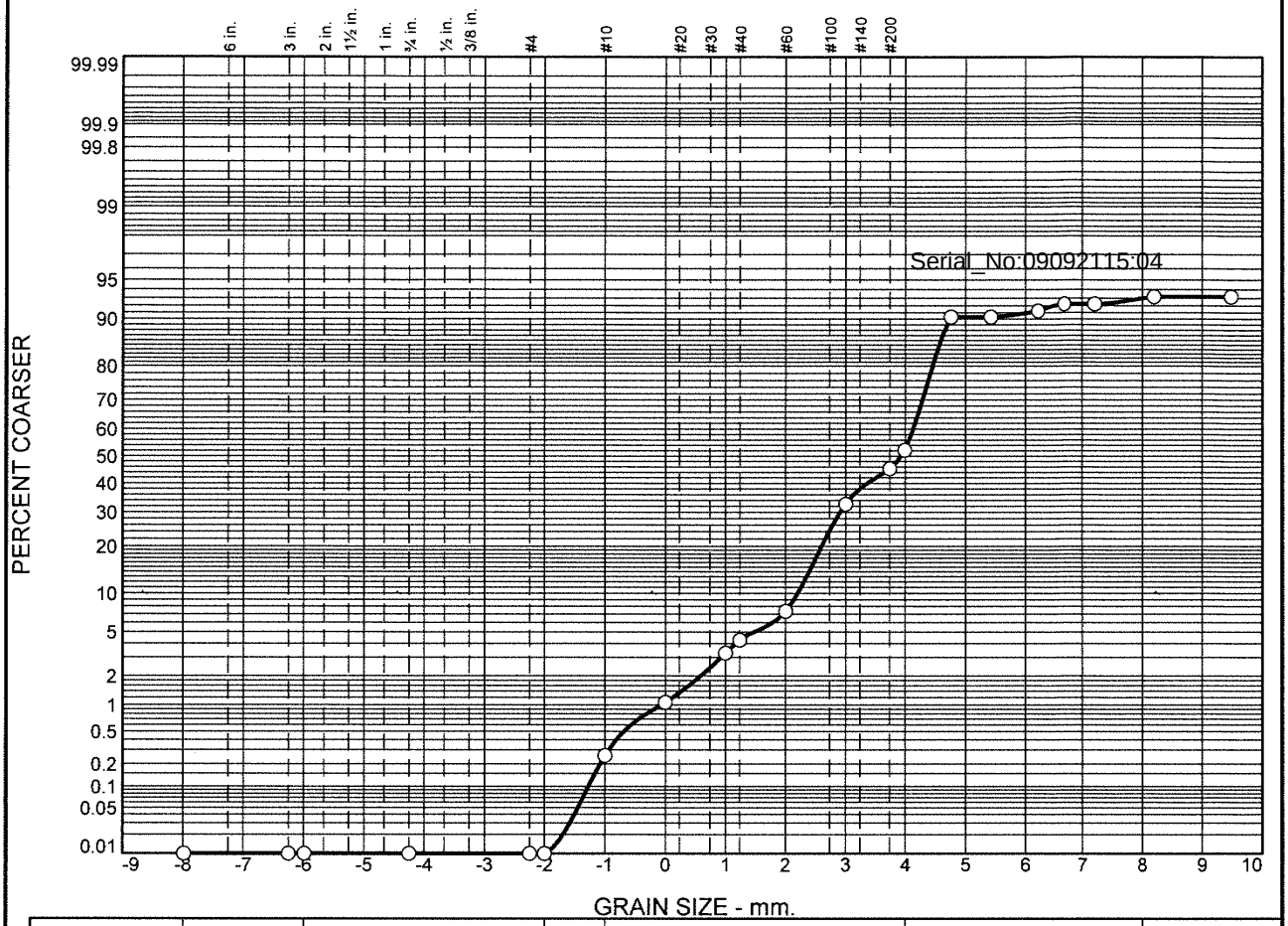
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.9	2.7	3.8	19.5	27.2	54.1	37.5	0.5	0.9	0.7	39.6	5.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0391	0.0435	0.0467	0.0523	0.0582	0.0682	0.0906	0.1508	0.1756	0.2165	0.3792

Fineness Modulus	C_u	C_c
0.31	2.32	0.77

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.8	2.2	4.1	25.3	20.0	37.6	0.6	1.3	0.8	7.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1853	0.0972	0.0655	0.0513	0.0423	0.0374	0.72	2.60

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|115|SED|GS|01 **Sample No.:** L2140928-18

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|115|SED|GS|01

Sample Number: L2140928-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 63.04
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
63.04	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.16	0.00	99.7
		#18	0.51	0.00	98.9
		#35	1.40	0.00	96.7
		#40	0.62	0.00	95.7
		#60	1.96	0.00	92.6
		#120	15.98	0.00	67.3
		#200	7.98	0.00	54.6
		#230	4.30	0.00	47.8

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 47.8
Weight of hydrometer sample =40.35
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	9.7
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	9.7
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	8.7
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	7.8
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	7.8
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	6.8
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	6.8

Fractional Components

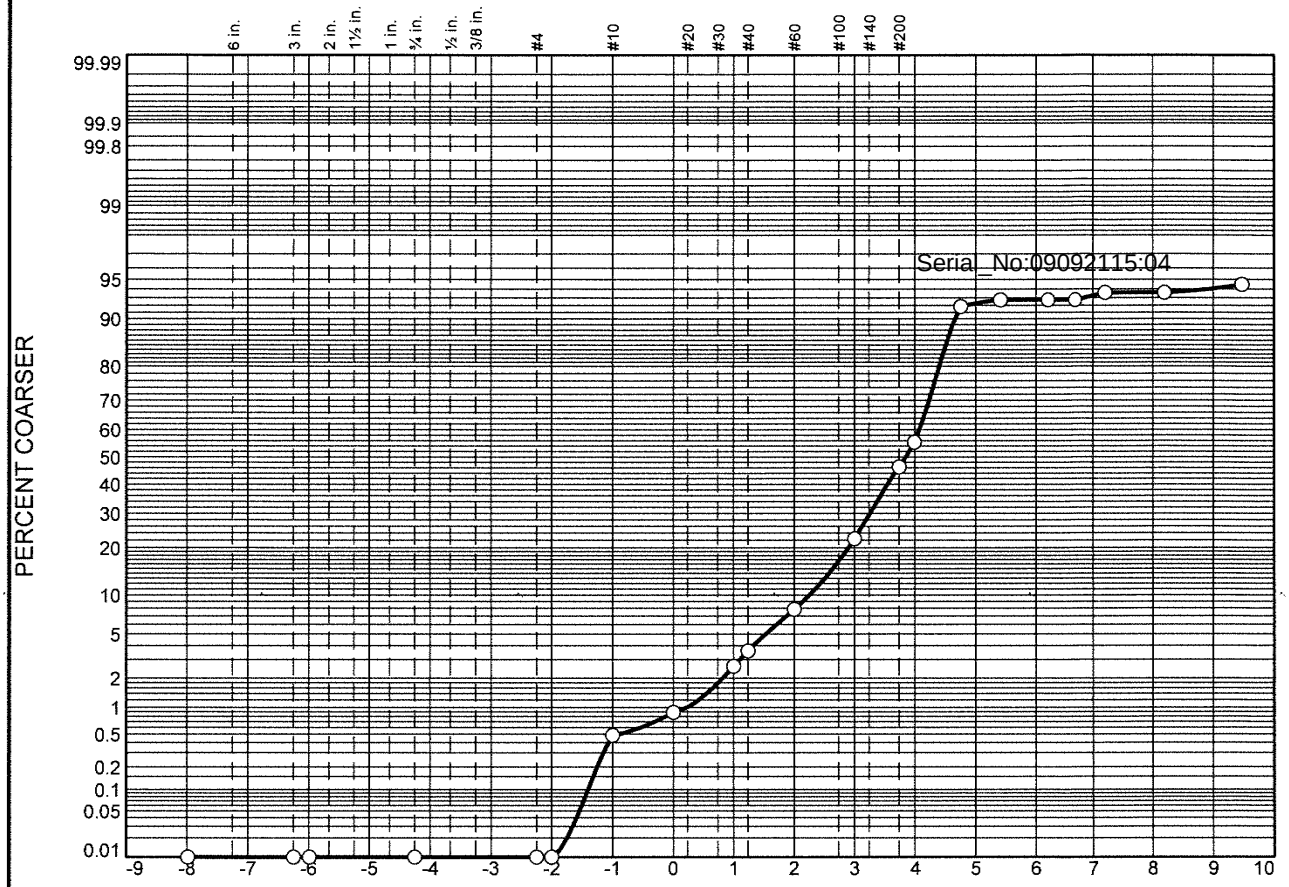
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.8	2.2	4.1	25.3	20.0	52.4	37.6	0.6	1.3	0.8	40.3	7.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0374	0.0423	0.0457	0.0513	0.0570	0.0655	0.0972	0.1646	0.1853	0.2174	0.3613

Fineness Modulus	C_u	C_c
0.34	2.60	0.72

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	0.4	1.7	5.2	14.6	33.6	36.3	0.4	0.5	0.4	6.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1601	0.0855	0.0693	0.0532	0.0440	0.0396	0.84	2.16

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|119|SED|GS|01 **Sample No.:** L2140928-19

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|119|SED|GS|01

Sample Number: L2140928-19

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 47.40
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
47.40	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.23	0.00	99.5
		#18	0.19	0.00	99.1
		#35	0.81	0.00	97.4
		#40	0.47	0.00	96.4
		#60	2.02	0.00	92.2
		#120	6.90	0.00	77.6
		#200	11.35	0.00	53.6
		#230	4.30	0.00	44.6

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 44.6
Weight of hydrometer sample =40.24
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	8.2
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	7.3
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	7.3
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	7.3
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	6.4
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	6.4
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	5.5

Fractional Components

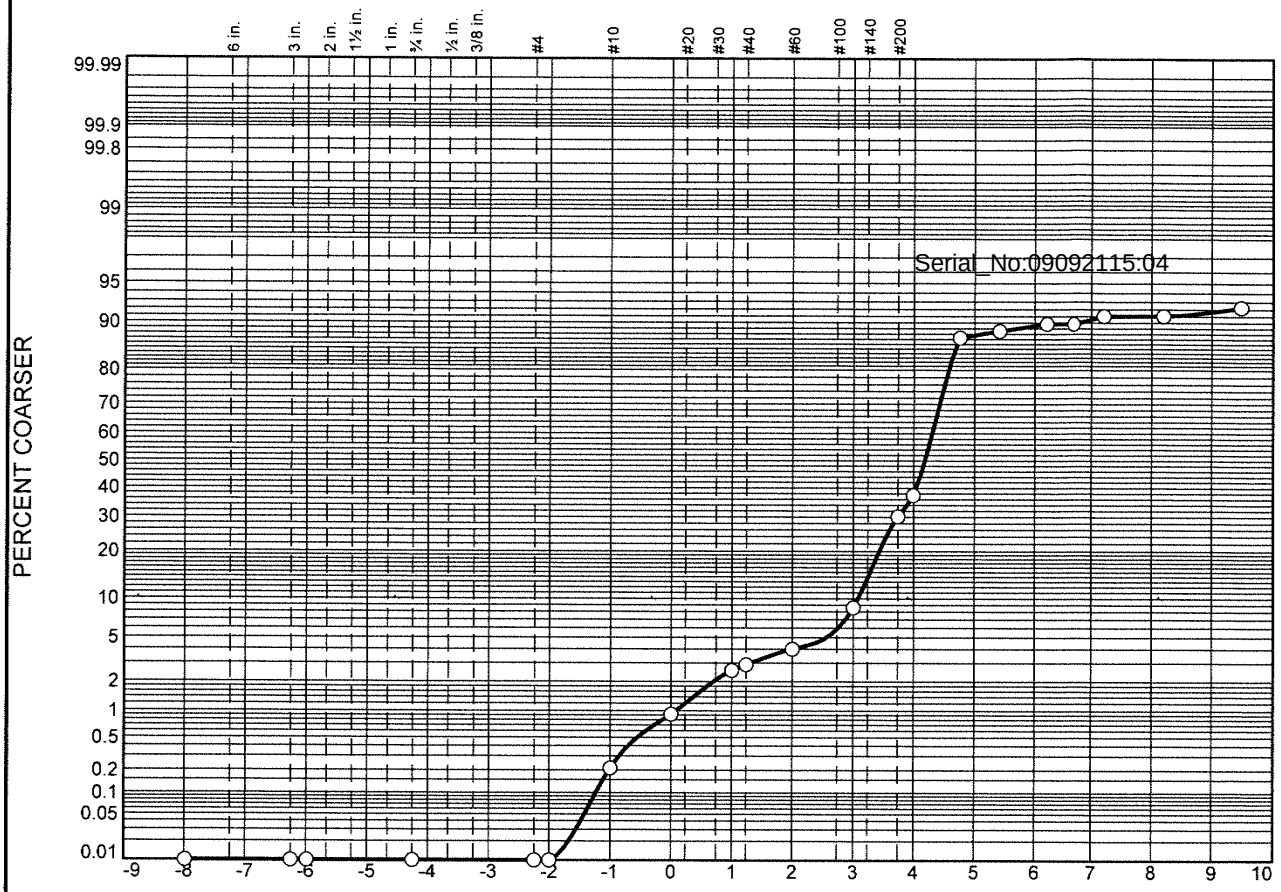
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	0.4	1.7	5.2	14.6	33.6	55.5	36.3	0.4	0.5	0.4	37.6	6.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0396	0.0440	0.0474	0.0532	0.0594	0.0693	0.0855	0.1339	0.1601	0.2100	0.3471

Fineness Modulus	C_u	C_c
0.26	2.16	0.84

Serial_No:09092115:04

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.7	1.7	1.4	4.6	29.3	49.9	1.7	1.0	0.5	9.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1029	0.0608	0.0549	0.0465	0.0389	0.0089	4.03	6.87

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|126|SED|GS|01 **Sample No.:** L2140928-20

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/8/2021

Location: 3664|2021|WTG|126|SED|GS|01

Sample Number: L2140928-20

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 56.79
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
56.79	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.12	0.00	99.8
		#18	0.40	0.00	99.1
		#35	0.93	0.00	97.4
		#40	0.19	0.00	97.1
		#60	0.63	0.00	96.0
		#120	2.61	0.00	91.4
		#200	12.25	0.00	69.8
		#230	4.11	0.00	62.6

Serial_No:09092115:04

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 62.6
Weight of hydrometer sample =40.29
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	12.7
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	11.5
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	10.2
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	10.2
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	9.0
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	9.0
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	7.7

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.7	1.7	1.4	4.6	29.3	37.7	49.9	1.7	1.0	0.5	53.1	9.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0089	0.0389	0.0420	0.0465	0.0506	0.0549	0.0608	0.0927	0.1029	0.1183	0.1694

Fineness Modulus	C_u	C_c
0.12	6.87	4.03

Serial_No:09092115:04

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Serial_No:09092115:04

7/30/21

L2140928

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|142|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|143|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|146|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|152|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|155|Sed|TOC|01	7/21/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 2; Cooler #3
3664|2021|WTG|001|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|004|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|006|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|015|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|017|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|029|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|032|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|036|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|037|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|039|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|042|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|045|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
3664|2021|WTG|051|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2
					grain size	Tier 2; Cooler #2 -01
					grain size	Tier 2; Cooler #2 -02

Shipper: FEDEX UPS USPS DHL

Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: T. Hudson 7/30/21 1250
DATE/TIME: 7/29/21
RECEIVED BY: T. Hudson Henderson, NAC
DATE/TIME: 7/29/21 1600

RELINQUISHED BY:
DATE/TIME: 7/30/21
RECEIVED BY:
DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

A chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

NAC 7/30/21 1250

7/30/21

L2140928

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|056|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -03
3664|2021|WTG|059|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -04
3664|2021|WTG|061|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -05
3664|2021|WTG|065|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -06
3664|2021|WTG|071|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -07
3664|2021|WTG|072|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -08
3664|2021|WTG|075|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -09
3664|2021|WTG|086|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -10
3664|2021|WTG|088|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -11
3664|2021|WTG|092|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -12
3664|2021|WTG|094|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -13
3664|2021|WTG|103|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -14
3664|2021|WTG|105|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -15
3664|2021|WTG|108|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -16
3664|2021|WTG|111|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -17
3664|2021|WTG|115|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -18
3664|2021|WTG|119|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -19
3664|2021|WTG|126|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -20
3664|2021|WTG|131|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2

Shipper: FEDEX UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: [signature] DATE/TIME: 7/29/21

RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] DATE/TIME: 7/30/21

RECEIVED BY: [signature] DATE/TIME: 7/30/21 1135

[signature] 7/30/21 1252

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the (samples listed) have been under the continuous custody of the signatories. Customers must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

[signature] -4AC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140929
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/10/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140929
Report Date: 09/10/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140929-01	3664|2021|WTG|131|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/22/21 00:00	07/30/21
L2140929-02	3664|2021|WTG|140|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140929-03	3664|2021|WTG|140|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140929-04	3664|2021|WTG|142|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140929-05	3664|2021|WTG|143|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140929-06	3664|2021|WTG|146|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140929-07	3664|2021|WTG|152|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140929-08	3664|2021|WTG|155|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/21/21 00:00	07/30/21
L2140929-09	3664|2021|WTG|096|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140929-10	3664|2021|WTG|106|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140929-11	3664|2021|WTG|113|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140929-12	3664|2021|WTG|114|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140929-13	3664|2021|WTG|116|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	07/30/21
L2140929-14	3664|2021|WTG|117|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140929-15	3664|2021|WTG|120|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140929-16	3664|2021|WTG|120|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140929-17	3664|2021|WTG|121|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140929-18	3664|2021|WTG|124|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140929-19	3664|2021|WTG|125|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140929-20	3664|2021|WTG|127|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140929
Project Number:	3664	**Report Date:**	09/10/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140929
Project Number:	3664	**Report Date:**	09/10/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/10/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-01
Client ID: 3664|2021|WTG|131|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/22/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	1.50		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	3.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	10.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	10.0		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	4.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	32.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	31.0		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	6.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-02
Client ID: 3664|2021|WTG|140|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.80		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	6.00		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	12.0		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	12.1		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	27.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	30.0		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	9.60		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-03
Client ID: 3664|2021|WTG|140|SED|GS|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	5.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	11.1		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	11.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	27.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	34.1		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	9.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-04
Client ID: 3664|2021|WTG|142|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	2.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	4.80		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	9.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	15.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	24.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	33.3		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	9.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-05
Client ID: 3664|2021|WTG|143|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.800		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	5.60		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	14.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	9.20		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	30.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	31.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	7.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-06
Client ID: 3664|2021|WTG|146|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	6.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	12.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	11.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	25.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	34.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	7.80		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-07
Client ID: 3664|2021|WTG|152|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.700		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	3.60		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	10.1		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	13.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	24.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	36.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	10.0		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-08
Client ID: 3664|2021|WTG|155|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/21/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.900		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	7.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	15.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	9.00		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	29.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	30.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	8.20		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-09
Client ID: 3664|2021|WTG|096|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	7.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	12.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	37.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	17.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	18.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	4.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-10
Client ID: 3664|2021|WTG|106|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.00		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	3.00		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	6.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	27.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	26.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	29.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	6.50		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-11
Client ID: 3664|2021|WTG|113|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.900		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	2.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	3.50		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	15.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	35.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	33.3		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	8.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-12
Client ID: 3664|2021|WTG|114|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.50		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	3.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	6.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	18.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	32.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	29.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	7.20		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-13
Client ID: 3664|2021|WTG|116|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/28/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	2.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	5.20		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	21.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	26.3		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	34.3		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	8.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-14
Client ID: 3664|2021|WTG|117|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	3.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	7.50		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	19.3		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	25.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	36.5		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	5.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-15
Client ID: 3664|2021|WTG|120|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	2.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	7.80		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	12.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	36.5		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	32.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	8.20		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-16
Client ID: 3664|2021|WTG|120|SED|GS|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.400		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	1.90		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	5.00		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	14.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	38.4		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	30.1		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	9.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-17
Client ID: 3664|2021|WTG|121|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	2.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	7.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	22.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	33.5		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	27.0		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	6.00		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-18
Client ID: 3664|2021|WTG|124|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.600		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	3.70		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	9.30		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	15.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	27.7		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	35.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	6.80		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-19
Client ID: 3664|2021|WTG|125|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	1.50		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	2.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	5.70		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	12.2		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	29.6		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	39.6		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	8.40		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140929
Report Date: 09/10/21

SAMPLE RESULTS

Lab ID: L2140929-20
Client ID: 3664|2021|WTG|127|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Cobbles	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Coarse Sand	0.900		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Coarse Sand	5.10		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Medium Sand	13.9		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Fine Sand	12.5		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
% Very Fine Sand	20.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Silt - (3.9-62.5 um)	38.8		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR
Clay - (<3.9 um)	7.80		%	0.100	NA	1	-	08/28/21 12:14	12,D6913/D7928(M)	DR

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140929
Report Date: 09/10/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1540287-1 QC Sample: L2140929-09 Client ID: 3664|2021|WTG|096|SED|GS|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	ND	ND	%	NC		20
Granule (2.0-4.0 mm)	ND	0.100	%	NC		20
% Very Coarse Sand	1.90	1.60	%	17		20
% Coarse Sand	7.30	6.60	%	10		20
% Medium Sand	12.9	13.2	%	2		20
% Fine Sand	37.4	37.4	%	0		20
% Very Fine Sand	17.7	18.0	%	2		20
Silt - (3.9-62.5 um)	18.4	18.7	%	2		20
Clay - (<3.9 um)	4.40	4.40	%	0		20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140929
Report Date: 09/10/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
B	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140929-01A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140929-02A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140929-03A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140929-04A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140929-05A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140929
Report Date: 09/10/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140929-06A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140929-07A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140929-08A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140929-09A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140929-10A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140929-11A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140929
Report Date: 09/10/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140929-12A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140929-13A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2140929-14A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140929-15A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140929-16A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140929-17A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140929
Report Date: 09/10/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140929-18A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140929-19A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2140929-20A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140929
Project Number:	3664	**Report Date:**	09/10/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140929
Project Number:	3664	**Report Date:**	09/10/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140929
Project Number:	3664	**Report Date:**	09/10/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name:	BEACON WIND	**Lab Number:**	L2140929
Project Number:	3664	**Report Date:**	09/10/21

REFERENCES

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

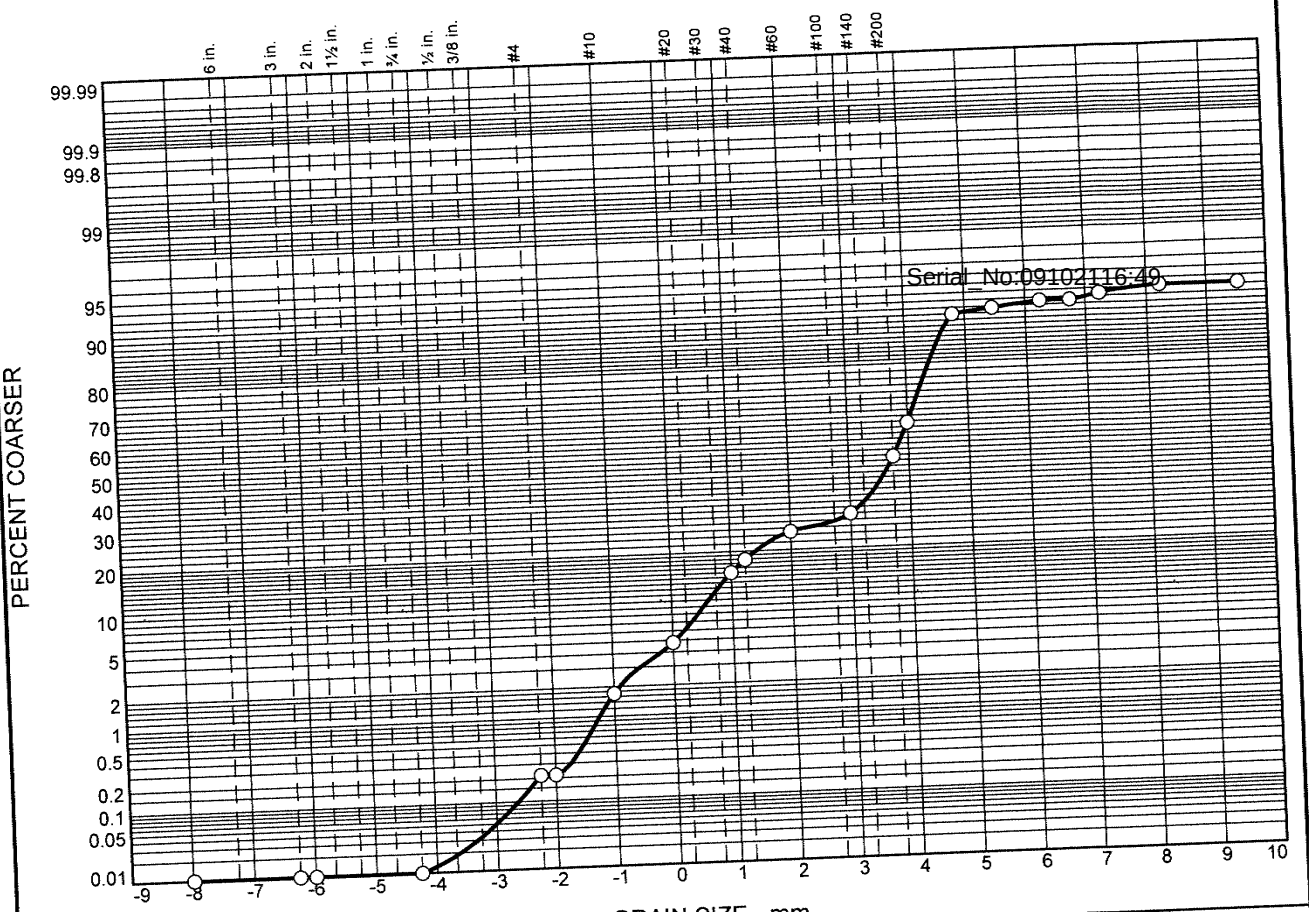
LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

ASTM D6913/D7928
GRAIN SIZE ANALYSIS

Particle Size Distribution Report



% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
		0.2	1.5	3.1	10.2	10.0	4.9	32.2	28.2	1.0	0.6	1.2	6.9

LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
		0.4992	0.0893	0.0743	0.0562	0.0433	0.0357	0.99	2.51

Material Description	USCS	AASHTO

Project No. **Client:**

Project:

Source: 3664|2021|WTG|131|SED|GS|01 **Sample No.:** L2140929-01

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|131|SED|GS|01
Sample Number: L2140929-01

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 41.55
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
41.55	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.09	0.00	99.8
		#5	0.00	0.00	99.8
		#10	0.62	0.00	98.3
		#18	1.28	0.00	95.2
		#35	4.23	0.00	85.0
		#40	1.19	0.00	82.2
		#60	2.97	0.00	75.0
		#120	2.04	0.00	70.1
		#200	8.10	0.00	50.6
		#230	5.03	0.00	38.5

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 38.5
Weight of hydrometer sample =38.99
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0359	10.0
5.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0228	9.2
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	8.4
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	8.4
60.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0066	7.6
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	6.8
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	6.8

Fractional Components

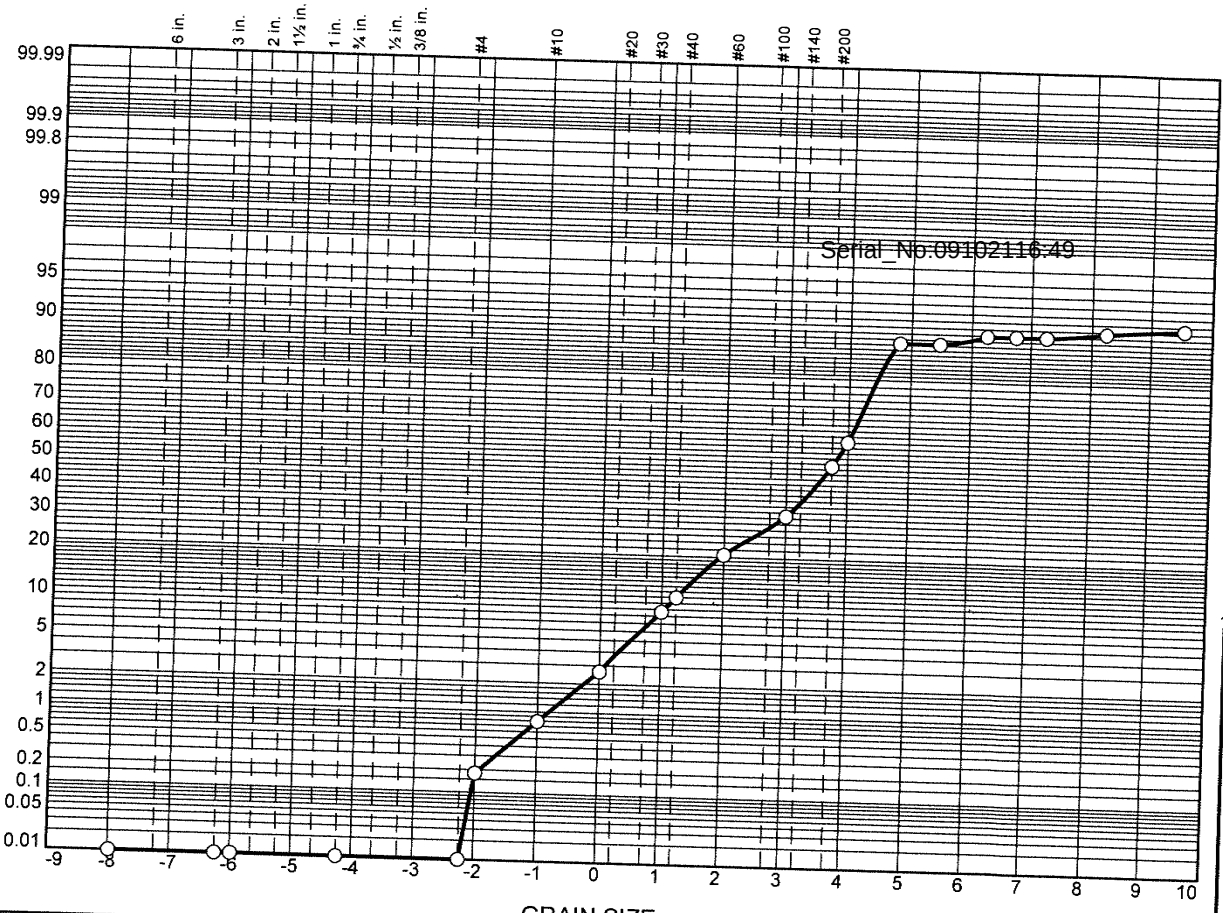
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	1.5	3.1	10.2	10.0	4.9	32.2	60.4	28.2	1.0	0.6	1.2	31.0	6.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0357	0.0433	0.0481	0.0562	0.0643	0.0743	0.0893	0.3729	0.4992	0.6534	0.9718

Fineness Modulus	C_u	C_c
0.67	2.51	0.99

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.6	1.8	6.0	12.0	12.1	27.7	27.8	0.9	0.7	0.6	9.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3376	0.0982	0.0767	0.0539	0.0405	0.0053	5.54	18.38

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|140|SED|GS|01 **Sample No.:** L2140929-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|140|SED|GS|01

Sample Number: L2140929-02

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 44.59
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
44.59	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.08	0.00	99.8
		#10	0.27	0.00	99.2
		#18	0.82	0.00	97.4
		#35	2.66	0.00	91.4
		#40	1.06	0.00	89.0
		#60	4.28	0.00	79.4
		#120	5.42	0.00	67.3
		#200	8.16	0.00	49.0
		#230	3.97	0.00	40.1

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 40.1
Weight of hydrometer sample =39.90
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0070	1.0073	0.0132	7.0	14.4	0.0356	11.8
5.00	22.4	1.0070	1.0073	0.0132	7.0	14.4	0.0225	11.8
15.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0131	10.2
30.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0093	10.2
60.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0066	10.2
240.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0033	9.4
1440.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0014	8.6

Fractional Components

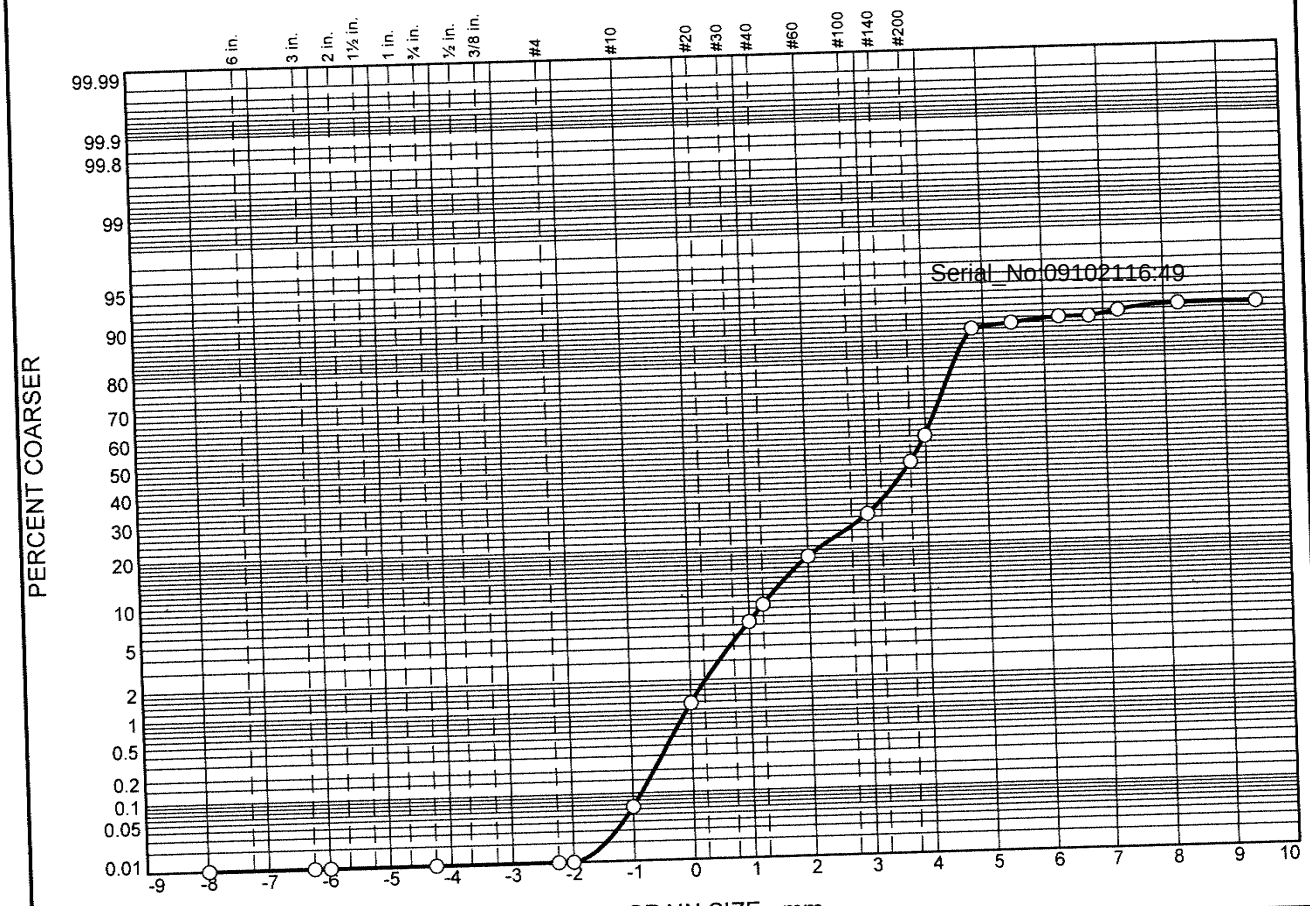
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.6	1.8	6.0	12.0	12.1	27.7	59.6	27.8	0.9	0.7	0.6	30.0	9.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0053	0.0405	0.0456	0.0539	0.0629	0.0767	0.0982	0.2582	0.3376	0.4522	0.7118

Fineness Modulus	C_u	C_c
0.55	18.38	5.54

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.1	5.1	11.1	11.4	27.8	30.8	1.2	0.7	1.3	9.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2879	0.0874	0.0701	0.0516	0.0388	0.0060	5.04	14.48

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|140|SED|GS|02 **Sample No.:** L2140929-03

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|140|SED|GS|02

Sample Number: L2140929-03

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 46.07
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
46.07	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	99.9
		#18	0.51	0.00	98.8
		#35	2.38	0.00	93.7
		#40	1.00	0.00	91.5
		#60	4.10	0.00	82.6
		#120	5.27	0.00	71.2
		#200	8.21	0.00	53.3
		#230	4.33	0.00	43.9

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 43.9
Weight of hydrometer sample =40.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0070	1.0073	0.0132	7.0	14.4	0.0356	12.9
5.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0226	12.0
15.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0131	11.1
30.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0093	11.1
60.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0066	10.2
240.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0033	9.3
1440.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0014	9.3

Fractional Components

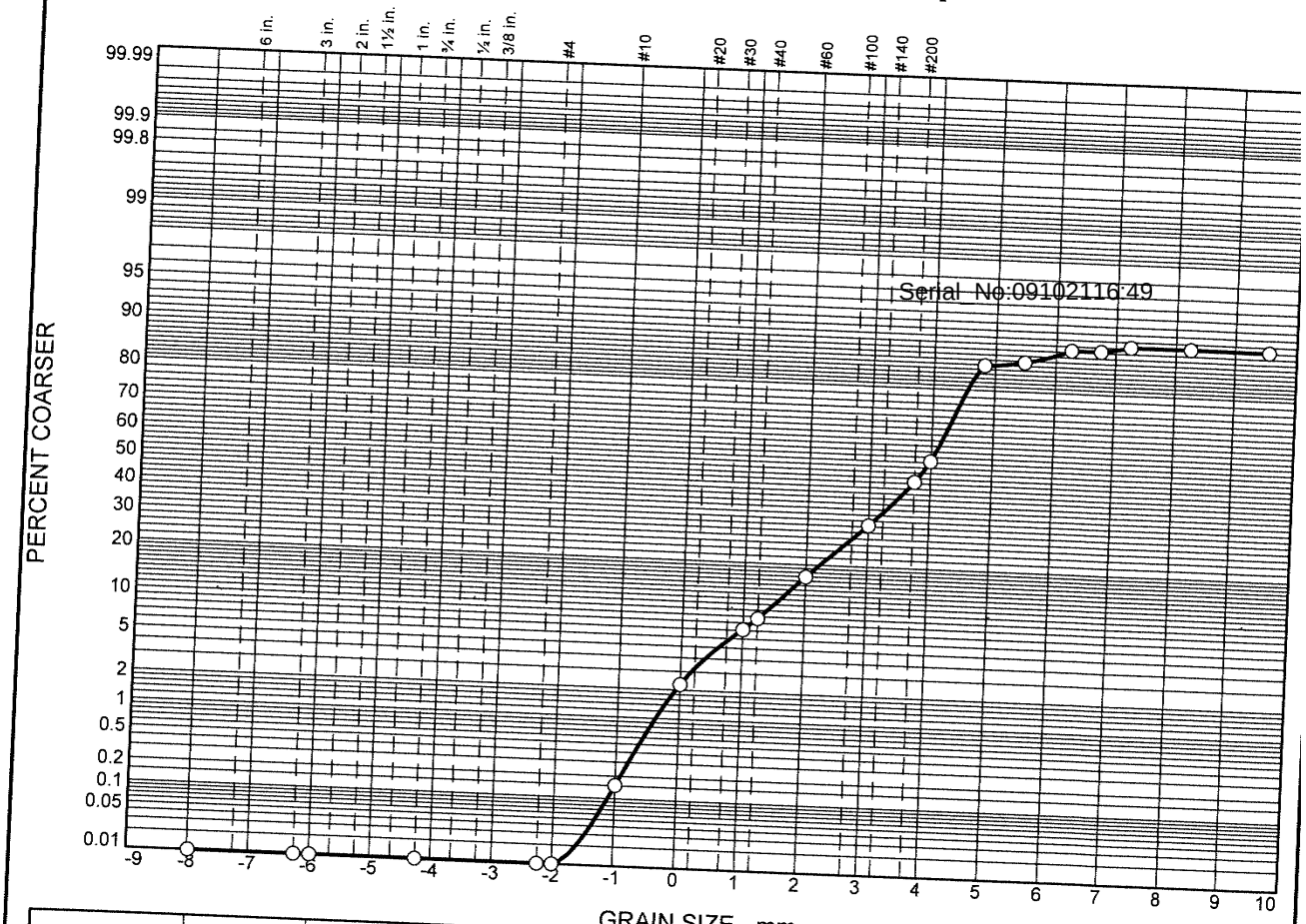
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.1	5.1	11.1	11.4	27.8	56.5	30.8	1.2	0.7	1.3	34.0	9.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0060	0.0388	0.0438	0.0516	0.0594	0.0701	0.0874	0.2115	0.2879	0.3856	0.5650

Fineness Modulus	C_u	C_c
0.45	14.48	5.04

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	2.1	4.8	9.9	15.4	24.4	29.2	2.3	1.3	0.5	9.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2776	0.0959	0.0724	0.0507	0.0367	0.0069	3.89	13.94

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

Remarks:

○ **Source:** 3664|2021|WTG|142|SED|GS|01 **Sample No.:** L2140929-04

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|142|SED|GS|01

Sample Number: L2140929-04

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 46.42
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
46.42	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.07	0.00	99.8
		#18	0.98	0.00	97.7
		#35	2.25	0.00	92.9
		#40	0.74	0.00	91.3
		#60	3.83	0.00	83.0
		#120	7.15	0.00	67.6
		#200	7.54	0.00	51.4
		#230	3.60	0.00	43.6

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 43.6
Weight of hydrometer sample =41.21
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0080	1.0083	0.0132	8.0	14.2	0.0353	14.1
5.00	22.4	1.0075	1.0078	0.0132	7.5	14.3	0.0224	13.3
15.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0131	10.7
30.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0093	10.7
60.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0066	9.9
240.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0033	9.9
1440.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0013	9.9

Fractional Components

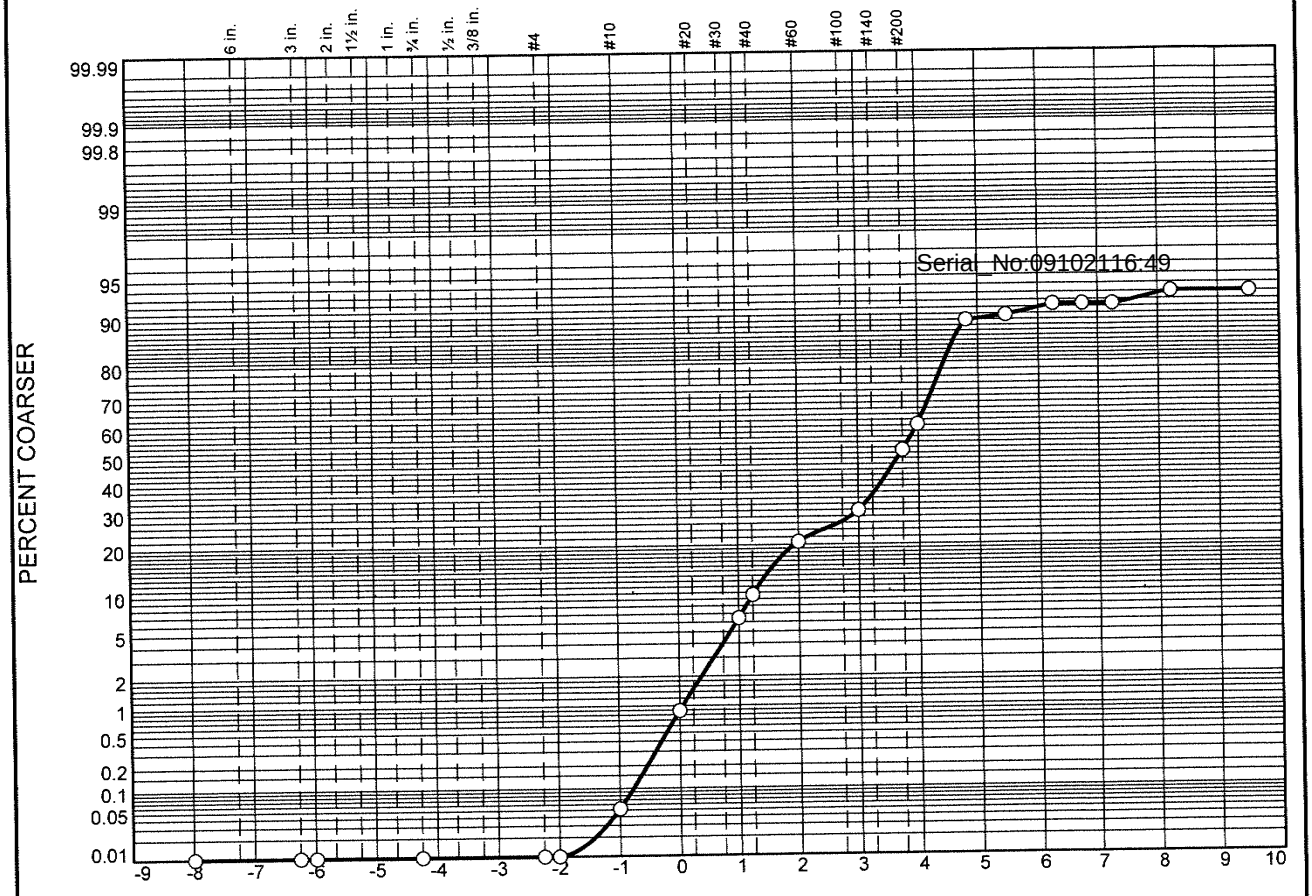
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	2.1	4.8	9.9	15.4	24.4	56.6	29.2	2.3	1.3	0.5	33.3	9.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0069	0.0367	0.0424	0.0507	0.0592	0.0724	0.0959	0.2141	0.2776	0.3816	0.6560

Fineness Modulus	C_u	C_c
0.49	13.94	3.89

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.8	5.6	14.2	9.2	31.0	28.3	1.7	0.5	1.3	7.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3350	0.0943	0.0767	0.0544	0.0415	0.0210	1.49	4.48

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|146|SED|GS|01 **Sample No.:** L2140929-05

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|146|SED|GS|01

Sample Number: L2140929-05

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 57.49
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
57.49	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	99.9
		#18	0.48	0.00	99.1
		#35	3.20	0.00	93.5
		#40	1.82	0.00	90.4
		#60	6.39	0.00	79.3
		#120	5.26	0.00	70.1
		#200	12.19	0.00	48.9
		#230	5.35	0.00	39.6

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 39.6
Weight of hydrometer sample =39.41
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0358	11.0
5.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0227	10.2
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	8.6
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	8.6
60.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0066	8.6
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	7.0
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	7.0

Alpha Analytical

Fractional Components

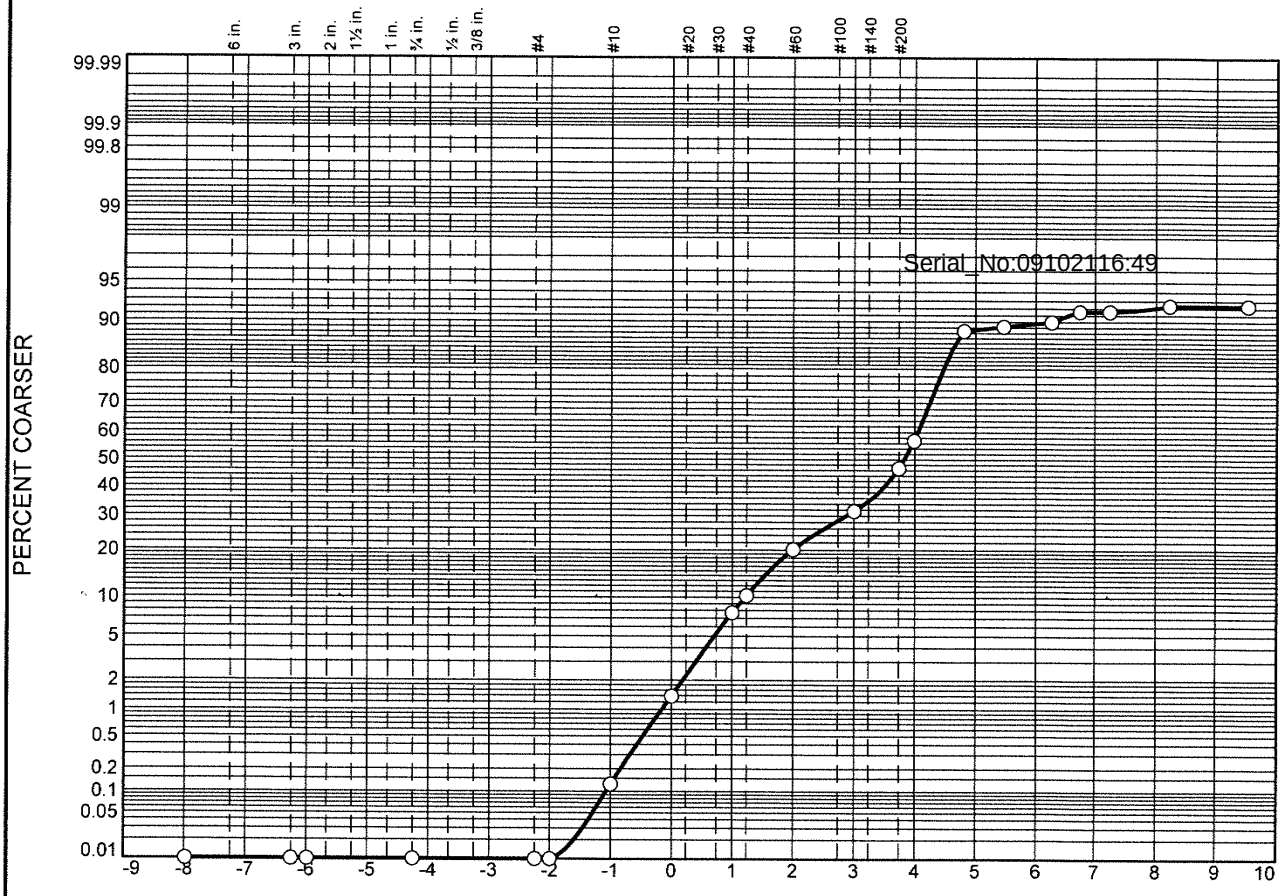
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.8	5.6	14.2	9.2	31.0	60.8	28.3	1.7	0.5	1.3	31.8	7.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0210	0.0415	0.0463	0.0544	0.0634	0.0767	0.0943	0.2617	0.3350	0.4176	0.5520

Fineness Modulus	C_u	C_c
0.48	4.48	1.49

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.3	6.3	12.4	11.4	26.0	31.1	1.1	1.8	0.6	7.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3277	0.0884	0.0705	0.0526	0.0403	0.0130	2.41	6.80

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|146|SED|GS|01 **Sample No.:** L2140929-06

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|146|SED|GS|01

Sample Number: L2140929-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 39.75
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
39.75	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.05	0.00	99.9
		#18	0.50	0.00	98.6
		#35	2.51	0.00	92.3
		#40	1.02	0.00	89.7
		#60	3.92	0.00	79.9
		#120	4.54	0.00	68.5
		#200	6.04	0.00	53.3
		#230	4.05	0.00	43.1

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 43.1
Weight of hydrometer sample =43.45
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0070	1.0073	0.0132	7.0	14.4	0.0356	11.6
5.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0226	10.8
15.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0131	10.1
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	8.5
60.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0066	8.5
240.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0033	7.7
1440.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0014	7.7

Fractional Components

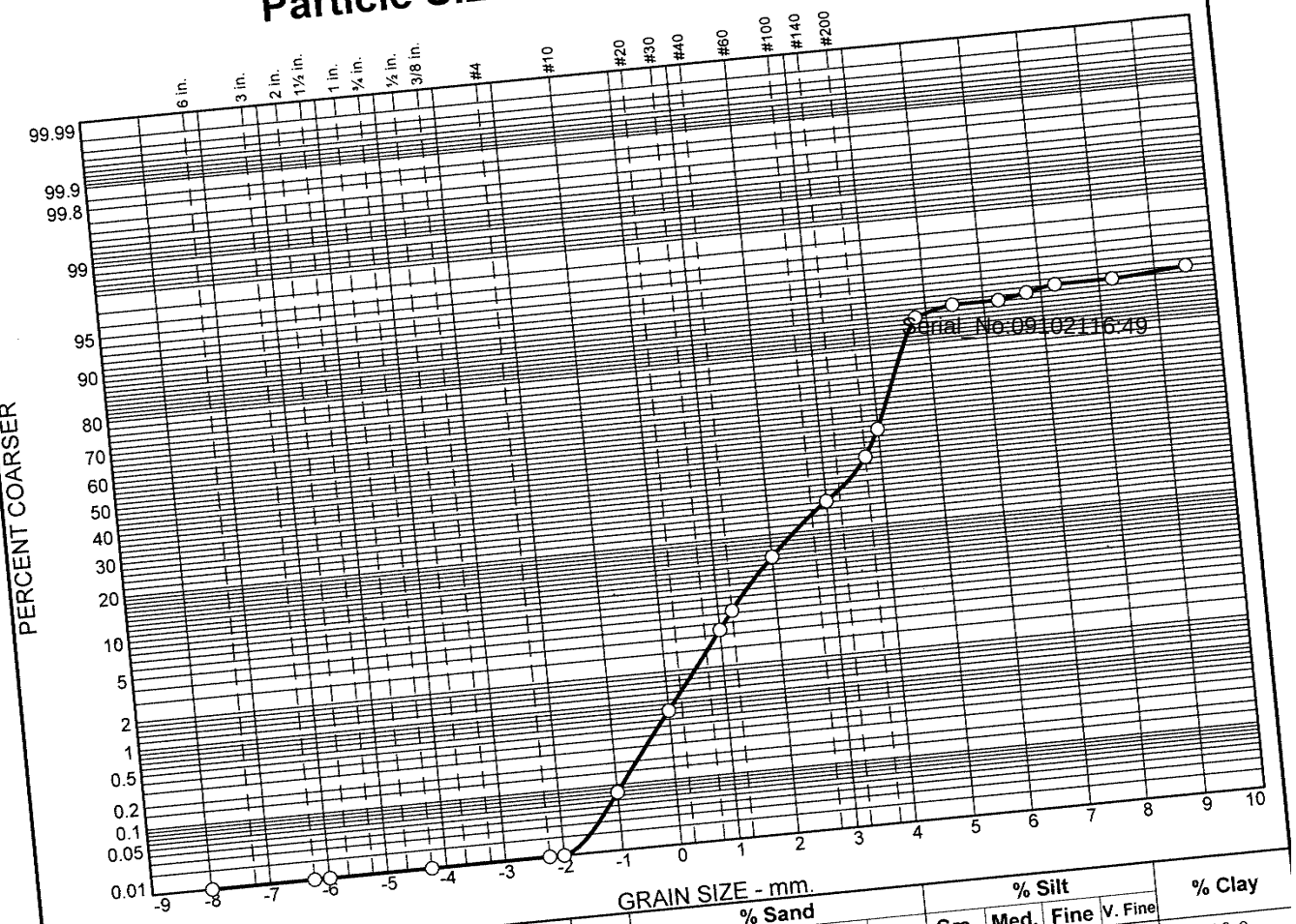
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.3	6.3	12.4	11.4	26.0	57.4	31.1	1.1	1.8	0.6	34.6	7.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0130	0.0403	0.0450	0.0526	0.0603	0.0705	0.0884	0.2517	0.3277	0.4317	0.6144

Fineness Modulus	C_u	C_c
0.51	6.80	2.41

Serial_No:09102116:49

Particle Size Distribution Report



% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
		0.0	0.1	0.7	3.6	10.1	13.9	24.8	33.9	1.1	1.4	0.4	10.0

LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
		0.2436	0.0796	0.0655	0.0499	0.0374	0.0067	4.64	11.80

Material Description	USCS	AASHTO

Project No. **Client:**

Project:

Source: 3664|2021|WTG|152|SED|GS|01 **Sample No.:** L2140929-07

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|152|SED|GS|01

Sample Number: L2140929-07

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 38.41
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
38.41	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	99.9
		#18	0.26	0.00	99.2
		#35	1.40	0.00	95.6
		#40	0.72	0.00	93.7
		#60	3.17	0.00	85.5
		#120	5.31	0.00	71.6
		#200	5.46	0.00	57.4
		#230	3.86	0.00	47.4

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 47.4
Weight of hydrometer sample =40.57
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0070	1.0073	0.0132	7.0	14.4	0.0356	13.7
5.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0227	11.8
15.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0131	11.8
30.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0093	10.9
60.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0066	10.0
240.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0033	10.0
1440.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0014	9.0

Fractional Components

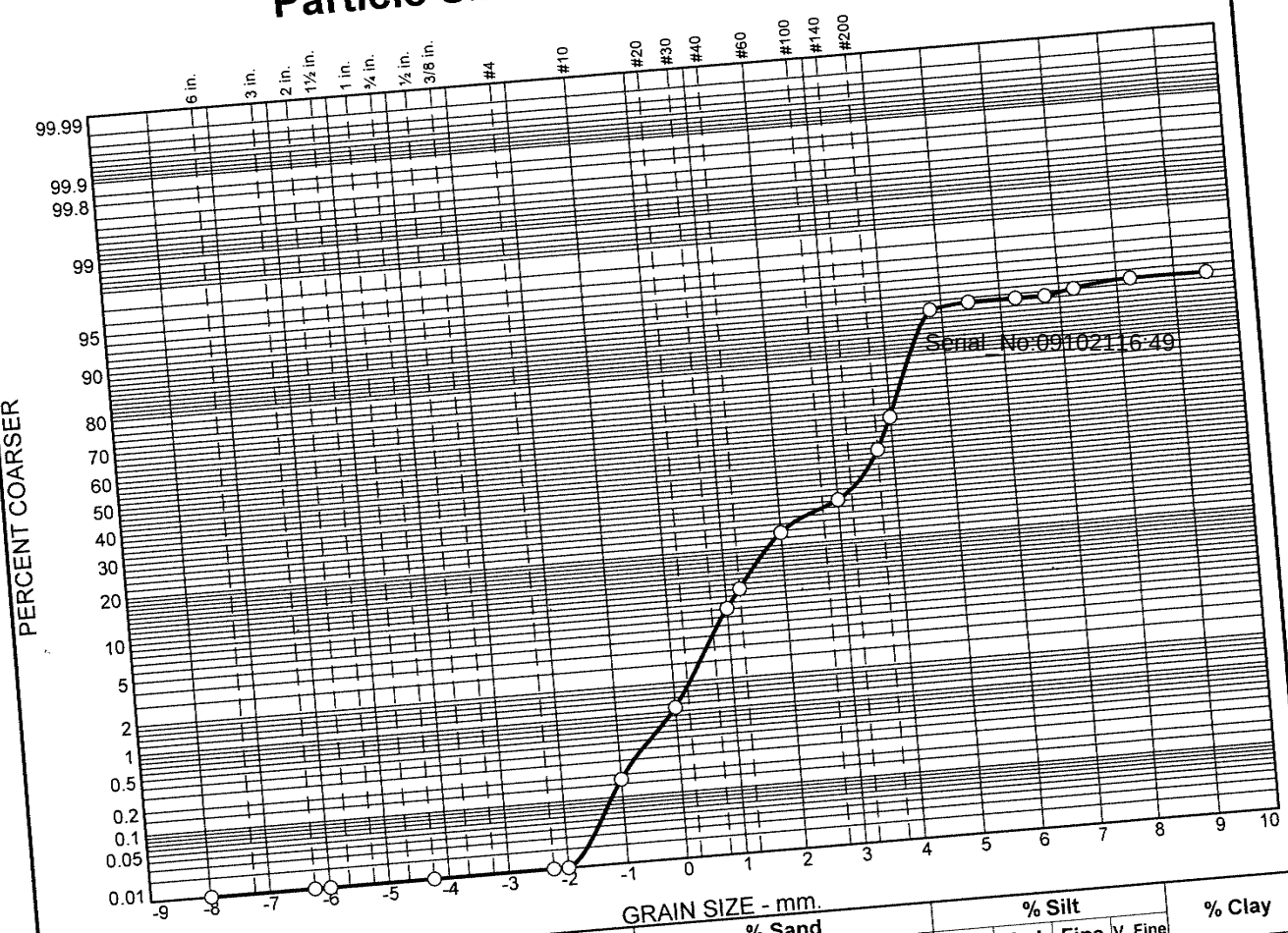
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	3.6	10.1	13.9	24.8	53.1	33.9	1.1	1.4	0.4	36.8	10.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0067	0.0374	0.0424	0.0499	0.0570	0.0655	0.0796	0.1884	0.2436	0.3271	0.4725

Fineness Modulus	C_u	C_c
0.39	11.80	4.64

Serial_No:09102116:49

Particle Size Distribution Report



% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
		0.0	0.2	0.9	7.1	15.2	9.0	29.2	28.3	0.4	0.3	1.2	8.2

LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
		0.3563	0.0913	0.0741	0.0557	0.0425	0.0289	1.18	3.16

Material Description	USCS	AASHTO

Project No. **Client:**

Project:

Source: 3664\|2021\|WTG\|155\|SED\|GS\|01 **Sample No.:** L2140929-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|155|SED|GS|01

Sample Number: L2140929-08

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 57.87
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
57.87	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.10	0.00	99.8
		#18	0.54	0.00	98.9
		#35	4.08	0.00	91.8
		#40	1.71	0.00	88.9
		#60	7.14	0.00	76.6
		#120	5.18	0.00	67.6
		#200	9.77	0.00	50.7
		#230	6.80	0.00	39.0

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 39.0
Weight of hydrometer sample =40.79
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0358	10.5
5.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0227	9.7
15.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0131	9.7
30.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0093	9.7
60.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0066	8.9
240.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0033	8.2
1440.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0014	8.2

Fractional Components

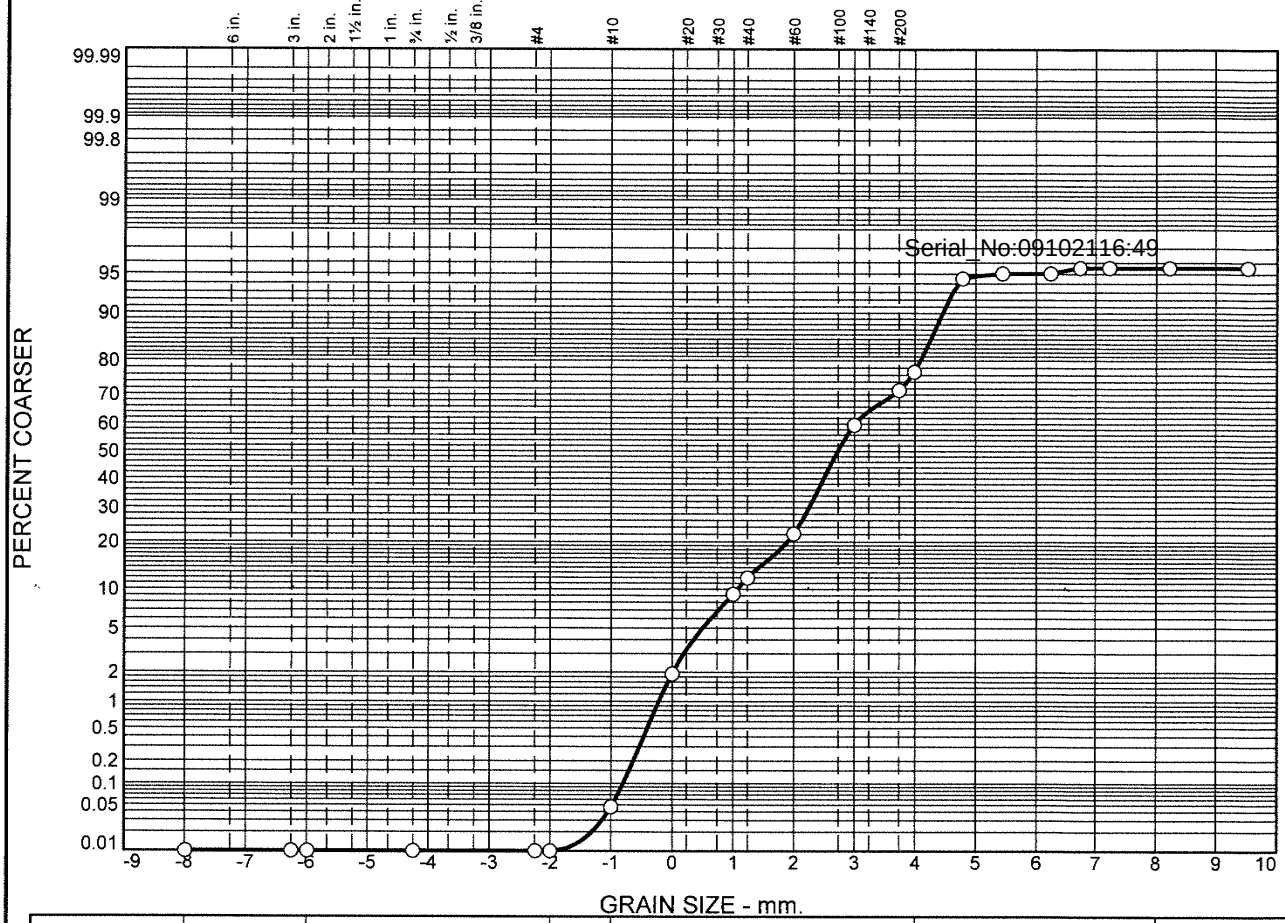
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.9	7.1	15.2	9.0	29.2	61.4	28.3	0.4	0.3	1.2	30.2	8.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0289	0.0425	0.0475	0.0557	0.0639	0.0741	0.0913	0.2910	0.3563	0.4506	0.6097

Fineness Modulus	C_u	C_c
0.55	3.16	1.18

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	1.9	7.3	12.9	37.4	17.7	17.6	0.2	0.6	0.0	4.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3482	0.1769	0.1508	0.0799	0.0522	0.0455	0.79	3.89

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|096|SED|GS|01 **Sample No.:** L2140929-09

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|096|SED|GS|01

Sample Number: L2140929-09

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 21.28
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
21.28	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.01	0.00	100.0
		#18	0.40	0.00	98.1
		#35	1.55	0.00	90.8
		#40	0.58	0.00	88.1
		#60	2.17	0.00	77.9
		#120	7.96	0.00	40.5
		#200	2.53	0.00	28.6
		#230	1.17	0.00	23.1

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 23.1
Weight of hydrometer sample =36.00
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0363	5.5
5.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0230	5.0
15.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0133	5.0
30.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0094	4.4
60.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0067	4.4
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	4.4
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	4.4

Fractional Components

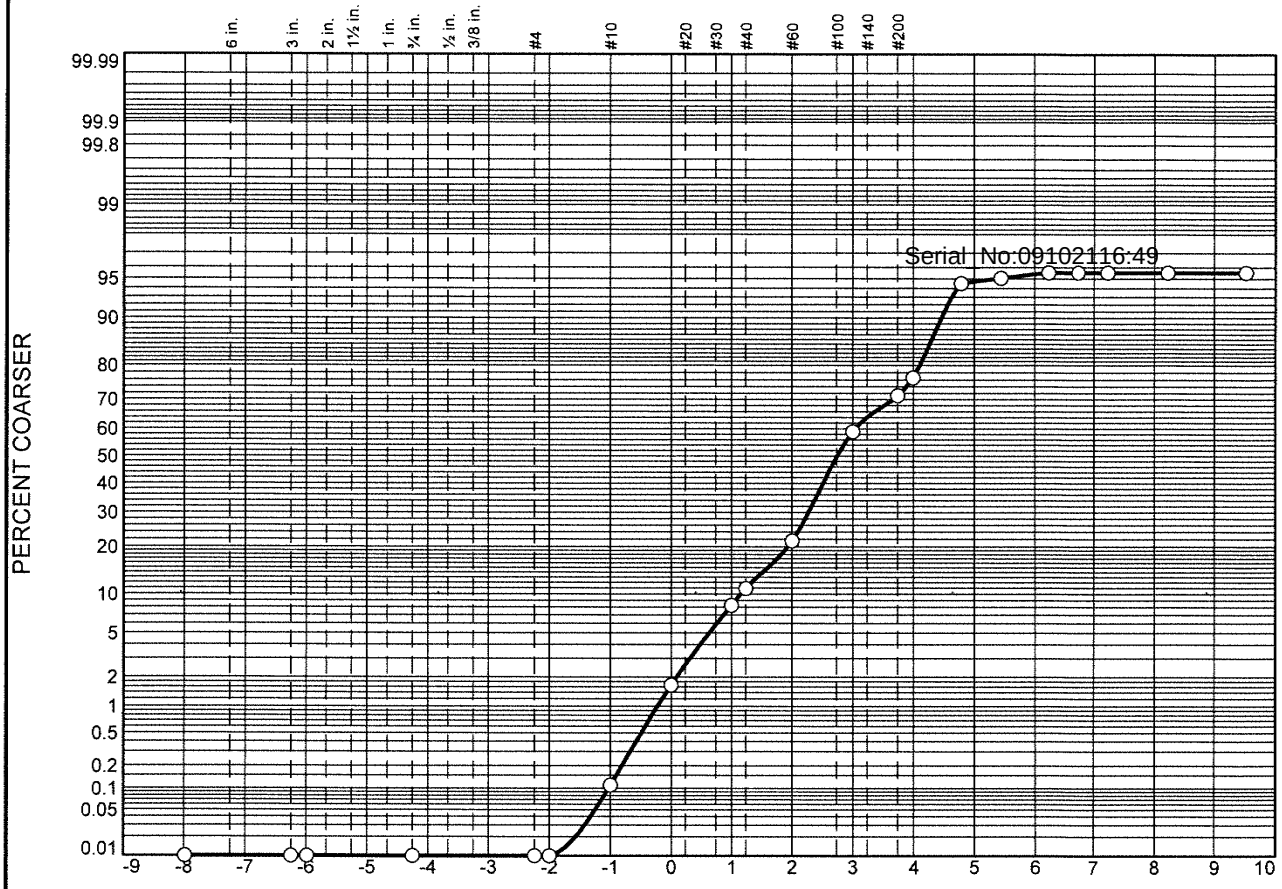
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	1.9	7.3	12.9	37.4	17.7	77.2	17.6	0.2	0.6	0.0	18.4	4.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0246	0.0455	0.0522	0.0586	0.0799	0.1235	0.1508	0.1769	0.2683	0.3482	0.4761	0.7075

Fineness Modulus	C_u	C_c
0.76	3.89	0.79

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.6	6.6	13.2	37.4	18.0	17.8	0.7	0.2		4.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3288	0.1751	0.1490	0.0790	0.0520	0.0454	0.79	3.85

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|096|SED|GS|01 **Sample No.:** WG1540287-1

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|096|SED|GS|01

Sample Number: WG1540287-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 18.12
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
18.12	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.02	0.00	99.9
		#18	0.28	0.00	98.3
		#35	1.20	0.00	91.7
		#40	0.48	0.00	89.1
		#60	1.92	0.00	78.5
		#120	6.77	0.00	41.1
		#200	2.23	0.00	28.8
		#230	0.98	0.00	23.4

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 23.4
Weight of hydrometer sample =36.56
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0363	5.5
5.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0230	4.9
15.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0134	4.4
30.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0094	4.4
60.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0067	4.4
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	4.4
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	4.4

Fractional Components

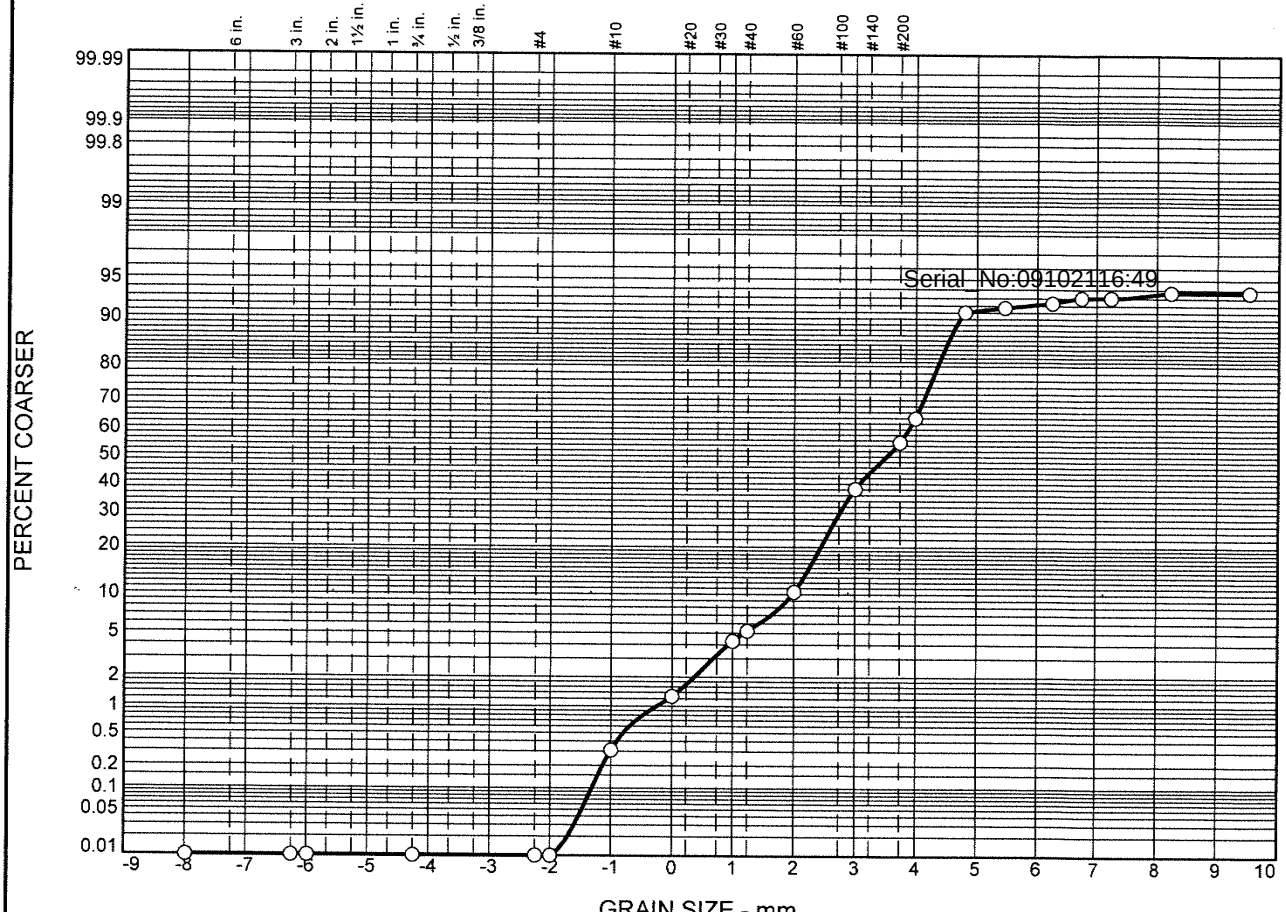
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.6	6.6	13.2	37.4	18.0	76.8	17.8	0.7	0.2		18.7	4.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0242	0.0454	0.0520	0.0582	0.0790	0.1214	0.1490	0.1751	0.2621	0.3288	0.4495	0.6453

Fineness Modulus	C_u	C_c
0.73	3.85	0.79

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	1.0	3.0	6.1	27.7	26.3	26.9	0.9	0.8	0.5	6.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2098	0.1191	0.0869	0.0572	0.0441	0.0378	0.73	3.15

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|106|SED|GS|01 **Sample No.:** L2140929-10

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|106|SED|GS|01

Sample Number: L2140929-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 35.49
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
35.49	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.11	0.00	99.7
		#18	0.34	0.00	98.7
		#35	1.07	0.00	95.7
		#40	0.33	0.00	94.8
		#60	1.83	0.00	89.6
		#120	9.84	0.00	61.9
		#200	6.08	0.00	44.8
		#230	3.07	0.00	36.1

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.1
Weight of hydrometer sample =44.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0358	9.0
5.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0227	8.3
15.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0132	7.6
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	7.0
60.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0066	7.0
240.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0033	6.3
1440.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0014	6.3

Fractional Components

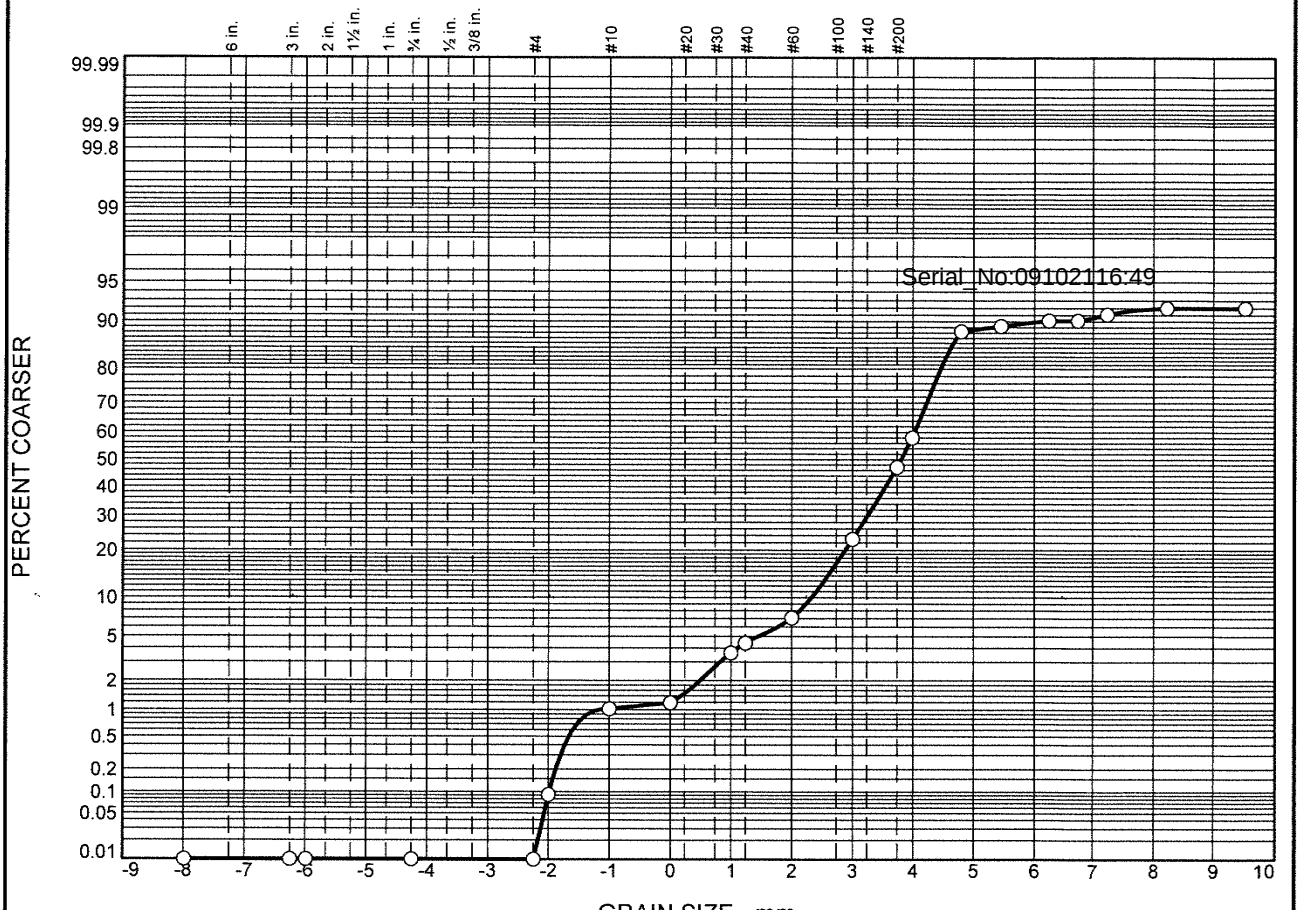
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	1.0	3.0	6.1	27.7	26.3	64.1	26.9	0.9	0.8	0.5	29.1	6.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0378	0.0441	0.0488	0.0572	0.0676	0.0869	0.1191	0.1839	0.2098	0.2549	0.4413

Fineness Modulus	C_u	C_c
0.42	3.15	0.73

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.9	0.2	2.4	3.5	15.8	35.7	30.0	1.3	0.7	1.3	8.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1591	0.0854	0.0714	0.0534	0.0407	0.0145	2.30	5.90

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|113|SED|GS|01 **Sample No.:** L2140929-11

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|113|SED|GS|01

Sample Number: L2140929-11

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 54.66
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
54.66	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.05	0.00	99.9
		#10	0.51	0.00	99.0
		#18	0.09	0.00	98.8
		#35	1.33	0.00	96.4
		#40	0.43	0.00	95.6
		#60	1.46	0.00	92.9
		#120	8.67	0.00	77.1
		#200	13.23	0.00	52.9
		#230	5.95	0.00	42.0

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.0
Weight of hydrometer sample =36.32
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0359	11.7
5.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0228	10.8
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	9.9
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	9.9
60.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0066	8.9
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	8.0
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	8.0

Fractional Components

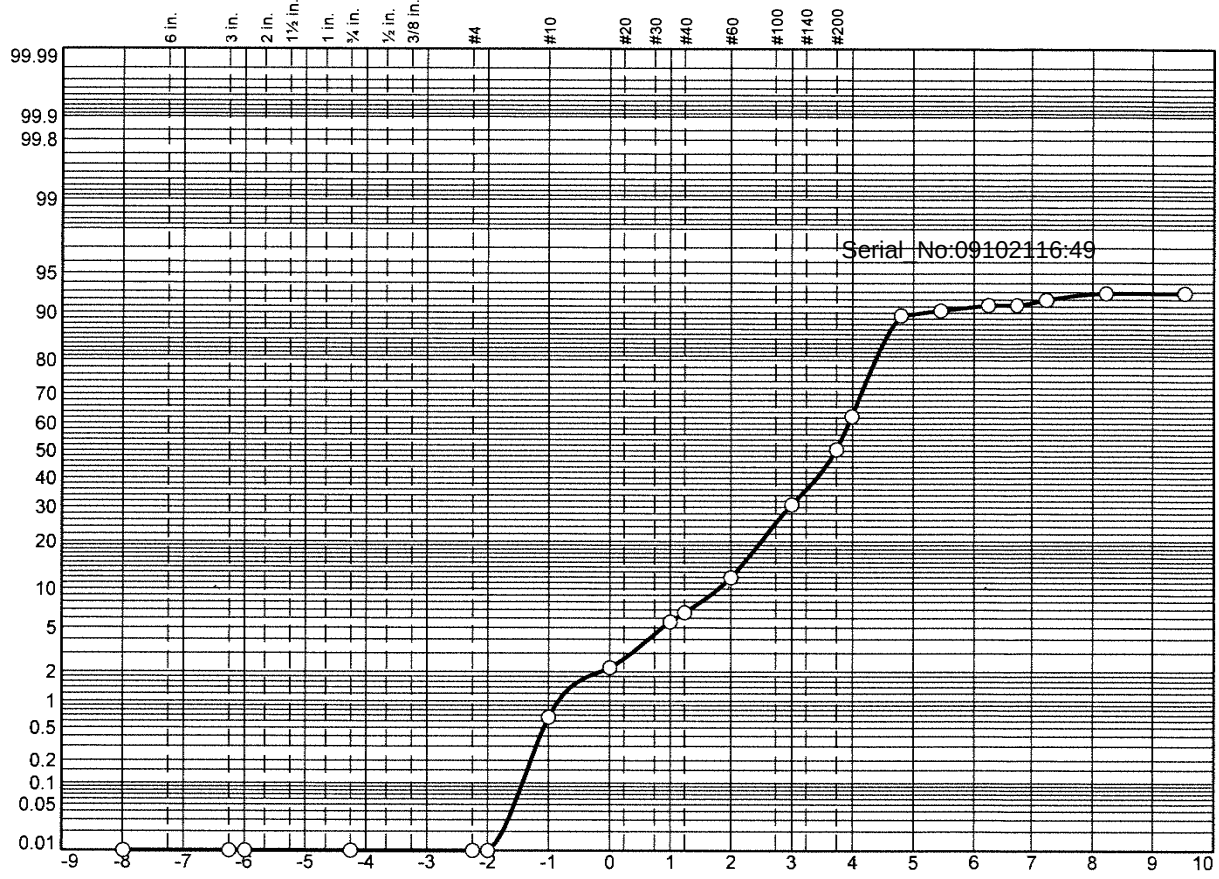
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.9	0.2	2.4	3.5	15.8	35.7	57.6	30.0	1.3	0.7	1.3	33.3	8.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0145	0.0407	0.0455	0.0534	0.0613	0.0714	0.0854	0.1355	0.1591	0.1992	0.3683

Fineness Modulus	C_u	C_c
0.27	5.90	2.30

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.7	1.5	3.4	6.4	18.9	32.3	26.6	1.2	0.5	1.2	7.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2141	0.0936	0.0757	0.0568	0.0431	0.0280	1.23	3.35

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|114|SED|GS|01 **Sample No.:** L2140929-12

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|114|SED|GS|01

Sample Number: L2140929-12

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 37.92
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
37.92	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.25	0.00	99.3
		#18	0.58	0.00	97.8
		#35	1.29	0.00	94.4
		#40	0.39	0.00	93.4
		#60	2.03	0.00	88.0
		#120	7.16	0.00	69.1
		#200	7.46	0.00	49.5
		#230	4.57	0.00	37.4

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 37.4
Weight of hydrometer sample =36.22
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0359	10.5
5.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0228	9.6
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	8.8
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	8.8
60.00	22.4	1.0045	1.0049	0.0132	4.5	15.1	0.0066	8.1
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	7.2
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	7.2

Fractional Components

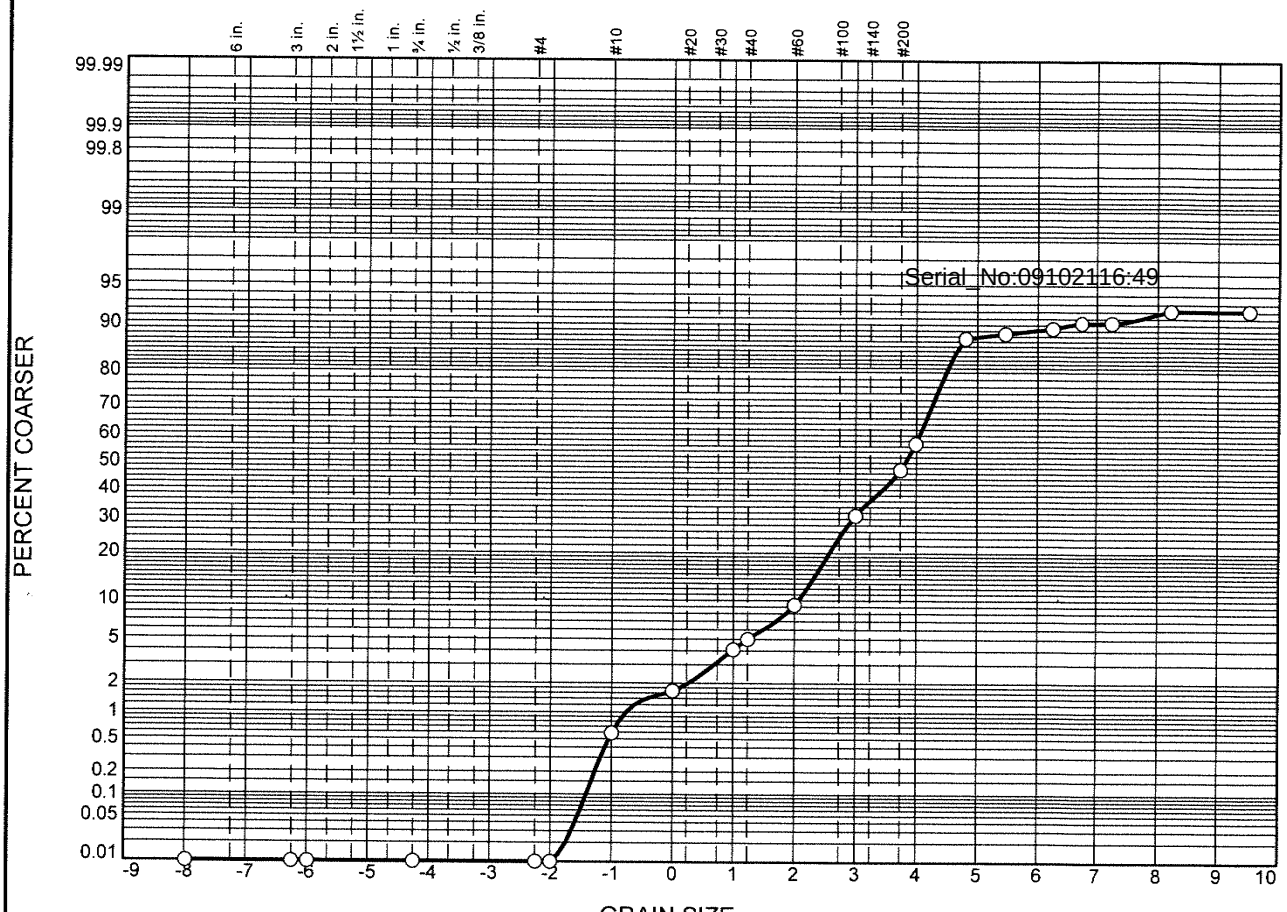
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.7	1.5	3.4	6.4	18.9	32.3	62.5	26.6	1.2	0.5	1.2	29.5	7.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0280	0.0431	0.0483	0.0568	0.0653	0.0757	0.0936	0.1767	0.2141	0.2874	0.5475

Fineness Modulus	C_u	C_c
0.41	3.35	1.23

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	1.1	2.4	5.2	21.8	26.3	30.5	1.2	1.2	1.4	8.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1943	0.0917	0.0708	0.0523	0.0395	0.0110	2.72	8.37

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|116|SED|GS|01 **Sample No.:** L2140929-13

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|116|SED|GS|01

Sample Number: L2140929-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 49.68
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
49.68	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.29	0.00	99.4
		#18	0.54	0.00	98.3
		#35	1.20	0.00	95.9
		#40	0.46	0.00	95.0
		#60	2.11	0.00	90.7
		#120	10.83	0.00	68.9
		#200	8.03	0.00	52.8
		#230	4.81	0.00	43.1

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 43.1
Weight of hydrometer sample =37.90
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0358	12.4
5.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0227	11.5
15.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0132	10.6
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	9.7
60.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0066	9.7
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	7.9
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	7.9

Fractional Components

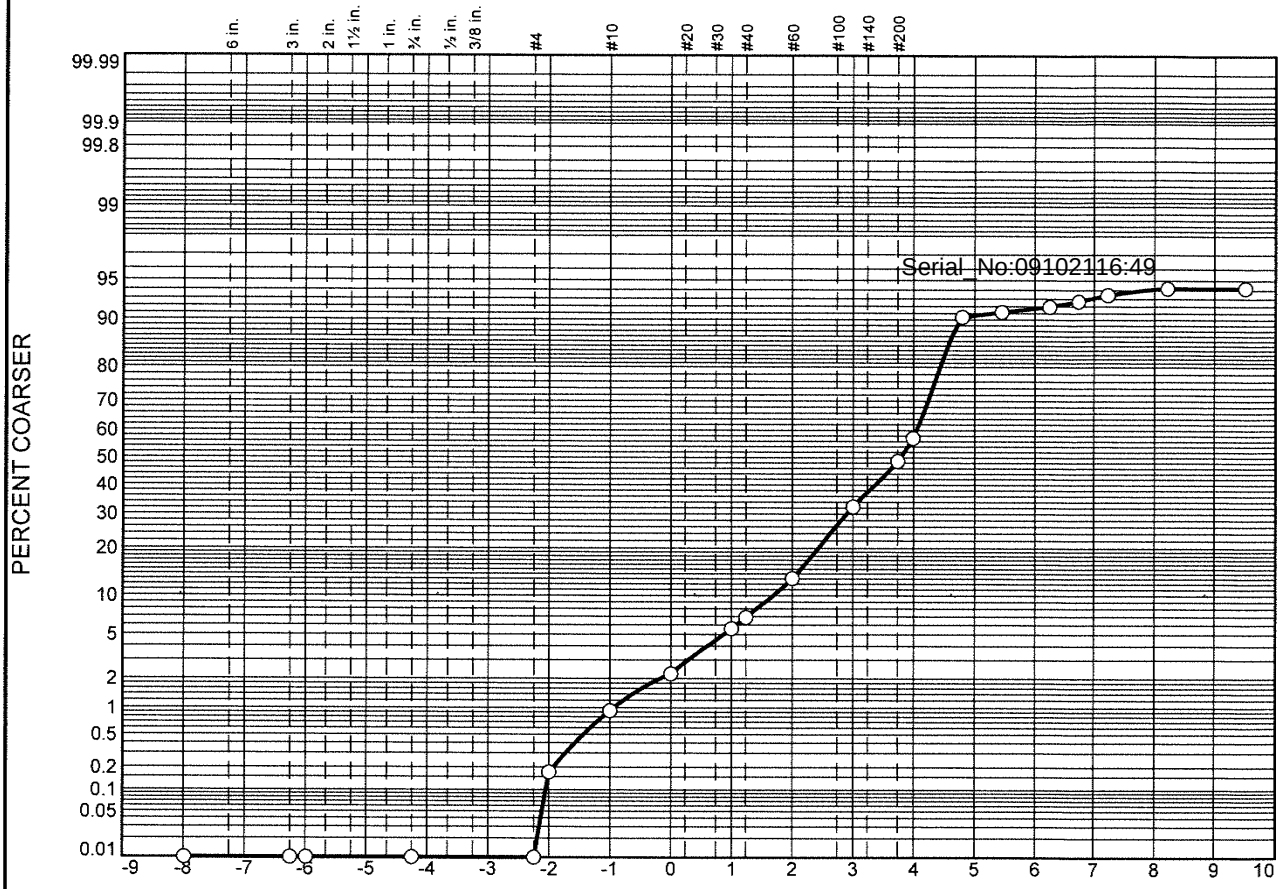
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	1.1	2.4	5.2	21.8	26.3	56.8	30.5	1.2	1.2	1.4	34.3	8.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0110	0.0395	0.0445	0.0523	0.0602	0.0708	0.0917	0.1676	0.1943	0.2391	0.4259

Fineness Modulus	C_u	C_c
0.36	8.37	2.72

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.7	1.3	3.4	7.5	19.3	25.2	33.0	1.1	1.4	1.0	5.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2264	0.0970	0.0725	0.0530	0.0423	0.0366	0.79	2.65

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|117|SED|GS|01 **Sample No.:** L2140929-14

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|117|SED|GS|01

Sample Number: L2140929-14

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 58.14
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
58.14	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.10	0.00	99.8
		#10	0.44	0.00	99.1
		#18	0.75	0.00	97.8
		#35	1.96	0.00	94.4
		#40	0.76	0.00	93.1
		#60	3.59	0.00	86.9
		#120	11.21	0.00	67.6
		#200	9.48	0.00	51.3
		#230	4.92	0.00	42.9

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.9
Weight of hydrometer sample =45.23
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0359	9.6
5.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0228	8.9
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	8.1
30.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0094	7.3
60.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0067	6.6
240.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0034	5.8
1440.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0014	5.8

Fractional Components

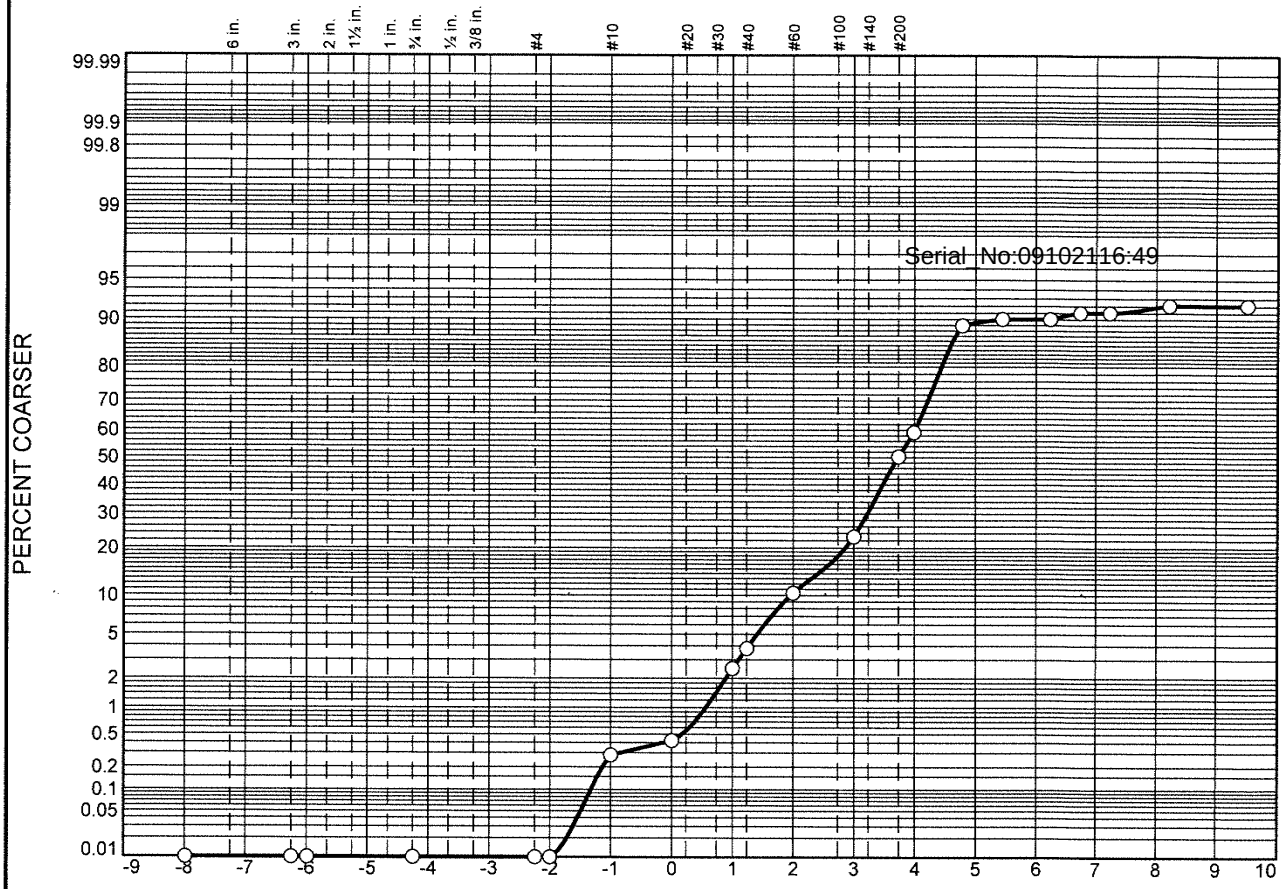
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.7	1.3	3.4	7.5	19.3	25.2	56.7	33.0	1.1	1.4	1.0	36.5	5.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0366	0.0423	0.0462	0.0530	0.0604	0.0725	0.0970	0.1853	0.2264	0.3098	0.5462

Fineness Modulus	C_u	C_c
0.44	2.65	0.79

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.1	2.1	7.8	12.8	36.5	29.8	0.6	1.0	0.8	8.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1756	0.0898	0.0753	0.0536	0.0414	0.0232	1.38	3.87

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|120|SED|GS|01 **Sample No.:** L2140929-15

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|120|SED|GS|01

Sample Number: L2140929-15

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 42.72
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
42.72	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.12	0.00	99.7
		#18	0.06	0.00	99.6
		#35	0.88	0.00	97.5
		#40	0.56	0.00	96.2
		#60	2.80	0.00	89.7
		#120	5.43	0.00	76.9
		#200	11.61	0.00	49.8
		#230	3.82	0.00	40.8

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 40.8
Weight of hydrometer sample =31.59
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0363	11.0
5.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0230	10.0
15.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0133	10.0
30.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0094	9.0
60.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0067	9.0
240.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0034	7.9
1440.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0014	7.9

Fractional Components

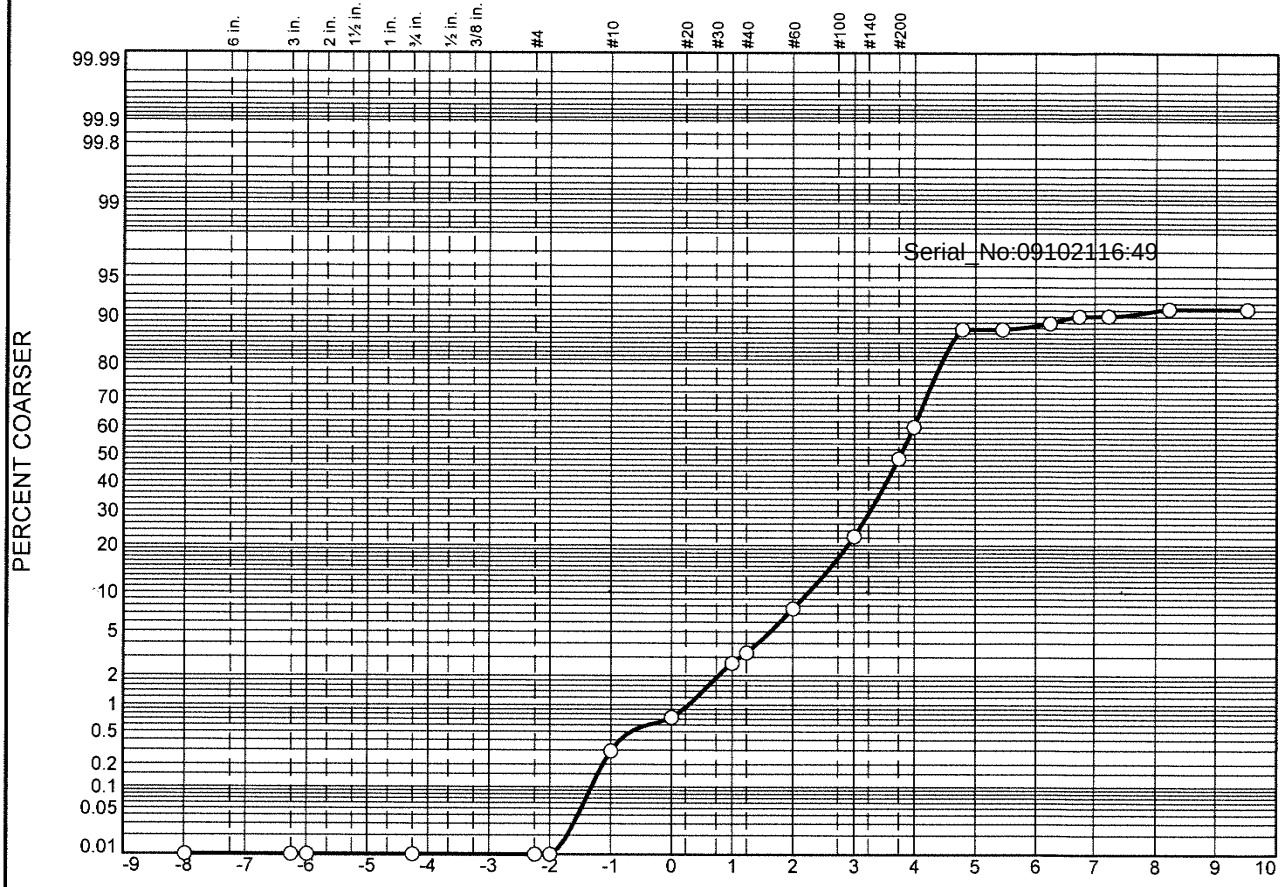
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.1	2.1	7.8	12.8	36.5	59.3	29.8	0.6	1.0	0.8	32.2	8.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0232	0.0414	0.0459	0.0536	0.0621	0.0753	0.0898	0.1375	0.1756	0.2566	0.3776

Fineness Modulus	C_u	C_c
0.28	3.87	1.38

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.4	1.9	5.0	14.8	38.4	27.0	0.7	1.6	0.9	9.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1613	0.0862	0.0734	0.0548	0.0409	0.0099	3.53	8.74

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|120|SED|GS|02 **Sample No.:** L2140929-16

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|120|SED|GS|02

Sample Number: L2140929-16

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 27.36
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
27.36	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.7
		#18	0.12	0.00	99.3
		#35	0.52	0.00	97.4
		#40	0.18	0.00	96.7
		#60	1.19	0.00	92.4
		#120	4.03	0.00	77.6
		#200	7.17	0.00	51.4
		#230	3.19	0.00	39.8

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 39.8
Weight of hydrometer sample =27.75
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0363	12.2
5.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0229	12.2
15.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0133	11.1
30.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0094	9.9
60.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0067	9.9
240.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0034	8.8
1440.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0014	8.8

Fractional Components

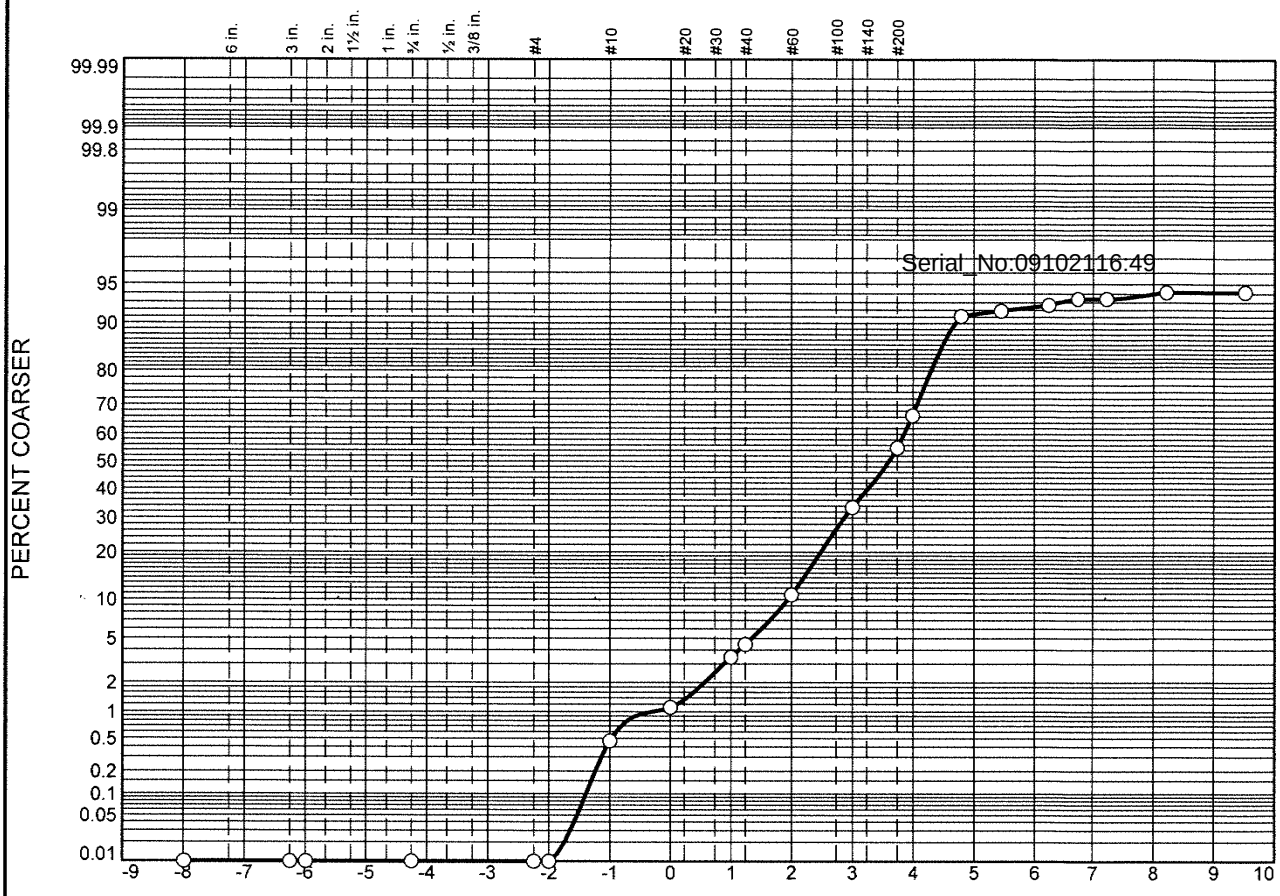
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.4	1.9	5.0	14.8	38.4	60.5	27.0	0.7	1.6	0.9	30.2	9.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0099	0.0409	0.0463	0.0548	0.0632	0.0734	0.0862	0.1341	0.1613	0.2104	0.3237

Fineness Modulus	C_u	C_c
0.25	8.74	3.53

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	0.6	2.4	7.3	22.7	33.6	24.3	1.0	1.0	0.6	6.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2093	0.1044	0.0822	0.0599	0.0457	0.0386	0.89	2.70

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|121|SED|GS|01 **Sample No.:** L2140929-17

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|121|SED|GS|01

Sample Number: L2140929-17

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 40.55
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
40.55	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.19	0.00	99.5
		#18	0.26	0.00	98.9
		#35	0.95	0.00	96.5
		#40	0.41	0.00	95.5
		#60	2.55	0.00	89.2
		#120	9.21	0.00	66.5
		#200	8.75	0.00	45.0
		#230	4.65	0.00	33.5

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 33.5
Weight of hydrometer sample =35.24
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0361	8.9
5.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0229	8.1
15.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0133	7.3
30.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0094	6.6
60.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0067	6.6
240.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0034	5.8
1440.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0014	5.8

Fractional Components

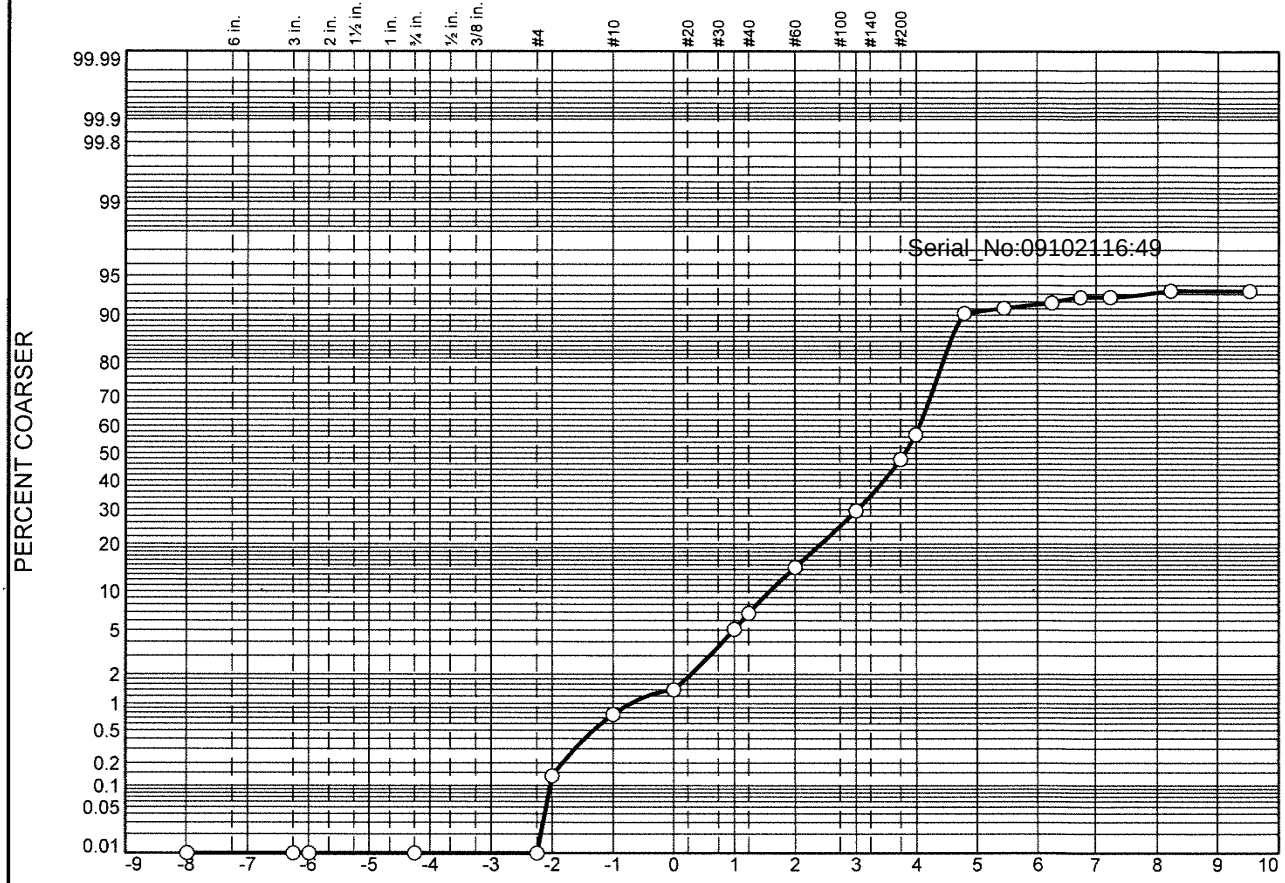
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	0.6	2.4	7.3	22.7	33.6	66.6	24.3	1.0	1.0	0.6	26.9	6.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0386	0.0457	0.0509	0.0599	0.0693	0.0822	0.1044	0.1785	0.2093	0.2601	0.3949

Fineness Modulus	C_u	C_c
0.38	2.70	0.89

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.7	0.6	3.7	9.3	15.2	27.8	33.1	1.1	1.0	0.6	6.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2419	0.0906	0.0713	0.0530	0.0422	0.0364	0.85	2.49

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|124|SED|GS|01 **Sample No.:** L2140929-18

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|124|SED|GS|01

Sample Number: L2140929-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 59.52
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
59.52	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.08	0.00	99.9
		#10	0.37	0.00	99.2
		#18	0.38	0.00	98.6
		#35	2.20	0.00	94.9
		#40	1.04	0.00	93.2
		#60	4.52	0.00	85.6
		#120	9.02	0.00	70.4
		#200	10.77	0.00	52.3
		#230	5.45	0.00	43.2

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 43.2
Weight of hydrometer sample =45.05
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x** Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0359	9.7
5.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0228	8.9
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	8.2
30.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0094	7.4
60.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0066	7.4
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	6.6
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	6.6

Fractional Components

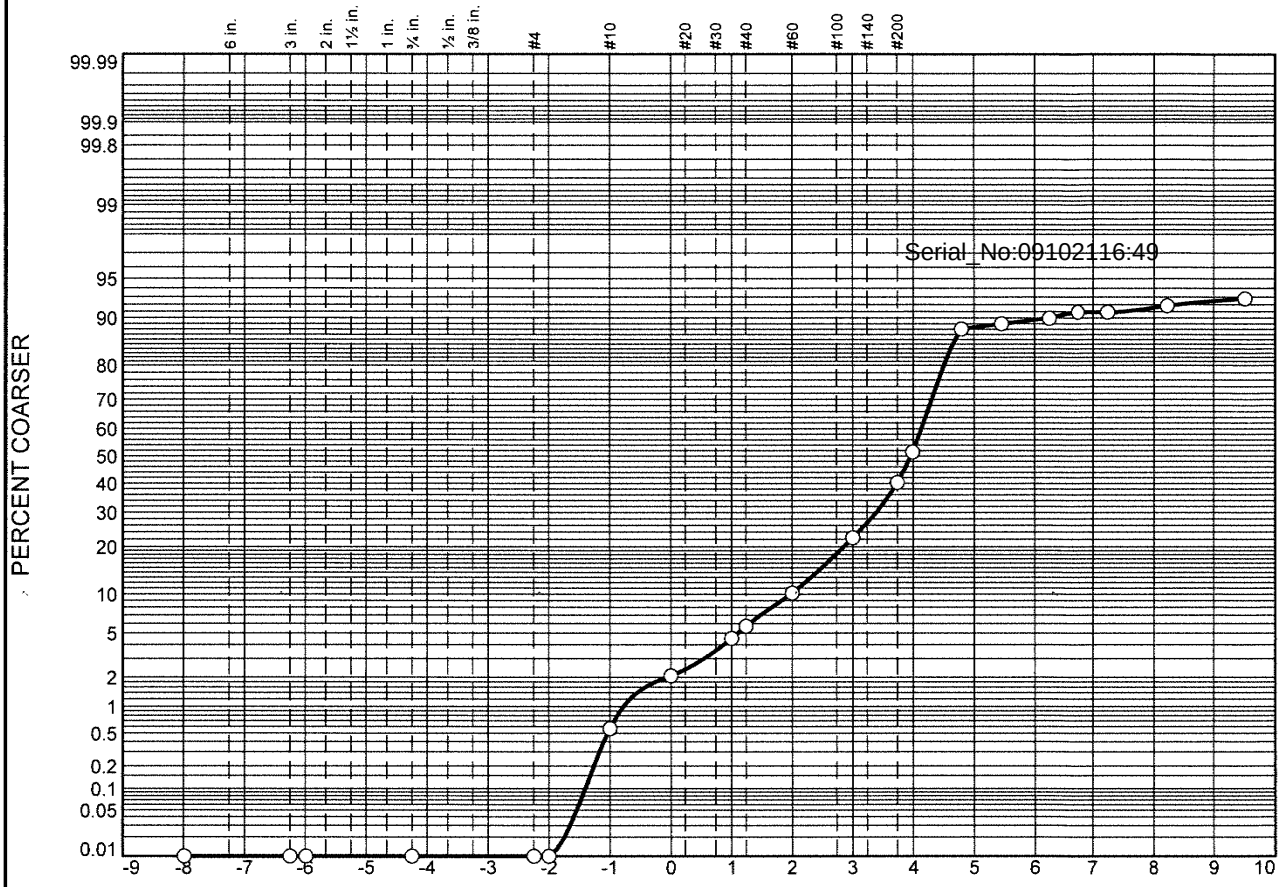
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.7	0.6	3.7	9.3	15.2	27.8	56.6	33.1	1.1	1.0	0.6	35.8	6.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0364	0.0422	0.0462	0.0530	0.0602	0.0713	0.0906	0.1858	0.2419	0.3328	0.5048

Fineness Modulus	C_u	C_c
0.42	2.49	0.85

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	1.5	2.4	5.7	12.2	29.6	36.4	1.3	1.2	0.7	8.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1778	0.0754	0.0642	0.0505	0.0397	0.0130	2.60	5.79

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|125|SED|GS|01 **Sample No.:** L2140929-19

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|125|SED|GS|01
Sample Number: L2140929-19

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 56.28
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
56.28	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.32	0.00	99.4
		#18	0.84	0.00	97.9
		#35	1.39	0.00	95.5
		#40	0.66	0.00	94.3
		#60	2.53	0.00	89.8
		#120	6.86	0.00	77.6
		#200	10.08	0.00	59.7
		#230	6.26	0.00	48.6

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 48.6
Weight of hydrometer sample =41.19
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0359	12.0
5.00	22.4	1.0055	1.0058	0.0132	5.5	14.8	0.0228	11.0
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	10.1
30.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0094	9.1
60.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0066	9.1
240.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0033	8.2
1440.00	22.4	1.0035	1.0038	0.0132	3.5	15.4	0.0014	7.2

Fractional Components

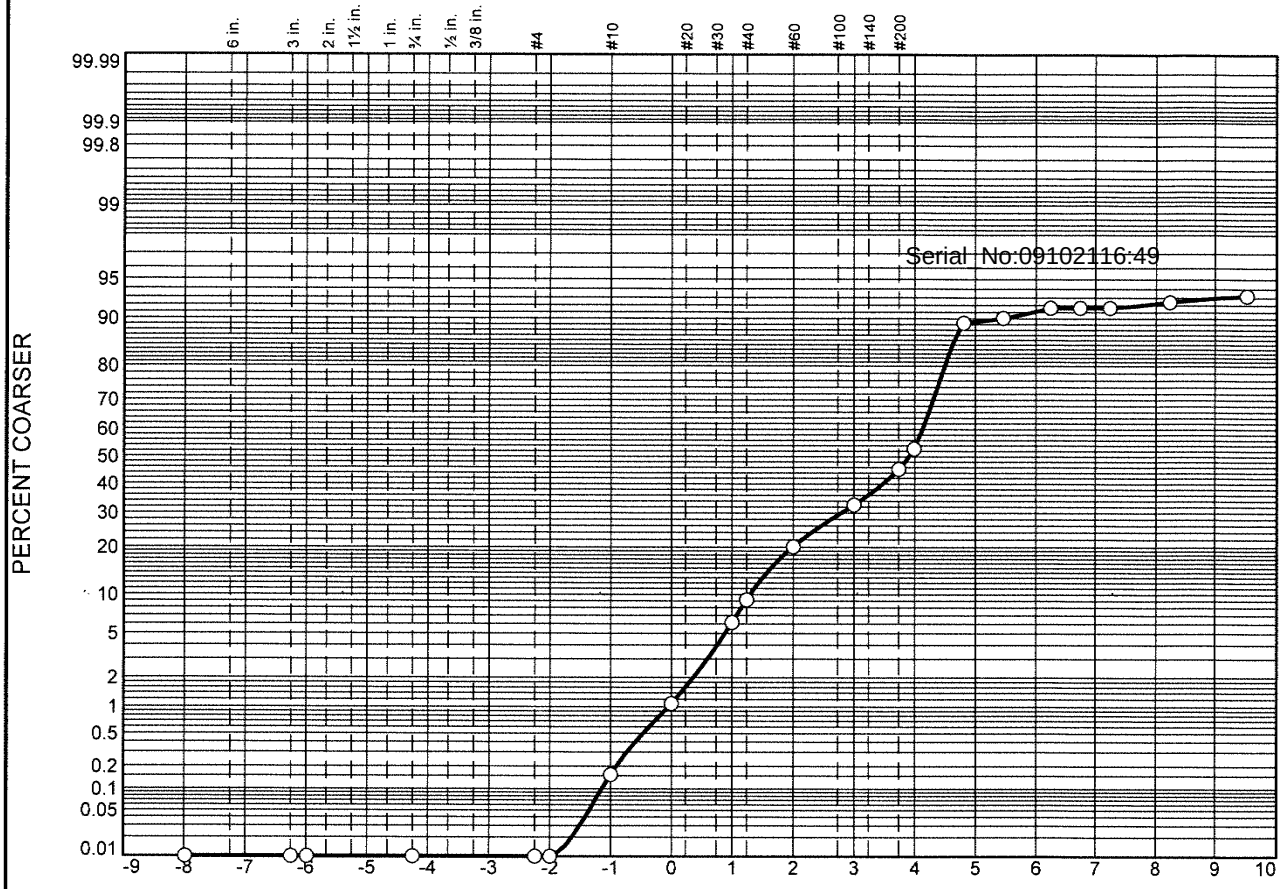
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	1.5	2.4	5.7	12.2	29.6	51.4	36.4	1.3	1.2	0.7	39.6	8.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0130	0.0397	0.0439	0.0505	0.0568	0.0642	0.0754	0.1384	0.1778	0.2547	0.4670

Fineness Modulus	C_u	C_c
0.32	5.79	2.60

Serial_No:09102116:49

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.9	5.1	13.9	12.5	20.8	36.1	1.6	0.5	0.6	7.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3223	0.0897	0.0665	0.0507	0.0406	0.0233	1.23	3.85

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|127|SED|GS|01 **Sample No.:** L2140929-20

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|127|SED|GS|01

Sample Number: L2140929-20

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 45.22
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
45.22	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.07	0.00	99.8
		#18	0.42	0.00	98.9
		#35	2.30	0.00	93.8
		#40	1.36	0.00	90.8
		#60	4.96	0.00	79.9
		#120	5.65	0.00	67.4
		#200	5.73	0.00	54.7
		#230	3.44	0.00	47.1

Serial_No:09102116:49

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 47.1
Weight of hydrometer sample =48.03
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.4	1.0065	1.0068	0.0132	6.5	14.6	0.0358	10.7
5.00	22.4	1.0060	1.0063	0.0132	6.0	14.7	0.0227	9.9
15.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0132	8.4
30.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0094	8.4
60.00	22.4	1.0050	1.0053	0.0132	5.0	15.0	0.0066	8.4
240.00	22.4	1.0045	1.0048	0.0132	4.5	15.1	0.0033	7.6
1440.00	22.4	1.0040	1.0043	0.0132	4.0	15.2	0.0014	6.8

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.9	5.1	13.9	12.5	20.8	53.2	36.1	1.6	0.5	0.6	38.8	7.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0233	0.0406	0.0444	0.0507	0.0571	0.0665	0.0897	0.2519	0.3223	0.4084	0.5426

Fineness Modulus	C_u	C_c
0.51	3.85	1.23

Serial_No:09102116:49

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140929

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE:

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|056|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -07
3664|2021|WTG|059|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -04
3664|2021|WTG|061|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -05
3664|2021|WTG|065|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -06
3664|2021|WTG|071|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -07
3664|2021|WTG|072|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -08
3664|2021|WTG|075|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -09
3664|2021|WTG|086|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -10
3664|2021|WTG|088|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -11
3664|2021|WTG|092|Sed|GS|01	7/23/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -12
3664|2021|WTG|094|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -13
3664|2021|WTG|103|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -14
3664|2021|WTG|105|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -15
3664|2021|WTG|108|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -16 (AK)
3664|2021|WTG|111|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -17
3664|2021|WTG|115|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -18
3664|2021|WTG|119|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -19
3664|2021|WTG|126|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -20
3664|2021|WTG|131|Sed|GS|01	7/22/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -01

Shipper: FEDEX UPS USPS OHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: BG
DATE/TIME: 7/29/21
RECEIVED BY:
DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Arnold 7/30/21 1252
DATE/TIME: 7/30/21
RECEIVED BY: Anderson MMT
DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed here been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

AK / AAC 7/30/21 1260

Serial_No:09102116:49

7/30/21

L2140929

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|140|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -02
3664|2021|WTG|140|Sed|GS|02	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2; QC duplicate -03
3664|2021|WTG|142|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -04
3664|2021|WTG|143|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2; -05
3664|2021|WTG|146|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -06
3664|2021|WTG|152|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -07
3664|2021|WTG|155|Sed|GS|01	7/21/21	SmithMac	250-mL plastic	freeze	grain size	Tier 2; Cooler #2 -08
3664|2021|WTG|096|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|106|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|113|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|114|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|116|Sed|TOC|01	7/28/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|117|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|120|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|120|Sed|TOC|02	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3; QC duplicate
3664|2021|WTG|121|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|124|Sed|TOC|01	7/27/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 7/29/21 RECEIVED BY: _____ DATE/TIME: 7/29/21 1600
RELINQUISHED BY: T. Hamilton 7/30/21 1252 DATE/TIME: 7/30/21 RECEIVED BY: T. Hamilton Hamilton MMT DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

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AKL - AA2 7/30/21 1260

Serial_No:09102116:49

7/30/21

L2140a29

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|154|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|156|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|096|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -09
3664|2021|WTG|106|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -10
3664|2021|WTG|113|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -11
3664|2021|WTG|114|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -12
3664|2021|WTG|116|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -13
3664|2021|WTG|117|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -14
3664|2021|WTG|120|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -15
3664|2021|WTG|120|Sed|GS|02	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate -16
3664|2021|WTG|121|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -17
3664|2021|WTG|124|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -18
3664|2021|WTG|125|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -19
3664|2021|WTG|127|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -20
3664|2021|WTG|129|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|130|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|130|Sed|GS|02	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
3664|2021|WTG|132|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: 3G
DATE/TIME: 7/29/21
RECEIVED BY:
DATE/TIME: 7/29/21 1600

RELINQUISHED BY: J. Hamilton 7/30/21 1250
DATE/TIME: 7/30/21
RECEIVED BY: J. Hamilton
DATE/TIME: 7/30/21 1135

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

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7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2140930
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/13/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140930
Report Date: 09/13/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140930-01	3664|2021|WTG|129|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-02	3664|2021|WTG|130|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-03	3664|2021|WTG|130|SED|GS|02	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-04	3664|2021|WTG|132|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-05	3664|2021|WTG|133|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-06	3664|2021|WTG|135|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-07	3664|2021|WTG|136|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-08	3664|2021|WTG|138|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-09	3664|2021|WTG|139|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-10	3664|2021|WTG|141|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-11	3664|2021|WTG|144|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-12	3664|2021|WTG|145|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-13	3664|2021|WTG|147|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-14	3664|2021|WTG|148|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/27/21 00:00	07/30/21
L2140930-15	3664|2021|WTG|149|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140930-16	3664|2021|WTG|151|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21
L2140930-17	3664|2021|WTG|153|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2140930-18	3664|2021|WTG|154|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/24/21 00:00	07/30/21
L2140930-19	3664|2021|WTG|156|SED|GS|01	SEDIMENT	OFFSHORE MA / NY	07/25/21 00:00	07/30/21

Project Name:	BEACON WIND	**Lab Number:**	L2140930
Project Number:	3664	**Report Date:**	09/13/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2140930
Project Number:	3664	**Report Date:**	09/13/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size

The WG1542475-1 Laboratory Duplicate RPD for % pebble (22%), % very coarse sand (29%), % coarse sand (96%), % medium sand (119%), % fine sand (43%), % very fine sand (53%)), % silt (25%) and % clay (61%), performed on L2140930-01, are outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/13/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-01
Client ID: 3664|2021|WTG|129|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	1.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	2.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	5.50		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	11.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	39.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	28.2		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	8.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-02
Client ID: 3664|2021|WTG|130|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.800		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	9.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	9.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	35.7		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	9.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-03
Client ID: 3664|2021|WTG|130|SED|GS|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	9.30		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	9.30		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	36.3		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-04
Client ID: 3664|2021|WTG|132|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.700		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.900		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	7.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	22.7		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	18.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	23.0		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	22.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-05
Client ID: 3664|2021|WTG|133|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.90		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	10.7		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	17.0		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	26.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	32.6		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-06
Client ID: 3664|2021|WTG|135|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.30		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.90		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	13.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	20.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	22.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	29.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-07
Client ID: 3664|2021|WTG|136|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.300		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	2.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	3.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	5.30		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	6.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	42.6		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-08
Client ID: 3664|2021|WTG|138|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	8.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	9.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	33.3		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	34.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-09
Client ID: 3664|2021|WTG|139|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.900		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	4.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	4.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	5.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	10.0		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	28.3		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	33.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-10
Client ID: 3664|2021|WTG|141|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.700		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	5.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	11.3		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	16.2		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	20.7		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	34.0		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	8.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-11
Client ID: 3664|2021|WTG|144|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.300		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	8.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	20.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	14.2		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	24.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	24.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-12
Client ID: 3664|2021|WTG|145|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	2.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	5.50		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	14.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	14.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	26.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	29.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-13
Client ID: 3664|2021|WTG|147|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.600		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	2.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.50		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	6.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	15.2		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	25.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	35.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.30		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-14
Client ID: 3664|2021|WTG|148|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/27/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.900		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	2.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	6.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	8.90		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	12.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	25.6		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	34.2		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	8.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-15
Client ID: 3664|2021|WTG|149|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.30		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	9.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	9.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	30.6		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	35.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	8.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-16
Client ID: 3664|2021|WTG|151|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.20		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	3.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	5.90		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	9.40		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	24.8		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	45.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	8.90		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-17
Client ID: 3664|2021|WTG|153|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.700		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	4.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.70		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	4.50		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	8.10		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	6.90		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	22.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	41.0		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	9.50		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-18
Client ID: 3664|2021|WTG|154|SED|GS|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/24/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.500		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	3.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	10.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	20.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	11.2		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	23.6		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	25.4		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.80		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2140930
Report Date: 09/13/21

SAMPLE RESULTS

Lab ID: L2140930-19
Client ID: 3664|2021|WTG|156|SED|GS|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 07/25/21 00:00
Date Received: 07/30/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.500		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	2.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.00		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Coarse Sand	5.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Medium Sand	16.1		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Fine Sand	11.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
% Very Fine Sand	22.6		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	33.5		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.60		%	0.100	NA	1	-	09/02/21 19:39	12,D6913/D7928(M)	SM

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140930
Report Date: 09/13/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-19 QC Batch ID: WG1542475-1 QC Sample: L2140930-01 Client ID: 3664|2021|WTG|129|SED|GS|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	1.00	0.800	%	**22**	Q	20
Granule (2.0-4.0 mm)	1.70	1.60	%	6		20
% Very Coarse Sand	2.00	1.50	%	**29**	Q	20
% Coarse Sand	2.70	7.70	%	**96**	Q	20
% Medium Sand	5.50	21.7	%	**119**	Q	20
% Fine Sand	11.4	17.6	%	**43**	Q	20
% Very Fine Sand	39.4	22.9	%	**53**	Q	20
Silt - (3.9-62.5 um)	28.2	21.9	%	**25**	Q	20
Clay - (<3.9 um)	8.10	4.30	%	**61**	Q	20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140930
Report Date: 09/13/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
B	Absent
C	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2140930-01A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140930-02A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2140930-03A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140930-04A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140930-05A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140930
Report Date: 09/13/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140930-06A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140930-07A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140930-08A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2140930-09A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140930-10A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140930-11A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140930-12A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2140930-13A	Plastic 8oz unpreserved for Grain Size	B	NA		3.3	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140930-14A	Plastic 8oz unpreserved for Grain Size	C	NA		3.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140930-15A	Plastic 8oz unpreserved for Grain Size	C	NA		3.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2140930-16A	Plastic 8oz unpreserved for Grain Size	C	NA		3.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2140930-17A	Plastic 8oz unpreserved for Grain Size	C	NA		3.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2140930
Report Date: 09/13/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2140930-18A	Plastic 8oz unpreserved for Grain Size	C	NA		3.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2140930-19A	Plastic 8oz unpreserved for Grain Size	C	NA		3.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2140930
Project Number:	3664	**Report Date:**	09/13/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140930
Project Number:	3664	**Report Date:**	09/13/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140930
Project Number:	3664	**Report Date:**	09/13/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2140930
Project Number:	3664	**Report Date:**	09/13/21

REFERENCES

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

LIMITATION OF LIABILITIES

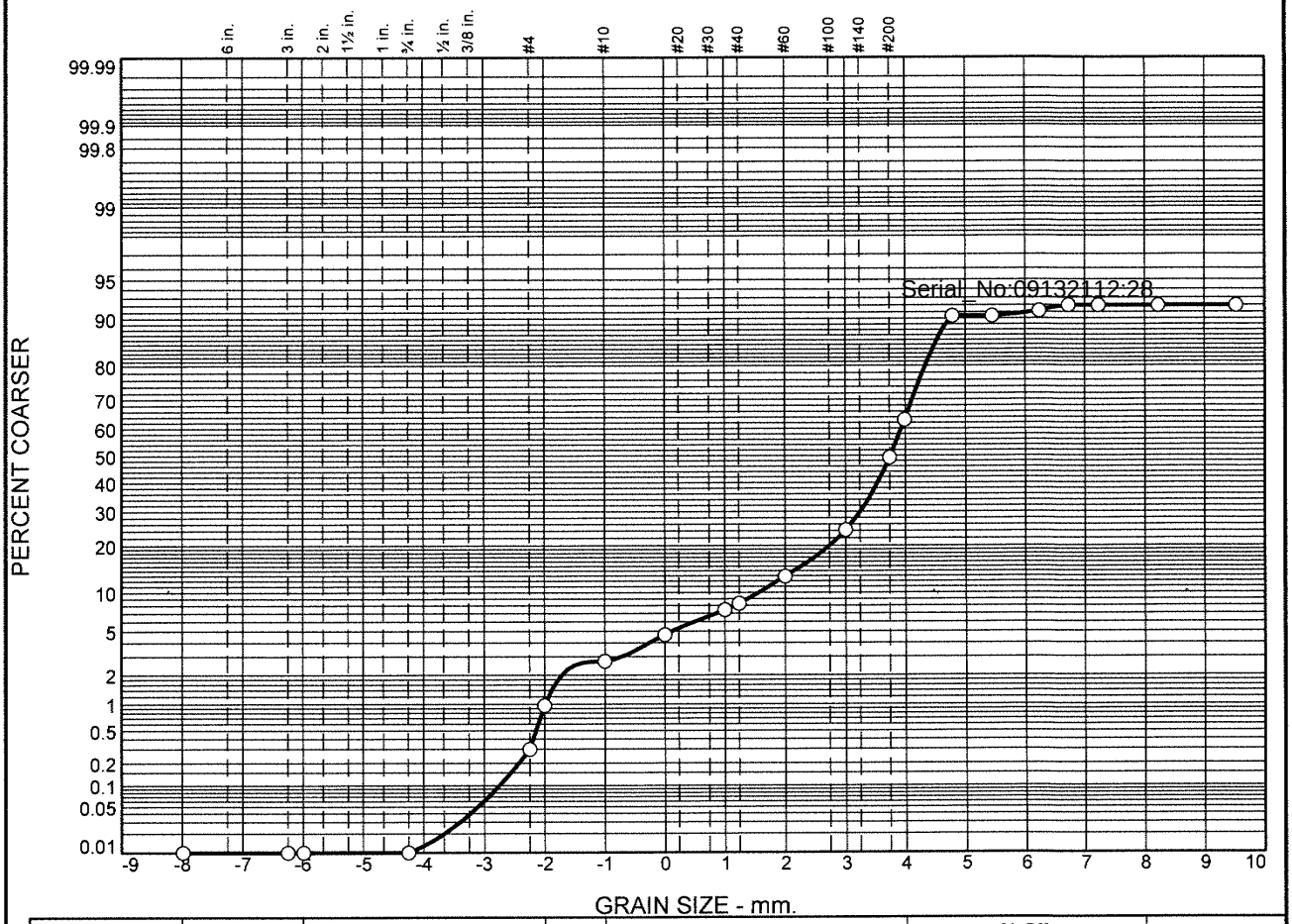
Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

ASTM D6913/D7928

GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			1.0	1.7	2.0	2.7	5.5	11.4	39.5	26.6	0.5	1.0	0.0	8.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2076	0.0860	0.0742	0.0577	0.0447	0.0372	1.04	2.31

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|129|SED|GS|01 **Sample No.:** L2140930-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|129|SED|GS|01

Sample Number: L2140930-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.35
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.35	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.27	0.00	99.7
		#5	0.60	0.00	99.0
		#10	1.59	0.00	97.3
		#18	1.78	0.00	95.3
		#35	2.48	0.00	92.6
		#40	0.79	0.00	91.7
		#60	4.15	0.00	87.1
		#120	10.29	0.00	75.7
		#200	22.50	0.00	50.8
		#230	12.57	0.00	36.9

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.9
Weight of hydrometer sample =38.41
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0362	9.6
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	9.6
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	8.8
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	8.1
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	8.1
240.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0033	8.1
1440.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0014	8.1

Fractional Components

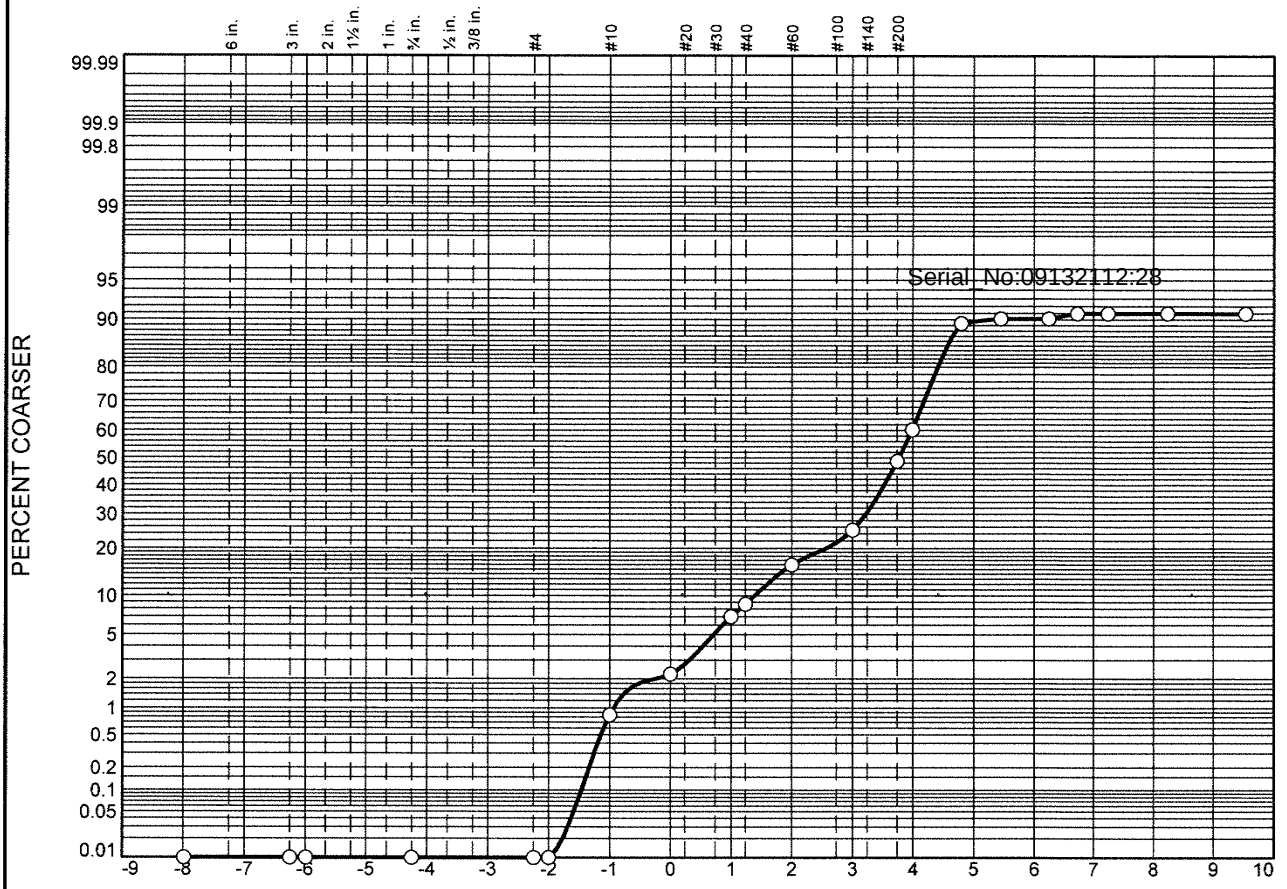
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		1.0	1.7	2.0	2.7	5.5	11.4	39.5	61.1	26.6	0.5	1.0	0.0	28.1	8.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0372	0.0447	0.0496	0.0577	0.0654	0.0742	0.0860	0.1499	0.2076	0.3375	0.9252

Fineness Modulus	C_u	C_c
0.45	2.31	1.04

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.8	1.4	4.8	9.0	9.1	35.7	28.9	0.4	0.8		9.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2693	0.0868	0.0734	0.0551	0.0423	0.0259	1.35	3.36

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|130|SED|GS|01 **Sample No.:** L2140930-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|130|SED|GS|01

Sample Number: L2140930-02

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 39.17
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
39.17	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.33	0.00	99.2
		#18	0.54	0.00	97.8
		#35	1.87	0.00	93.0
		#40	0.66	0.00	91.3
		#60	2.86	0.00	84.0
		#120	3.57	0.00	74.9
		#200	9.22	0.00	51.4
		#230	4.54	0.00	39.8

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 39.8
Weight of hydrometer sample =40.31
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	10.7
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	9.9
15.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0132	9.9
30.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0094	9.1
60.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0066	9.1
240.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0033	9.1
1440.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0014	9.1

Fractional Components

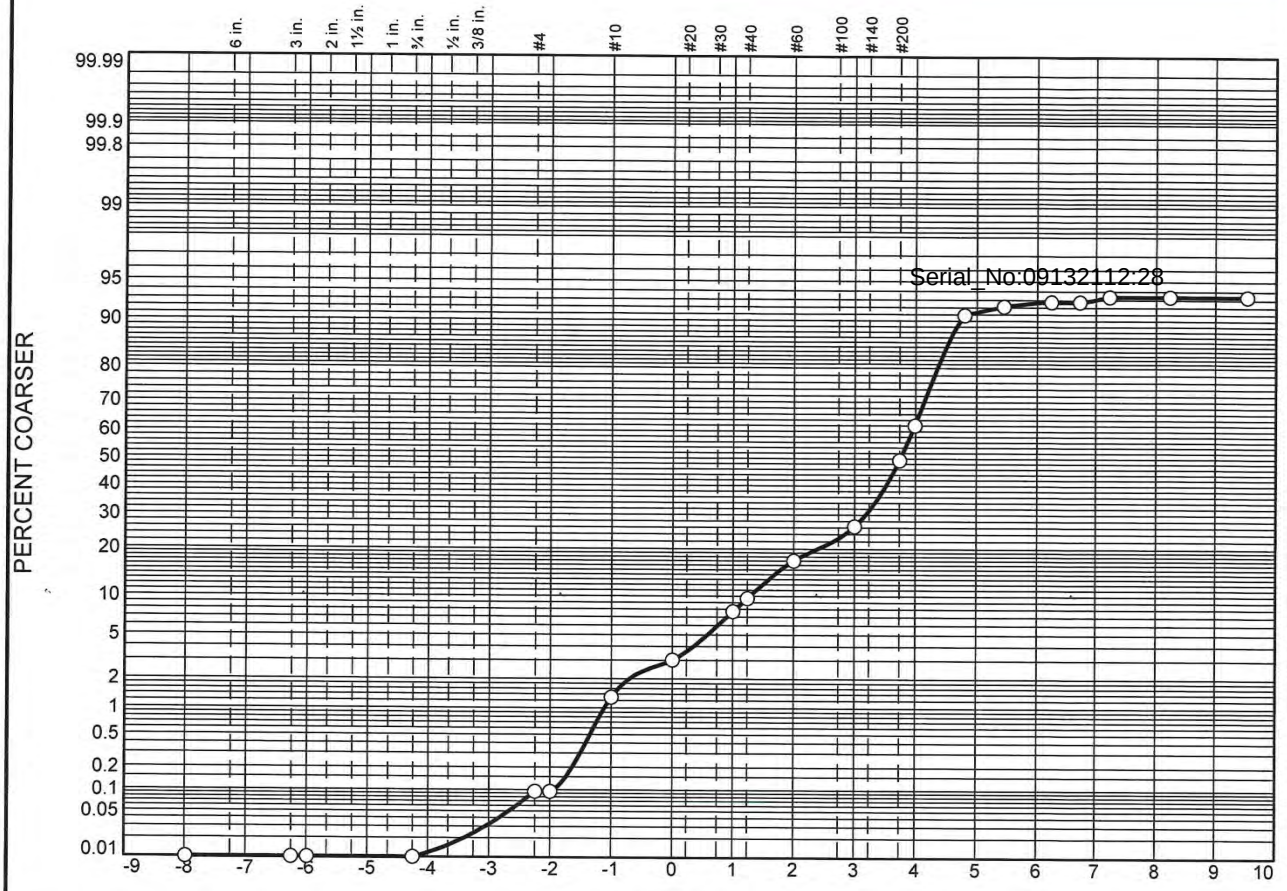
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.8	1.4	4.8	9.0	9.1	35.7	60.0	28.9	0.4	0.8		30.1	9.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0259	0.0423	0.0471	0.0551	0.0632	0.0734	0.0868	0.1686	0.2693	0.3813	0.6109

Fineness Modulus	C_u	C_c
0.42	3.36	1.35

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	1.2	1.7	4.7	9.3	9.3	36.3	28.7	1.3	0.5	0.3	6.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2899	0.0875	0.0743	0.0567	0.0441	0.0376	0.98	2.33

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|130|SED|GS|02 **Sample No.:** L2140930-03

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|130|SED|GS|02

Sample Number: L2140930-03

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 52.50
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
52.50	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.05	0.00	99.9
		#5	0.00	0.00	99.9
		#10	0.63	0.00	98.7
		#18	0.90	0.00	97.0
		#35	2.47	0.00	92.3
		#40	0.99	0.00	90.4
		#60	3.89	0.00	83.0
		#120	4.89	0.00	73.7
		#200	12.08	0.00	50.7
		#230	6.67	0.00	38.0

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 38.0
Weight of hydrometer sample =48.03
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0070	1.0072	0.0133	7.0	14.4	0.0359	9.2
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	7.9
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	7.3
30.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0094	7.3
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	6.6
240.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0033	6.6
1440.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0014	6.6

Fractional Components

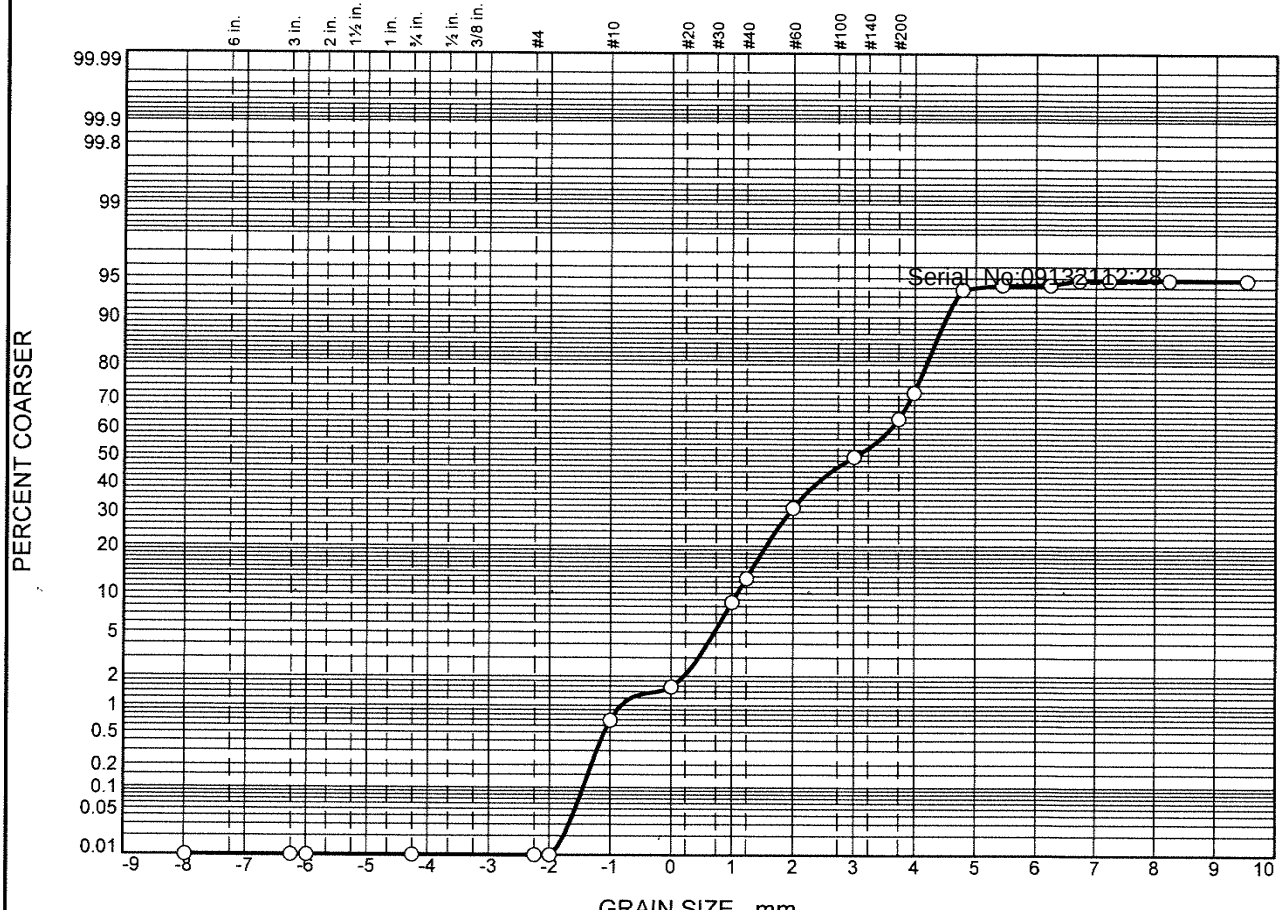
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	1.2	1.7	4.7	9.3	9.3	36.3	61.3	28.7	1.3	0.5	0.3	30.8	6.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0376	0.0441	0.0488	0.0567	0.0647	0.0743	0.0875	0.1895	0.2899	0.4119	0.6705

Fineness Modulus	C_u	C_c
0.47	2.33	0.98

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.7	0.9	7.0	22.7	18.1	23.0	21.6	0.3	0.5	0.0	5.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3925	0.1892	0.1210	0.0653	0.0496	0.0436	0.52	4.34

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|132|SED|GS|01 **Sample No.:** L2140930-04

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|132|SED|GS|01

Sample Number: L2140930-04

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 31.98
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
31.98	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.22	0.00	99.3
		#18	0.28	0.00	98.4
		#35	2.25	0.00	91.4
		#40	1.29	0.00	87.4
		#60	5.96	0.00	68.7
		#120	5.79	0.00	50.6
		#200	4.43	0.00	36.8
		#230	2.79	0.00	28.0

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 28.0
Weight of hydrometer sample =45.36
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0362	6.2
5.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0230	5.7
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	5.7
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	5.2
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	5.2
240.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0033	5.2
1440.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0014	5.2

Alpha Analytical

Fractional Components

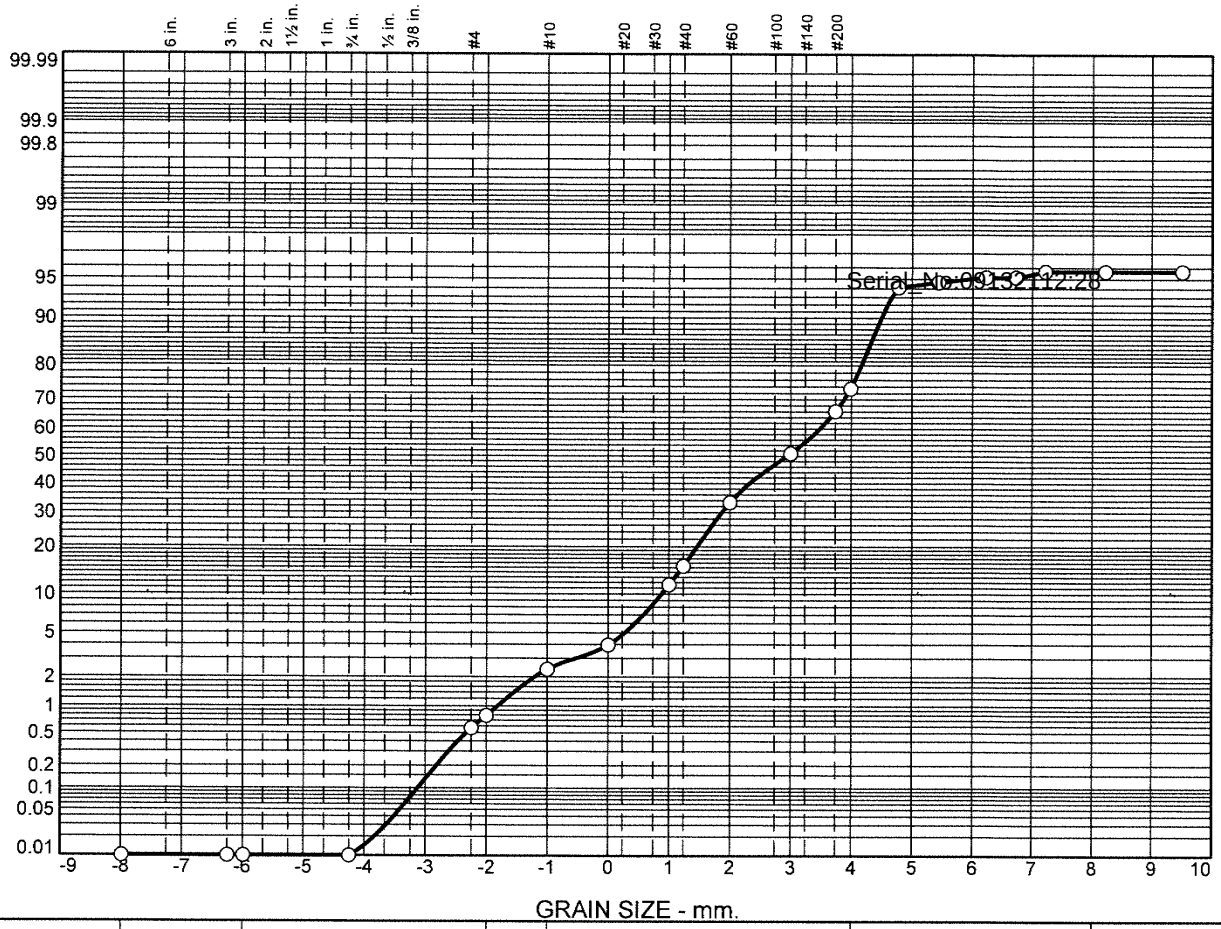
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.7	0.9	7.0	22.7	18.1	23.0	71.7	21.6	0.3	0.5	0.0	22.4	5.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0436	0.0496	0.0547	0.0653	0.0814	0.1210	0.1892	0.3386	0.3925	0.4703	0.6102

Fineness Modulus	C_u	C_c
0.77	4.34	0.52

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.8	1.6	1.5	7.7	21.7	17.6	22.9	20.5	0.7	0.4	0.3	4.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4298	0.1996	0.1300	0.0678	0.0503	0.0443	0.52	4.51

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|132|SED|GS|01 **Sample No.:** WG1542475-1

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|132|SED|GS|01

Sample Number: WG1542475-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 31.72
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
31.72	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.18	0.00	99.4
		#5	0.07	0.00	99.2
		#10	0.50	0.00	97.6
		#18	0.50	0.00	96.1
		#35	2.42	0.00	88.4
		#40	1.18	0.00	84.7
		#60	5.70	0.00	66.7
		#120	5.60	0.00	49.1
		#200	4.80	0.00	34.0
		#230	2.33	0.00	26.6

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 26.6
Weight of hydrometer sample =41.8
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x** Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0364	5.8
5.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0231	5.3
15.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0134	4.8
30.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0095	4.8
60.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0067	4.3
240.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0034	4.3
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	4.3

Alpha Analytical

Fractional Components

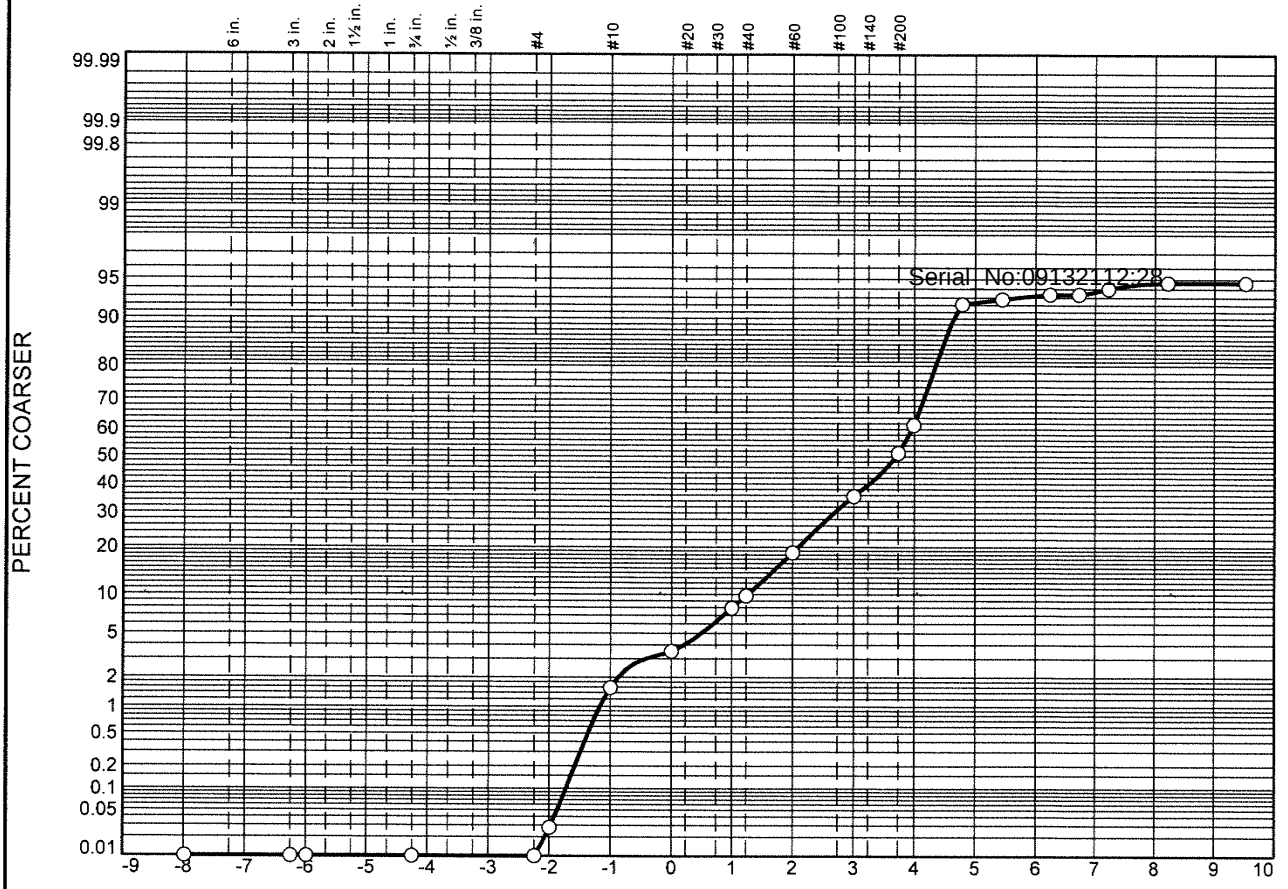
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.8	1.6	1.5	7.7	21.7	17.6	22.9	71.4	20.5	0.7	0.4	0.3	21.9	4.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0163	0.0443	0.0503	0.0556	0.0678	0.0895	0.1300	0.1996	0.3627	0.4298	0.5438	0.8280

Fineness Modulus	C_u	C_c
0.88	4.51	0.52

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.6	1.9	4.4	10.7	17.0	26.4	30.4	0.8	0.5	0.9	5.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2997	0.1042	0.0772	0.0562	0.0450	0.0398	0.76	2.62

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|133|SED|GS|01 **Sample No.:** L2140930-05

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|133|SED|GS|01

Sample Number: L2140930-05

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 72.55
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
72.55	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.02	0.00	100.0
		#10	1.12	0.00	98.4
		#18	1.41	0.00	96.5
		#35	3.21	0.00	92.1
		#40	1.31	0.00	90.3
		#60	6.40	0.00	81.4
		#120	12.35	0.00	64.4
		#200	11.40	0.00	48.7
		#230	7.36	0.00	38.6

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 38.6
Weight of hydrometer sample =48.92
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0362	7.9
5.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0230	7.2
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	6.6
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	6.6
60.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0067	6.0
240.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0034	5.3
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	5.3

Fractional Components

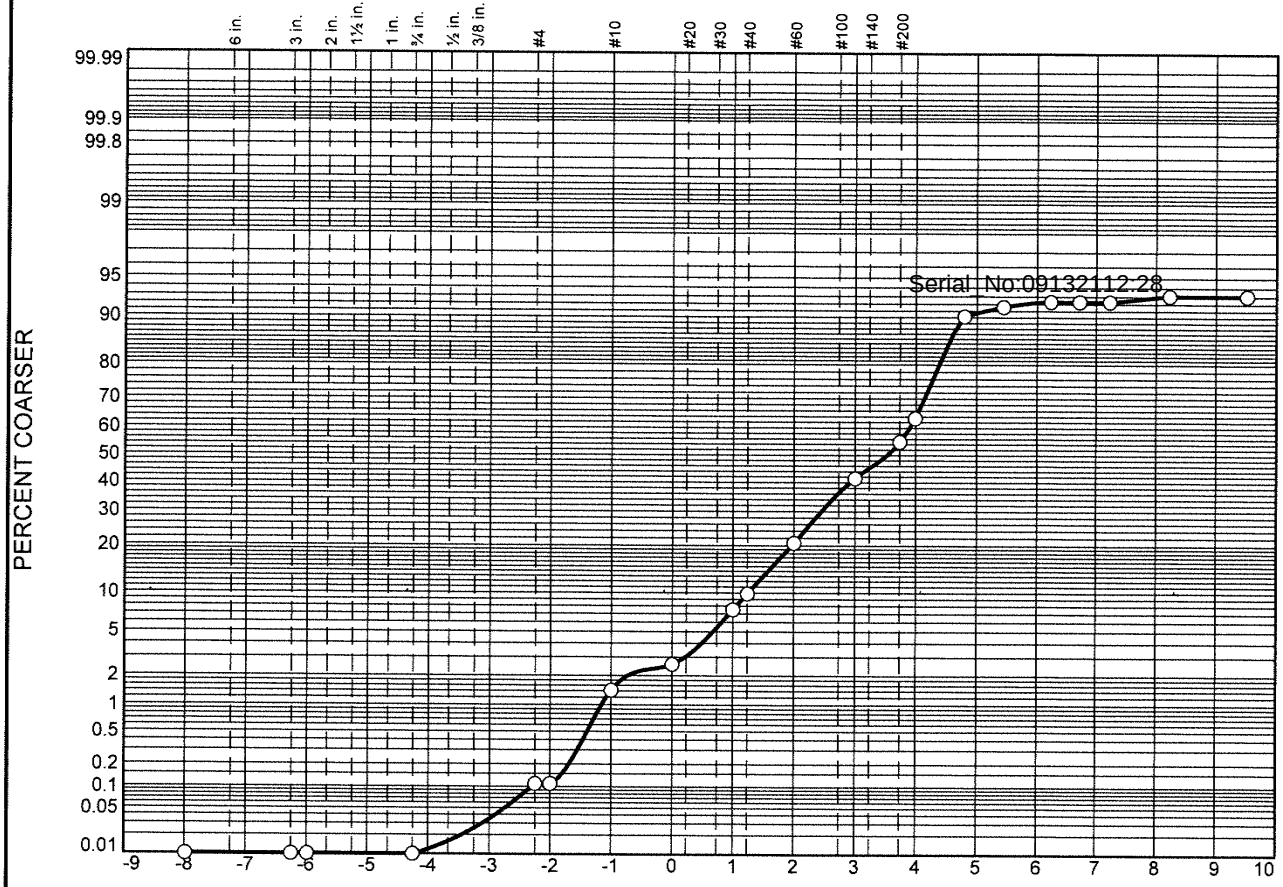
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.6	1.9	4.4	10.7	17.0	26.4	60.4	30.4	0.8	0.5	0.9	32.6	5.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0398	0.0450	0.0491	0.0562	0.0643	0.0772	0.1042	0.2341	0.2997	0.4163	0.7101

Fineness Modulus	C_u	C_c
0.56	2.62	0.76

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	1.3	1.2	4.9	13.1	20.8	22.5	26.8	1.5	0.1	0.6	7.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3187	0.1322	0.0867	0.0567	0.0432	0.0363	0.67	3.64

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|135|SED|GS|01 **Sample No.:** L2140930-06

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|135|SED|GS|01

Sample Number: L2140930-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 73.08
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
73.08	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.08	0.00	99.9
		#5	0.00	0.00	99.9
		#10	0.96	0.00	98.6
		#18	0.83	0.00	97.4
		#35	3.63	0.00	92.5
		#40	1.71	0.00	90.1
		#60	7.87	0.00	79.4
		#120	15.21	0.00	58.6
		#200	9.80	0.00	45.1
		#230	6.25	0.00	36.6

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.6
Weight of hydrometer sample =39.98
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	9.9
5.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0230	8.4
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	7.7
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	7.7
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	7.7
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	6.9
1440.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0014	6.9

Alpha Analytical

Fractional Components

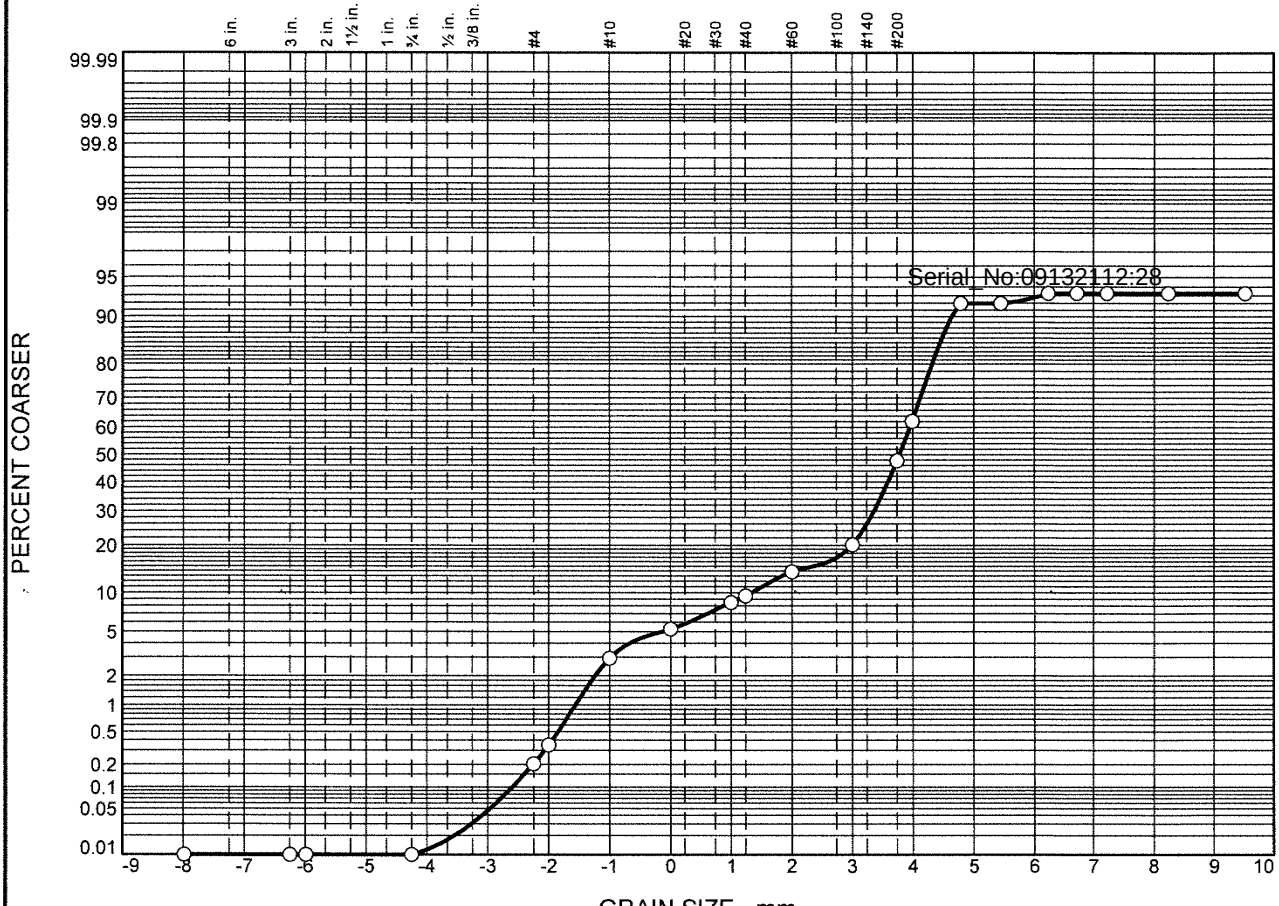
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	1.3	1.2	4.9	13.1	20.8	22.5	62.5	26.8	1.5	0.1	0.6	29.0	7.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0363	0.0432	0.0480	0.0567	0.0670	0.0867	0.1322	0.2562	0.3187	0.4214	0.6269

Fineness Modulus	C_u	C_c
0.61	3.64	0.67

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.3	2.6	2.4	3.2	5.3	6.4	42.7	29.1	0.8	0.5		6.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1935	0.0830	0.0728	0.0575	0.0459	0.0401	0.99	2.07

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|136|SED|GS|01 **Sample No.:** L2140930-07

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|136|SED|GS|01

Sample Number: L2140930-07

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 83.54
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
83.54	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.17	0.00	99.8
		#5	0.12	0.00	99.7
		#10	2.15	0.00	97.1
		#18	1.95	0.00	94.7
		#35	2.70	0.00	91.5
		#40	0.82	0.00	90.5
		#60	3.63	0.00	86.2
		#120	5.30	0.00	79.8
		#200	22.97	0.00	52.3
		#230	12.13	0.00	37.8

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 37.8
Weight of hydrometer sample =47.04
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0362	8.0
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	8.0
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	6.7
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	6.7
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	6.7
240.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0033	6.7
1440.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0014	6.7

Alpha Analytical

Fractional Components

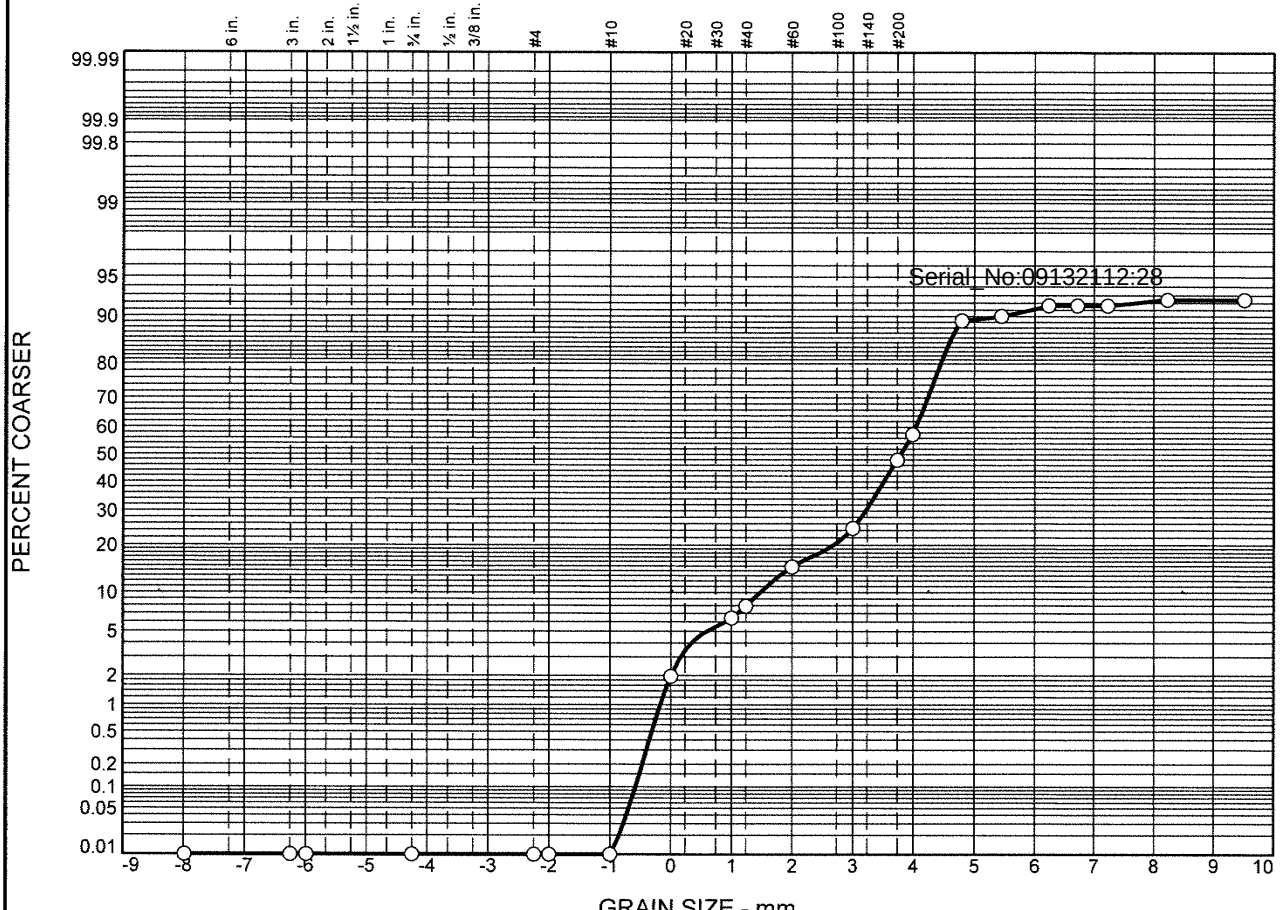
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.3	2.6	2.4	3.2	5.3	6.4	42.7	60.0	29.1	0.8	0.5		30.4	6.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0401	0.0459	0.0502	0.0575	0.0646	0.0728	0.0830	0.1258	0.1935	0.3951	1.1042

Fineness Modulus	C_u	C_c
0.44	2.07	0.99

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	2.0	4.4	8.4	9.8	33.3	31.5	1.7	0.5	0.7	7.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2452	0.0874	0.0720	0.0530	0.0415	0.0233	1.38	3.75

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|138|SED|GS|01 **Sample No.:** L2140930-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|138|SED|GS|01

Sample Number: L2140930-08

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 65.98
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
65.98	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#18	1.29	0.00	98.0
		#35	2.95	0.00	93.6
		#40	1.01	0.00	92.0
		#60	4.50	0.00	85.2
		#120	6.51	0.00	75.4
		#200	15.39	0.00	52.0
		#230	6.22	0.00	42.6

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.6
Weight of hydrometer sample =42.75
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	10.8
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	10.0
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	8.4
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	8.4
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	8.4
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	7.6
1440.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0014	7.6

Fractional Components

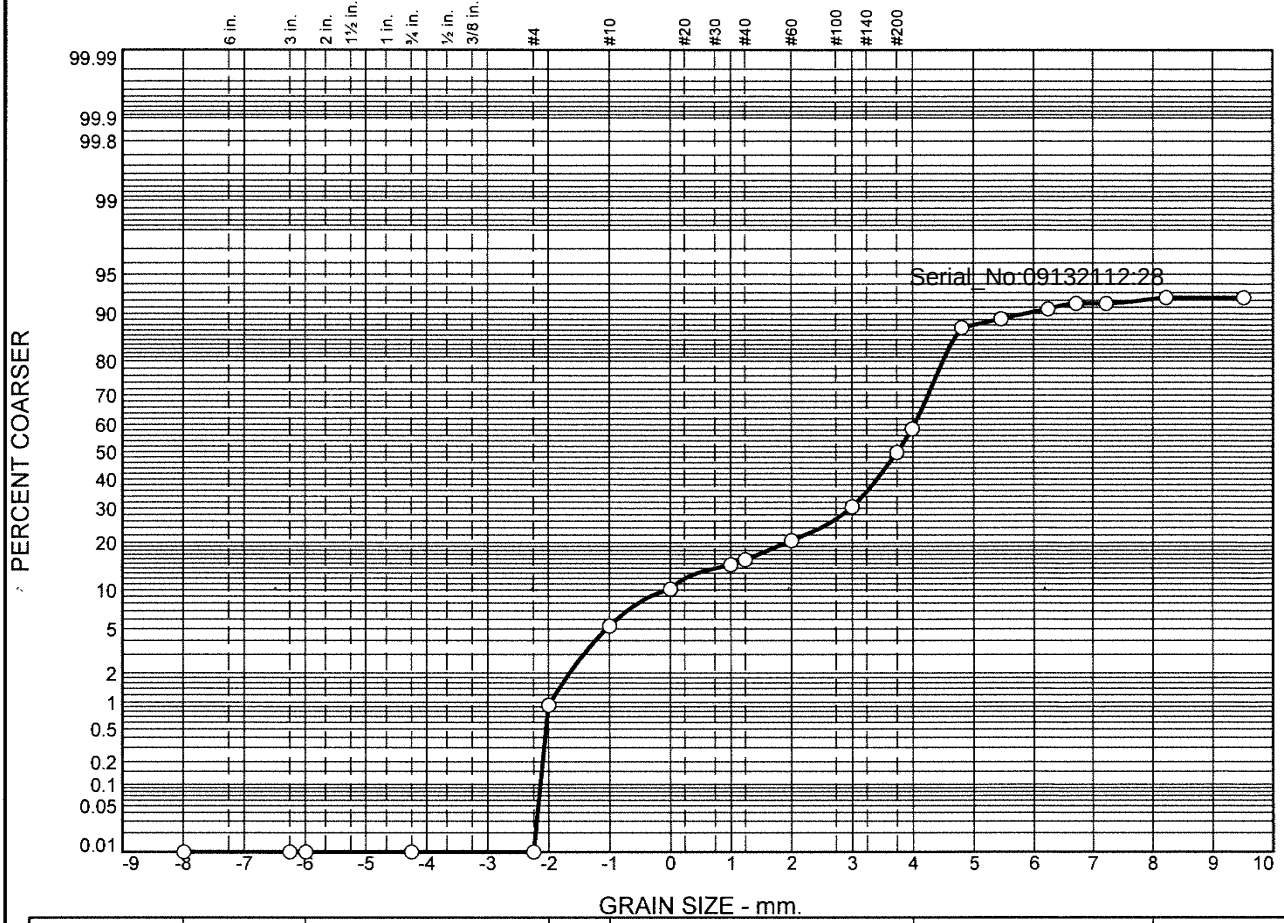
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	2.0	4.4	8.4	9.8	33.3	57.9	31.5	1.7	0.5	0.7	34.4	7.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0233	0.0415	0.0458	0.0530	0.0606	0.0720	0.0874	0.1554	0.2452	0.3593	0.6632

Fineness Modulus	C_u	C_c
0.39	3.75	1.38

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.9	4.4	4.8	4.7	5.7	10.0	28.4	29.1	2.3	1.2	0.7	7.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4788	0.0940	0.0745	0.0526	0.0393	0.0172	1.71	5.46

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|139|SED|GS|01 **Sample No.:** L2140930-09

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|139|SED|GS|01

Sample Number: L2140930-09

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 65.66
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
65.66	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.61	0.00	99.1
		#10	2.87	0.00	94.7
		#18	3.18	0.00	89.9
		#35	3.03	0.00	85.2
		#40	0.68	0.00	84.2
		#60	3.09	0.00	79.5
		#120	6.58	0.00	69.5
		#200	12.59	0.00	50.3
		#230	5.71	0.00	41.6

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 41.6
Weight of hydrometer sample =41.27
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0075	1.0077	0.0133	7.5	14.3	0.0357	12.5
5.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0228	10.9
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	9.3
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	8.5
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	8.5
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	7.6
1440.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0014	7.6

Fractional Components

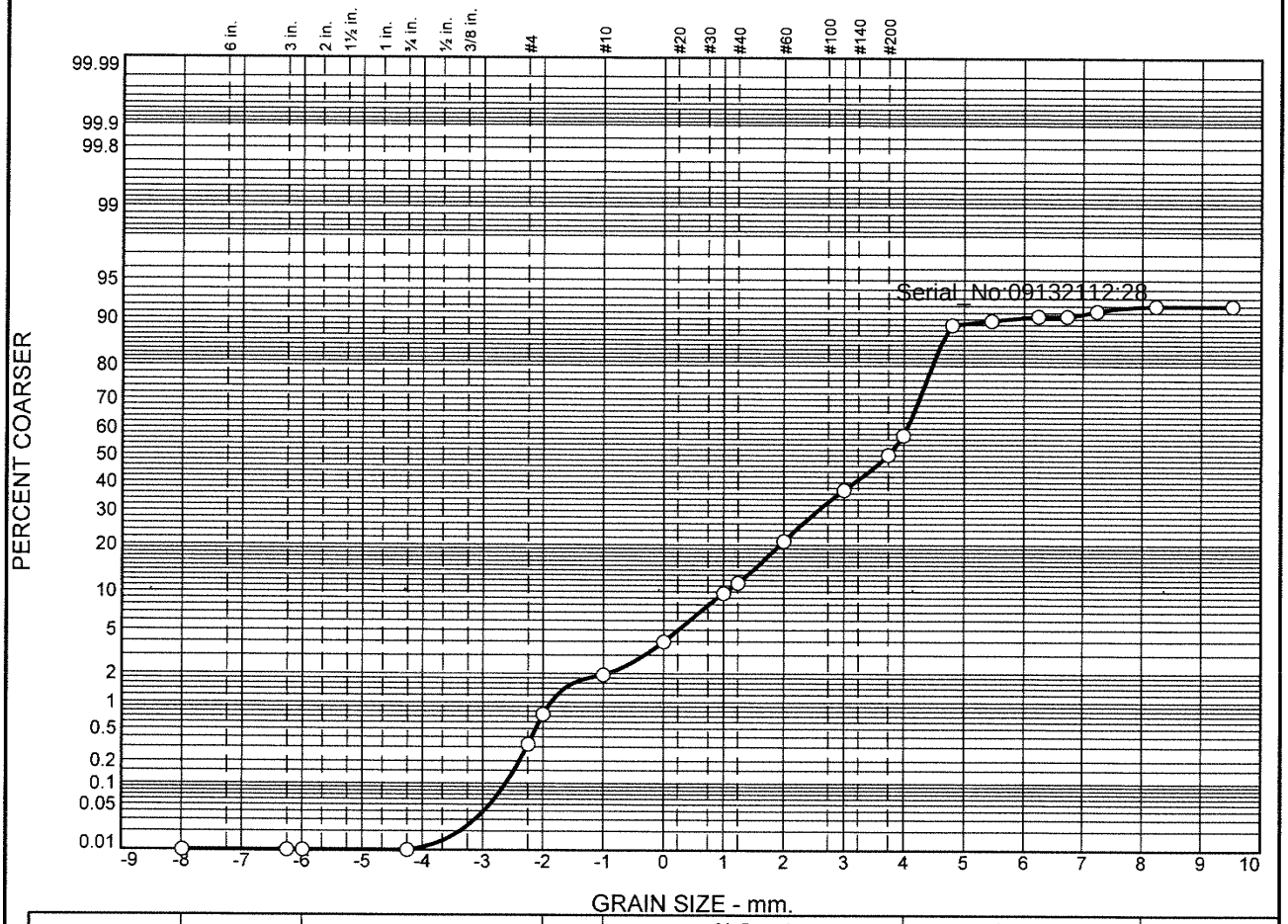
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.9	4.4	4.8	4.7	5.7	10.0	28.4	53.6	29.1	2.3	1.2	0.7	33.3	7.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0172	0.0393	0.0444	0.0526	0.0613	0.0745	0.0940	0.2634	0.4788	1.0367	2.0729

Fineness Modulus	C_u	C_c
0.73	5.46	1.71

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.7	1.2	2.1	5.7	11.3	16.2	20.7	31.3	1.0	0.6	1.1	8.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3349	0.1104	0.0754	0.0524	0.0408	0.0186	1.34	5.93

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|141|SED|GS|01 **Sample No.:** L2140930-10

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|141|SED|GS|01

Sample Number: L2140930-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 80.40
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
80.40	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.26	0.00	99.7
		#5	0.33	0.00	99.3
		#10	0.97	0.00	98.1
		#18	1.63	0.00	96.0
		#35	4.63	0.00	90.3
		#40	1.39	0.00	88.5
		#60	7.66	0.00	79.0
		#120	13.04	0.00	62.8
		#200	10.43	0.00	49.8
		#230	5.88	0.00	42.5

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.5
Weight of hydrometer sample =44.54
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0070	1.0072	0.0133	7.0	14.4	0.0359	11.1
5.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0228	10.3
15.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0132	9.5
30.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0093	9.5
60.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0066	8.8
240.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0033	8.0
1440.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0014	8.0

Fractional Components

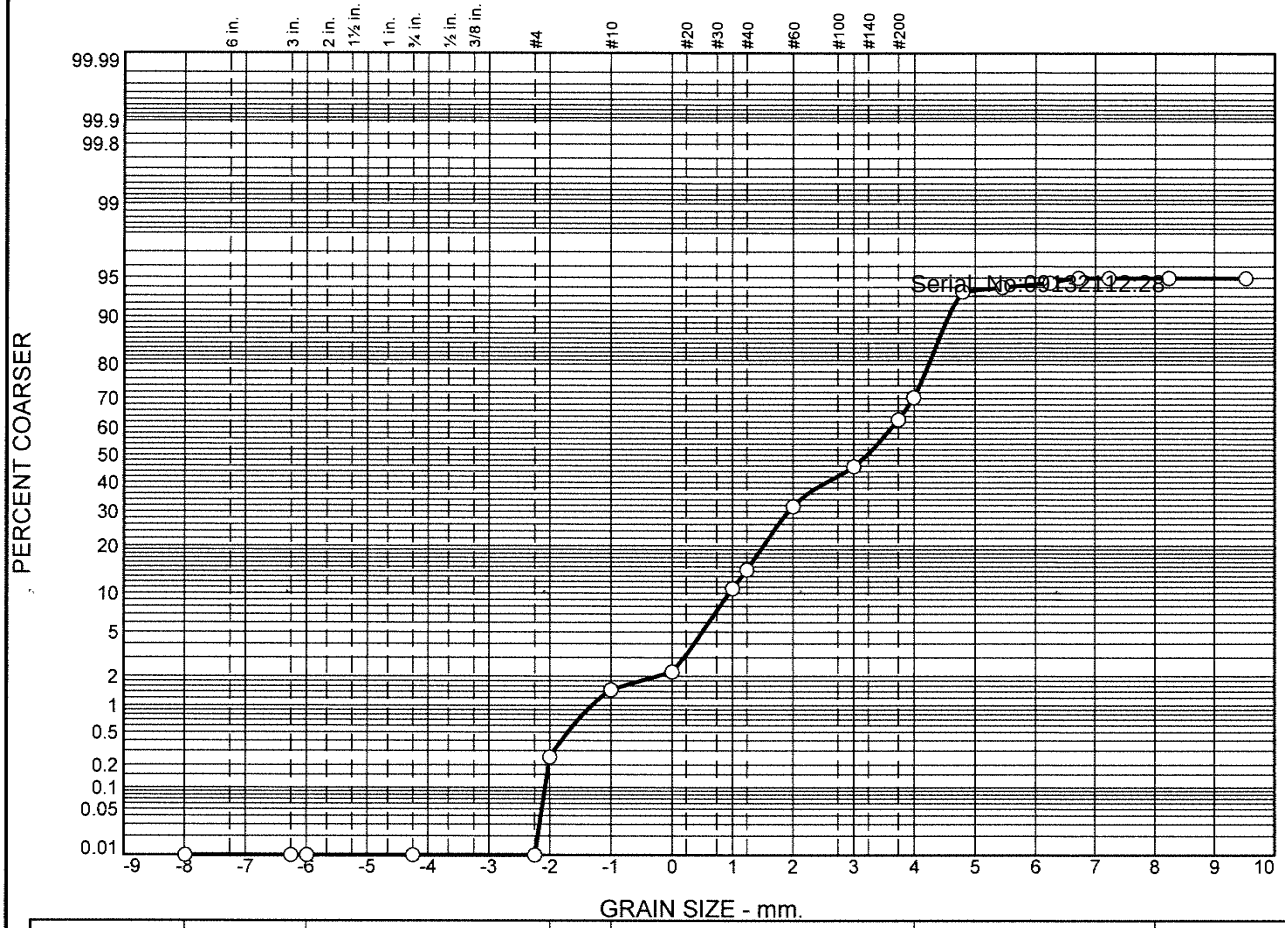
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.7	1.2	2.1	5.7	11.3	16.2	20.7	56.0	31.3	1.0	0.6	1.1	34.0	8.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0186	0.0408	0.0452	0.0524	0.0604	0.0754	0.1104	0.2613	0.3349	0.4866	0.8461

Fineness Modulus	C_u	C_c
0.63	5.93	1.34

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.3	1.2	0.7	8.6	20.8	14.2	24.9	23.0	0.6	0.7	0.0	5.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4133	0.1701	0.1074	0.0633	0.0481	0.0424	0.56	4.01

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|144|SED|GS|01 **Sample No.:** L2140930-11

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|144|SED|GS|01

Sample Number: L2140930-11

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 83.99
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
83.99	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.21	0.00	99.7
		#10	1.02	0.00	98.5
		#18	0.62	0.00	97.8
		#35	7.18	0.00	89.2
		#40	2.97	0.00	85.7
		#60	14.58	0.00	68.4
		#120	11.89	0.00	54.2
		#200	14.35	0.00	37.1
		#230	6.20	0.00	29.7

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 29.7
Weight of hydrometer sample =49.5
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	6.5
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	6.0
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	5.5
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	5.0
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	5.0
240.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0033	5.0
1440.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0014	5.0

Alpha Analytical

Fractional Components

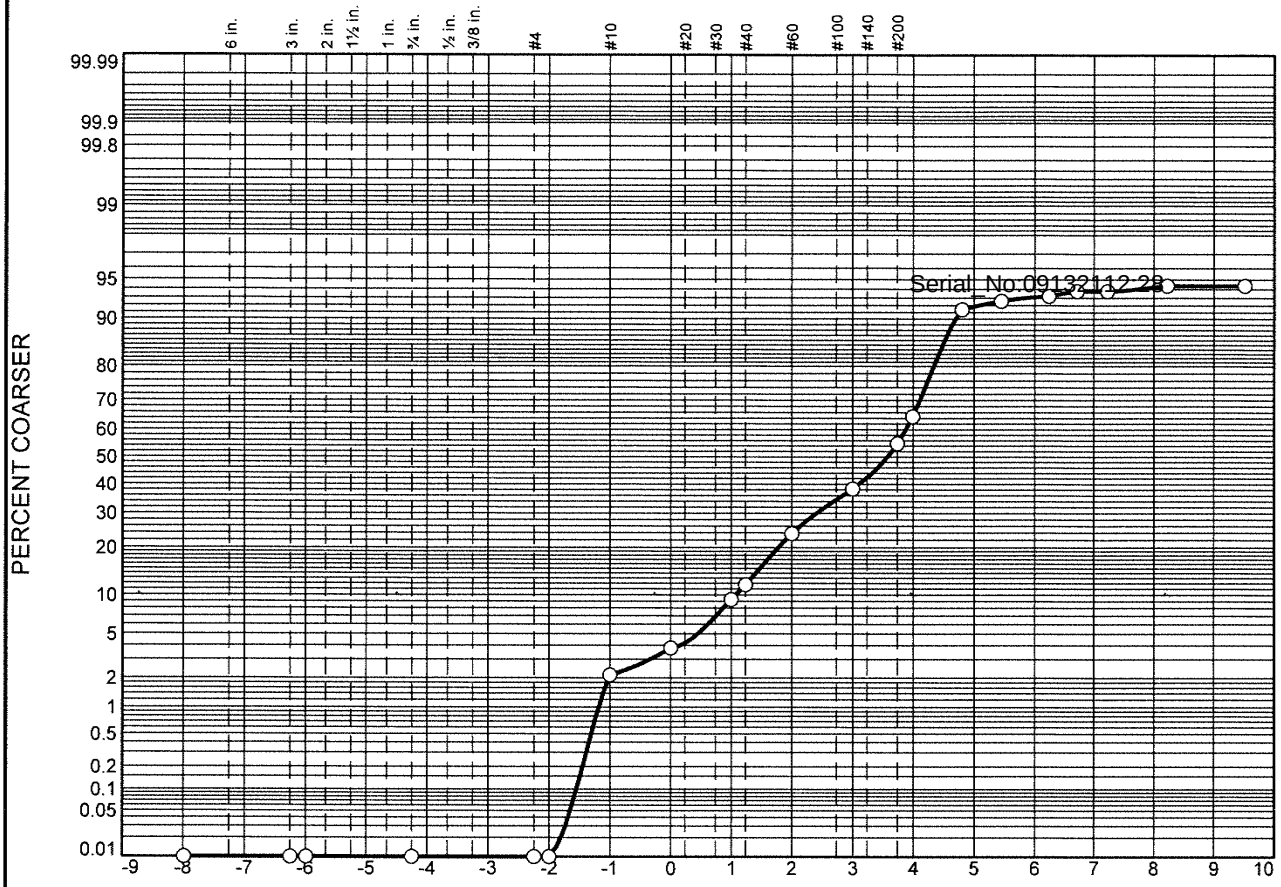
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.3	1.2	0.7	8.6	20.8	14.2	24.9	69.2	23.0	0.6	0.7	0.0	24.3	5.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0424	0.0481	0.0530	0.0633	0.0809	0.1074	0.1701	0.3501	0.4133	0.5194	0.7076

Fineness Modulus	C_u	C_c
0.78	4.01	0.56

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	2.1	1.7	5.5	14.5	14.5	26.8	26.8	1.2	0.7	0.4	5.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3599	0.1162	0.0838	0.0580	0.0448	0.0385	0.75	3.02

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|145|SED|GS|01 **Sample No.:** L2140930-12

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|145|SED|GS|01

Sample Number: L2140930-12

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 41.65
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
41.65	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.89	0.00	97.9
		#18	0.69	0.00	96.2
		#35	2.28	0.00	90.7
		#40	1.04	0.00	88.2
		#60	5.00	0.00	76.2
		#120	6.07	0.00	61.7
		#200	6.89	0.00	45.1
		#230	4.04	0.00	35.4

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 35.4
Weight of hydrometer sample =47.75
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0070	1.0072	0.0133	7.0	14.4	0.0359	8.6
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	7.4
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	6.8
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	6.2
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	6.2
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	5.6
1440.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0014	5.6

Fractional Components

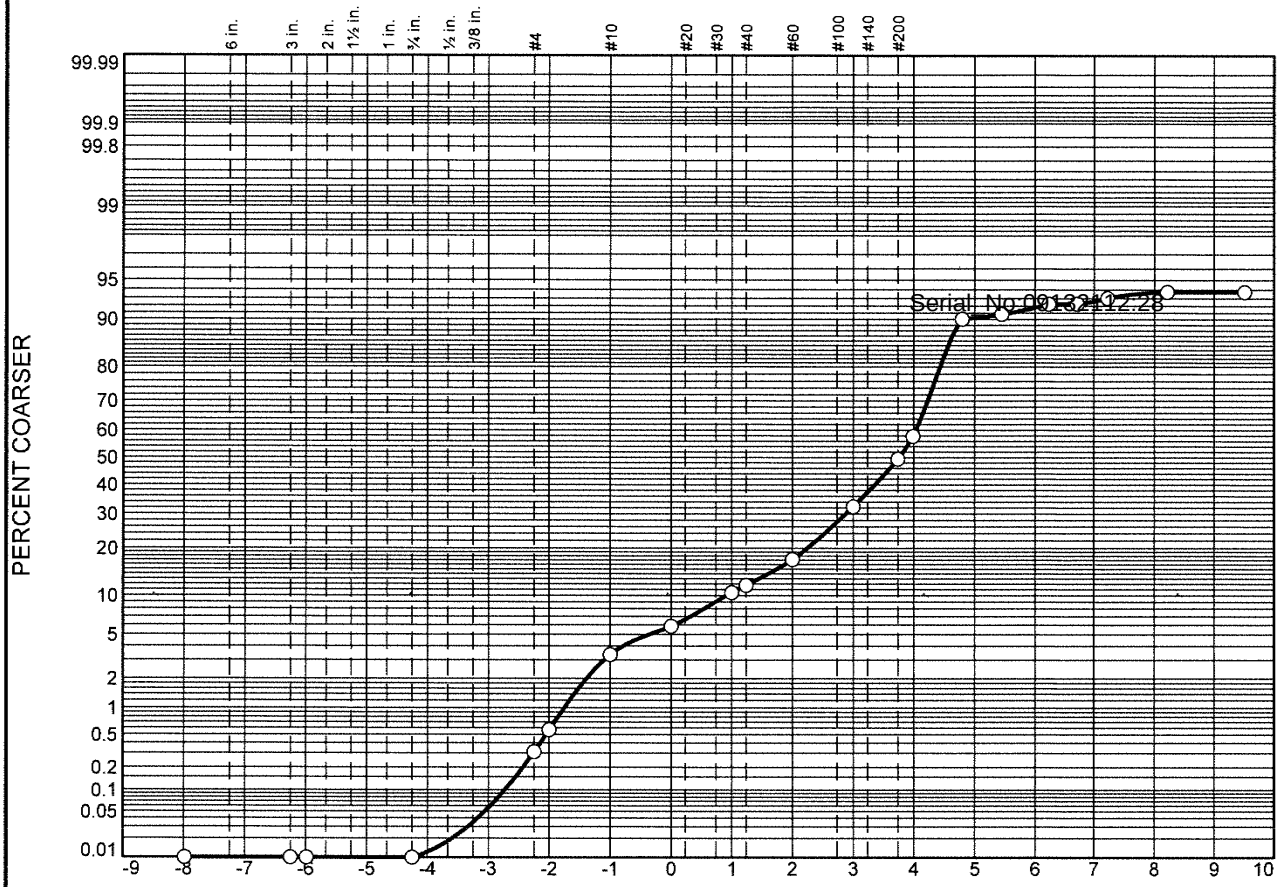
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	2.1	1.7	5.5	14.5	14.5	26.8	63.0	26.8	1.2	0.7	0.4	29.1	5.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0385	0.0448	0.0495	0.0580	0.0680	0.0838	0.1162	0.2911	0.3599	0.4753	0.7334

Fineness Modulus	C_u	C_c
0.65	3.02	0.75

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.6	2.7	2.5	4.7	6.7	15.2	25.8	32.0	1.6	0.8	1.1	6.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2977	0.0974	0.0739	0.0532	0.0422	0.0361	0.80	2.70

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|147|SED|GS|01 **Sample No.:** L2140930-13

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|147|SED|GS|01

Sample Number: L2140930-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 77.57
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
77.57	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.24	0.00	99.7
		#5	0.20	0.00	99.4
		#10	2.15	0.00	96.7
		#18	1.94	0.00	94.2
		#35	3.59	0.00	89.5
		#40	0.99	0.00	88.3
		#60	4.22	0.00	82.8
		#120	11.80	0.00	67.6
		#200	13.21	0.00	50.6
		#230	6.44	0.00	42.3

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.3
Weight of hydrometer sample =45.85
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	10.0
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	9.2
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	7.7
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	7.7
60.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0067	7.0
240.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0034	6.3
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	6.3

Fractional Components

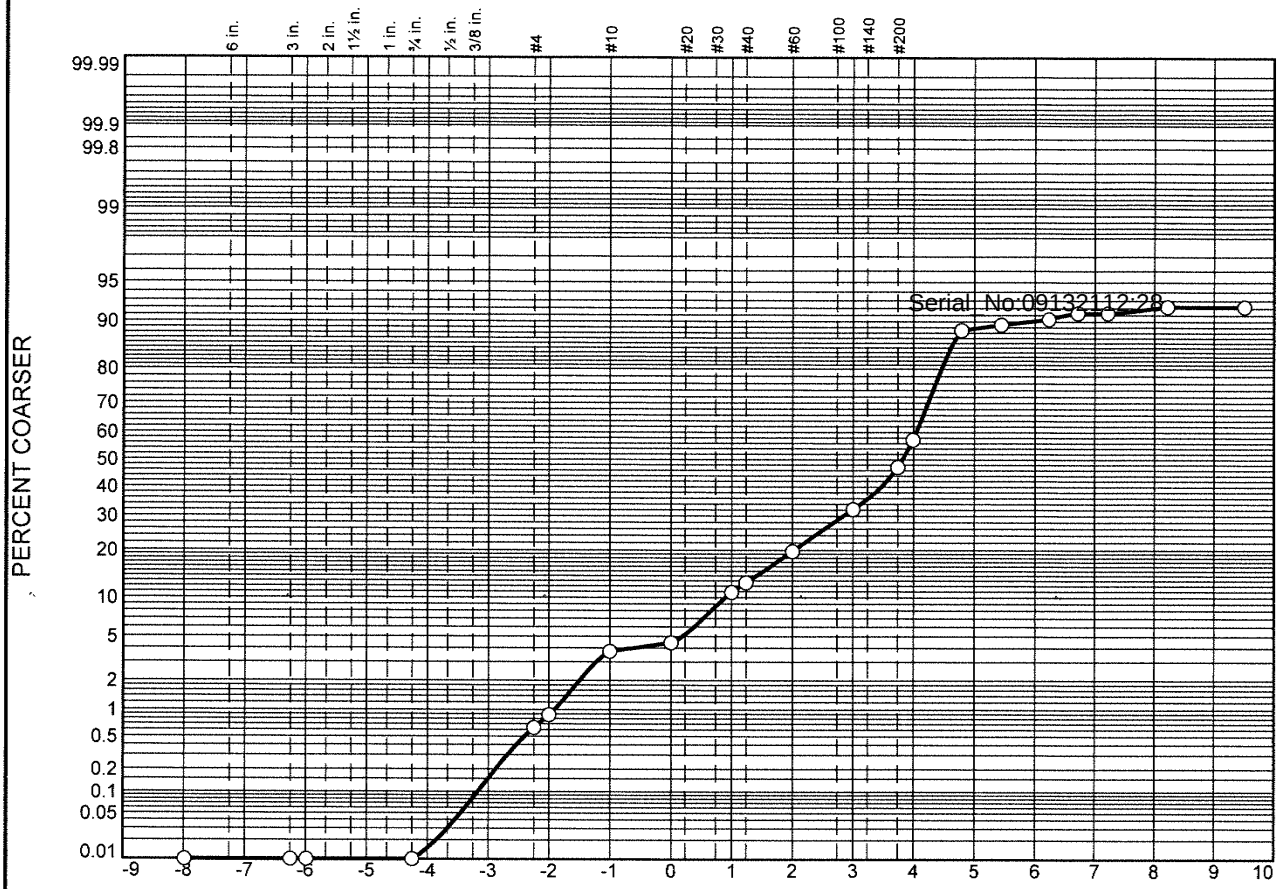
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.6	2.7	2.5	4.7	6.7	15.2	25.8	54.9	32.0	1.6	0.8	1.1	35.5	6.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0361	0.0422	0.0462	0.0532	0.0608	0.0739	0.0974	0.2102	0.2977	0.5303	1.2819

Fineness Modulus	C_u	C_c
0.60	2.70	0.80

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.9	2.8	0.7	6.4	8.9	12.5	25.6	31.0	1.3	1.2	0.7	8.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3467	0.0902	0.0710	0.0530	0.0409	0.0167	1.87	5.41

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|148|SED|GS|01 **Sample No.:** L2140930-14

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|148|SED|GS|01

Sample Number: L2140930-14

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 82.24
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
82.24	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.52	0.00	99.4
		#5	0.20	0.00	99.1
		#10	2.34	0.00	96.3
		#18	0.58	0.00	95.6
		#35	5.28	0.00	89.2
		#40	1.44	0.00	87.4
		#60	5.83	0.00	80.3
		#120	10.28	0.00	67.8
		#200	12.34	0.00	52.8
		#230	8.30	0.00	42.7

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 42.7
Weight of hydrometer sample =37.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0362	11.5
5.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0230	10.6
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	9.6
30.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0095	8.7
60.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0067	8.7
240.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0034	7.8
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	7.8

Alpha Analytical

Fractional Components

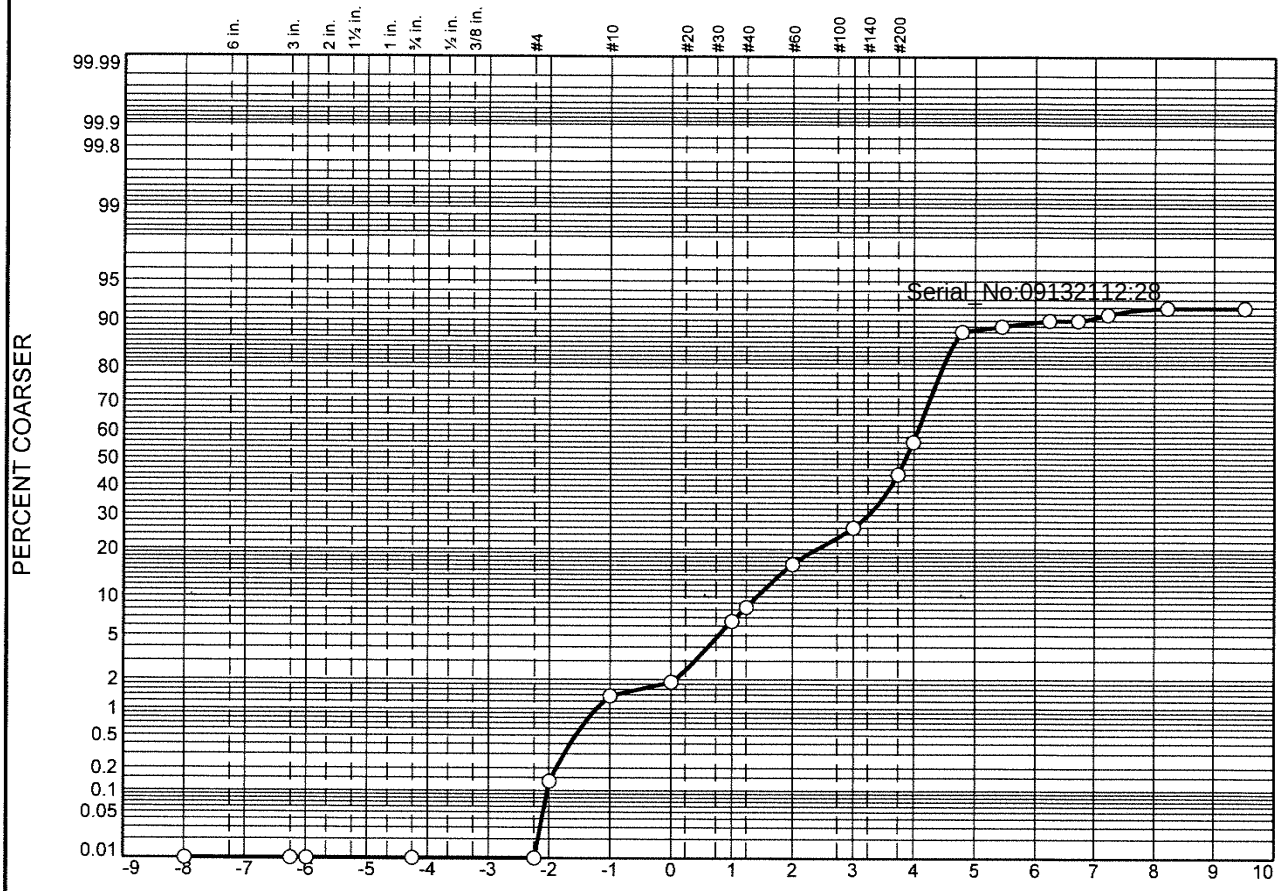
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.9	2.8	0.7	6.4	8.9	12.5	25.6	54.1	31.0	1.3	1.2	0.7	34.2	8.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0167	0.0409	0.0455	0.0530	0.0606	0.0710	0.0902	0.2451	0.3467	0.5367	0.8790

Fineness Modulus	C_u	C_c
0.62	5.41	1.87

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	1.3	0.5	4.6	9.8	9.8	30.6	31.7	1.3	0.7	1.4	8.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2711	0.0810	0.0685	0.0528	0.0405	0.0093	3.70	8.72

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|149|SED|GS|01 **Sample No.:** L2140930-15

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|149|SED|GS|01

Sample Number: L2140930-15

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 67.44
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
67.44	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.09	0.00	99.9
		#10	0.83	0.00	98.6
		#18	0.35	0.00	98.1
		#35	3.14	0.00	93.5
		#40	1.21	0.00	91.7
		#60	5.34	0.00	83.7
		#120	6.61	0.00	73.9
		#200	12.24	0.00	55.8
		#230	8.04	0.00	43.9

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 43.9
Weight of hydrometer sample =36.73
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0362	11.9
5.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0230	11.0
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	10.0
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	10.0
60.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0067	9.1
240.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0034	8.1
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	8.1

Alpha Analytical

Fractional Components

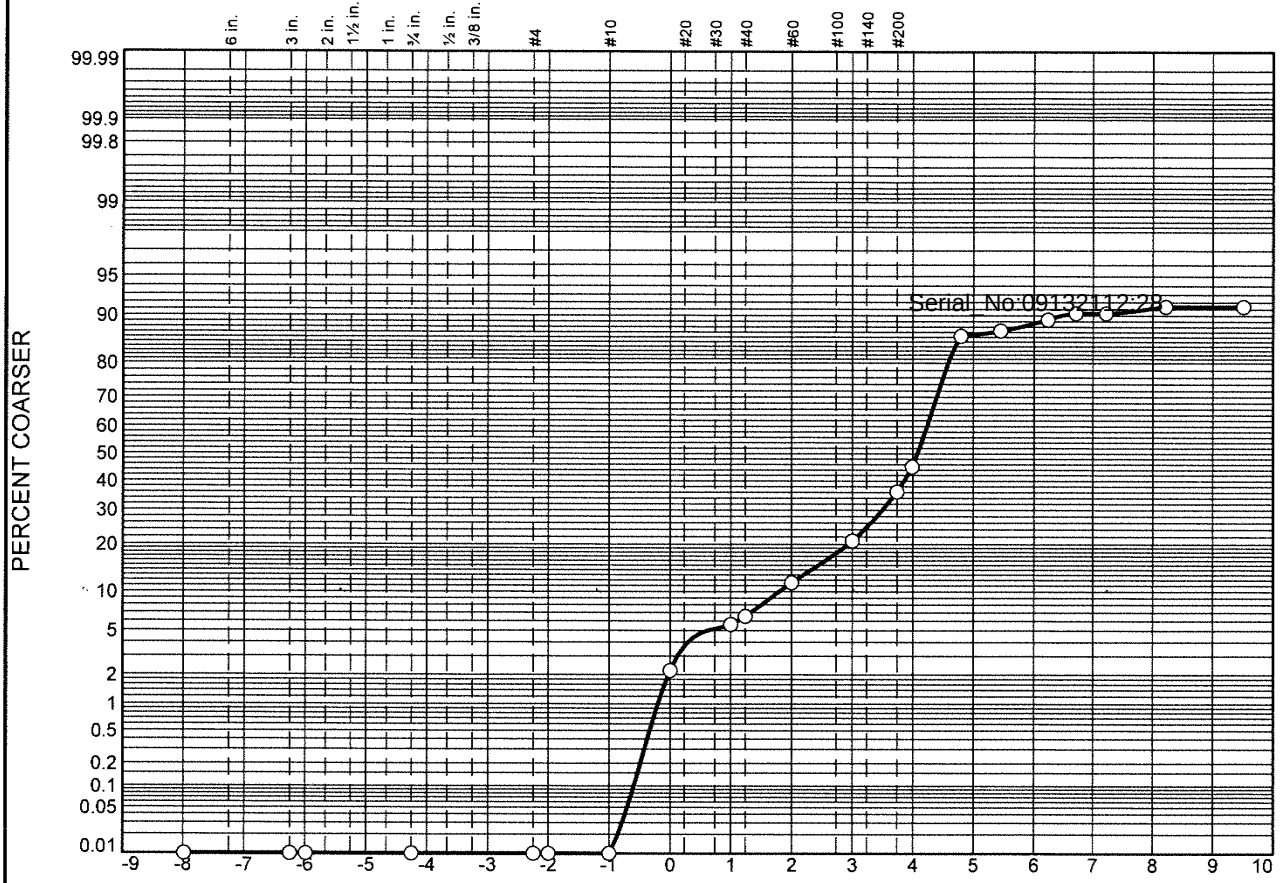
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	1.3	0.5	4.6	9.8	9.8	30.6	55.3	31.7	1.3	0.7	1.4	35.1	8.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0093	0.0405	0.0453	0.0528	0.0600	0.0685	0.0810	0.1892	0.2711	0.3742	0.5840

Fineness Modulus	C_u	C_c
0.44	8.72	3.70

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	2.2	3.4	5.9	9.4	24.8	40.8	2.1	1.7	0.8	8.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1832	0.0688	0.0591	0.0476	0.0375	0.0113	2.91	6.10

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|151|SED|GS|01 **Sample No.:** L2140930-16

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|151|SED|GS|01

Sample Number: L2140930-16

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 41.96
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
41.96	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#18	0.92	0.00	97.8
		#35	1.44	0.00	94.4
		#40	0.38	0.00	93.5
		#60	2.09	0.00	88.5
		#120	3.92	0.00	79.1
		#200	6.44	0.00	63.8
		#230	3.76	0.00	54.8

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 54.8
Weight of hydrometer sample =43.05
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	13.8
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	12.7
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	10.7
30.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0095	9.7
60.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0067	9.7
240.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0034	8.6
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	8.6

Alpha Analytical

Fractional Components

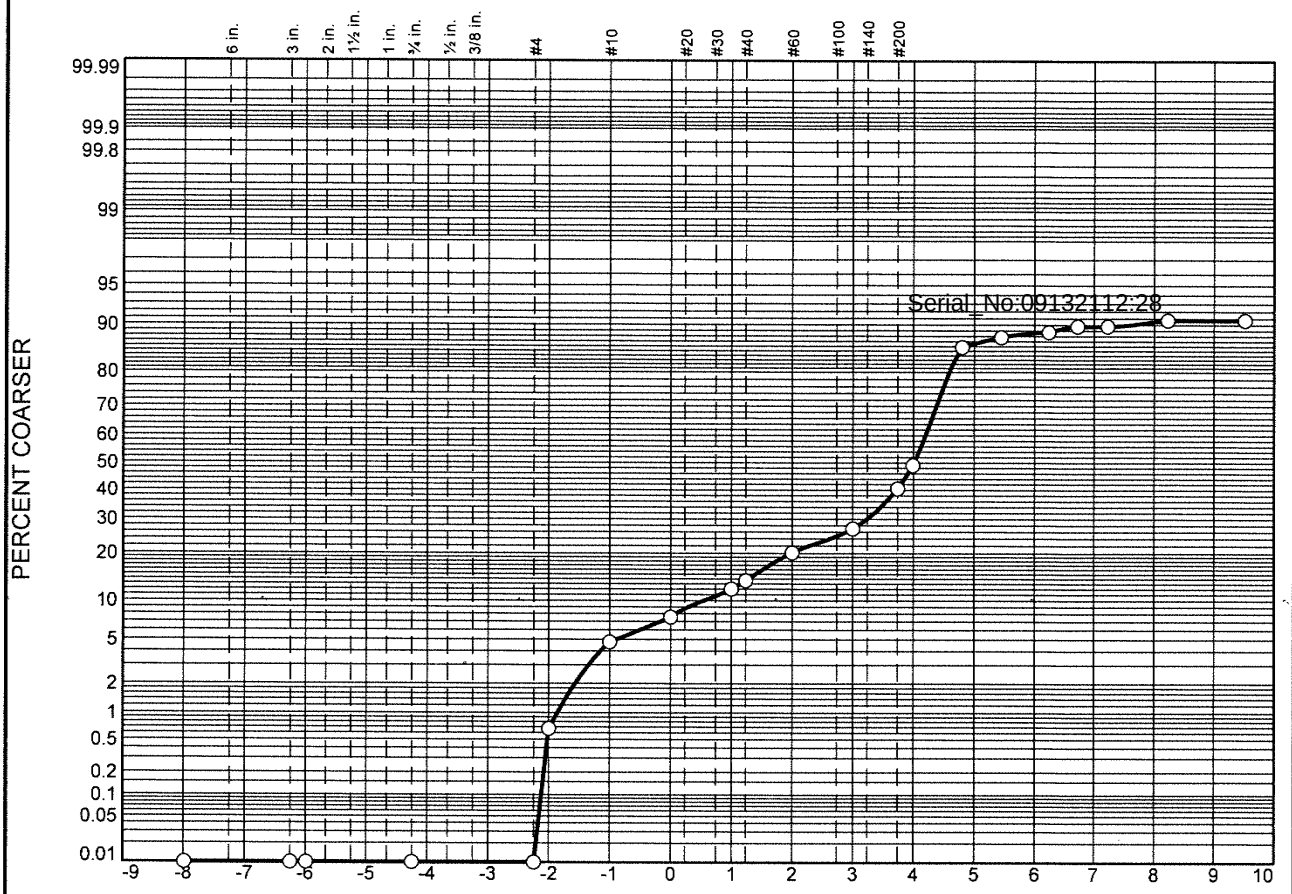
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	2.2	3.4	5.9	9.4	24.8	45.7	40.8	2.1	1.7	0.8	45.4	8.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0113	0.0375	0.0416	0.0476	0.0530	0.0591	0.0688	0.1306	0.1832	0.2878	0.6515

Fineness Modulus	C_u	C_c
0.33	6.10	2.91

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.7	4.1	2.7	4.5	8.1	6.9	22.5	37.1	2.0	1.1	0.8	9.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3788	0.0759	0.0620	0.0482	0.0369	0.0051	5.95	14.79

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|153|SED|GS|01 **Sample No.:** L2140930-17

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|153|SED|GS|01

Sample Number: L2140930-17

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 51.10
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
51.10	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.34	0.00	99.3
		#10	2.09	0.00	95.2
		#18	1.42	0.00	92.5
		#35	2.29	0.00	88.0
		#40	0.83	0.00	86.4
		#60	3.32	0.00	79.9
		#120	3.50	0.00	73.0
		#200	6.90	0.00	59.5
		#230	4.35	0.00	51.0

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 51.0
Weight of hydrometer sample =41.71
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0070	1.0072	0.0133	7.0	14.4	0.0359	14.2
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	12.2
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	11.2
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	10.3
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	10.3
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	9.3
1440.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0014	9.3

Fractional Components

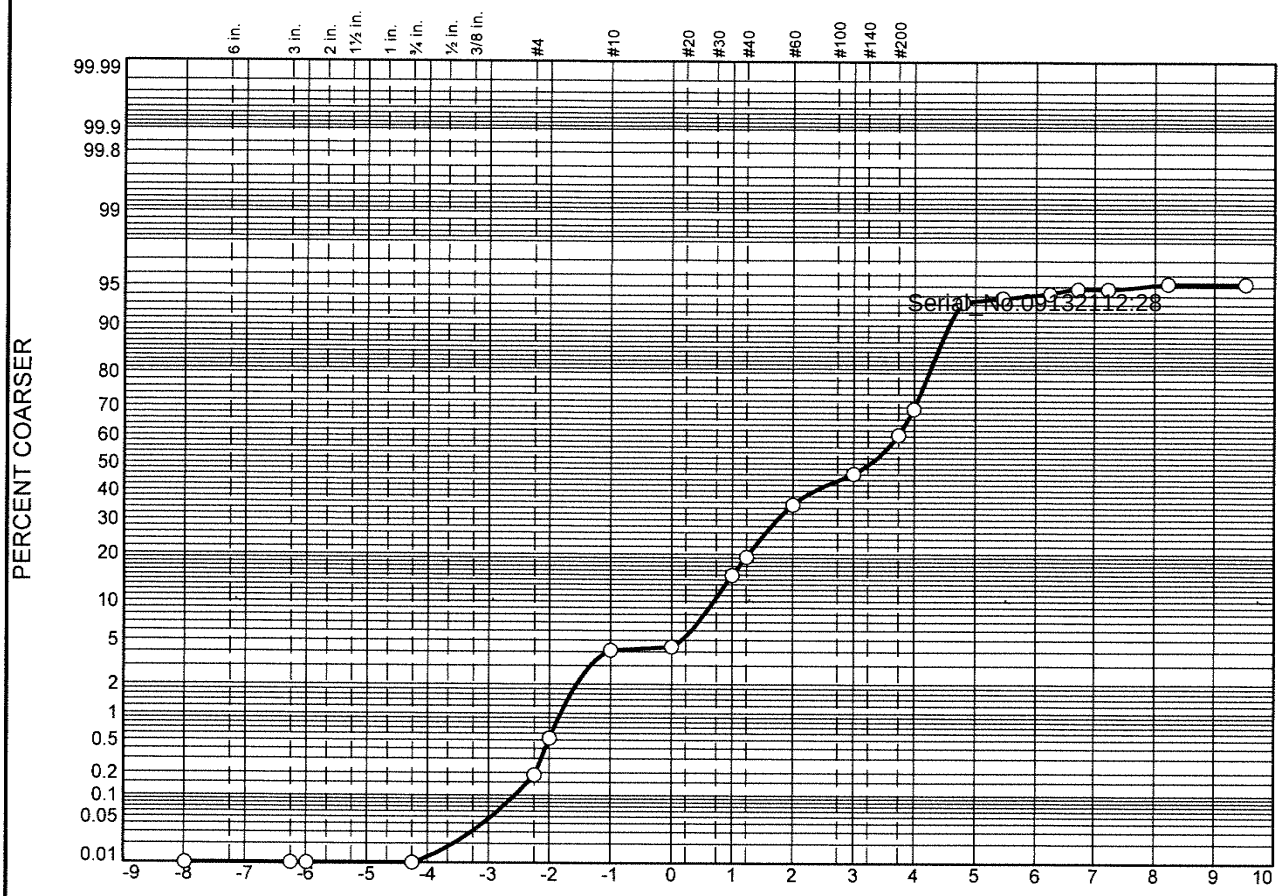
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.7	4.1	2.7	4.5	8.1	6.9	22.5	44.7	37.1	2.0	1.1	0.8	41.0	9.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0051	0.0369	0.0415	0.0482	0.0544	0.0620	0.0759	0.2532	0.3788	0.6835	1.8520

Fineness Modulus	C_u	C_c
0.64	14.79	5.95

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.5	3.6	0.3	10.5	20.1	11.2	23.7	23.6	0.6	0.7	0.4	4.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.4982	0.1945	0.1031	0.0624	0.0480	0.0422	0.47	4.61

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|154|SED|GS|01 **Sample No.:** L2140930-18

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|154|SED|GS|01

Sample Number: L2140930-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 64.66
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
64.66	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.12	0.00	99.8
		#5	0.22	0.00	99.5
		#10	2.31	0.00	95.9
		#18	0.19	0.00	95.6
		#35	6.80	0.00	85.1
		#40	2.80	0.00	80.8
		#60	10.21	0.00	65.0
		#120	7.25	0.00	53.8
		#200	9.24	0.00	39.5
		#230	5.73	0.00	30.6

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 30.6
Weight of hydrometer sample =49.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	6.7
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	6.2
15.00	21.8	1.0055	1.0057	0.0133	5.5	14.8	0.0133	5.7
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	5.2
60.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0067	5.2
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	4.7
1440.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0014	4.7

Alpha Analytical

Fractional Components

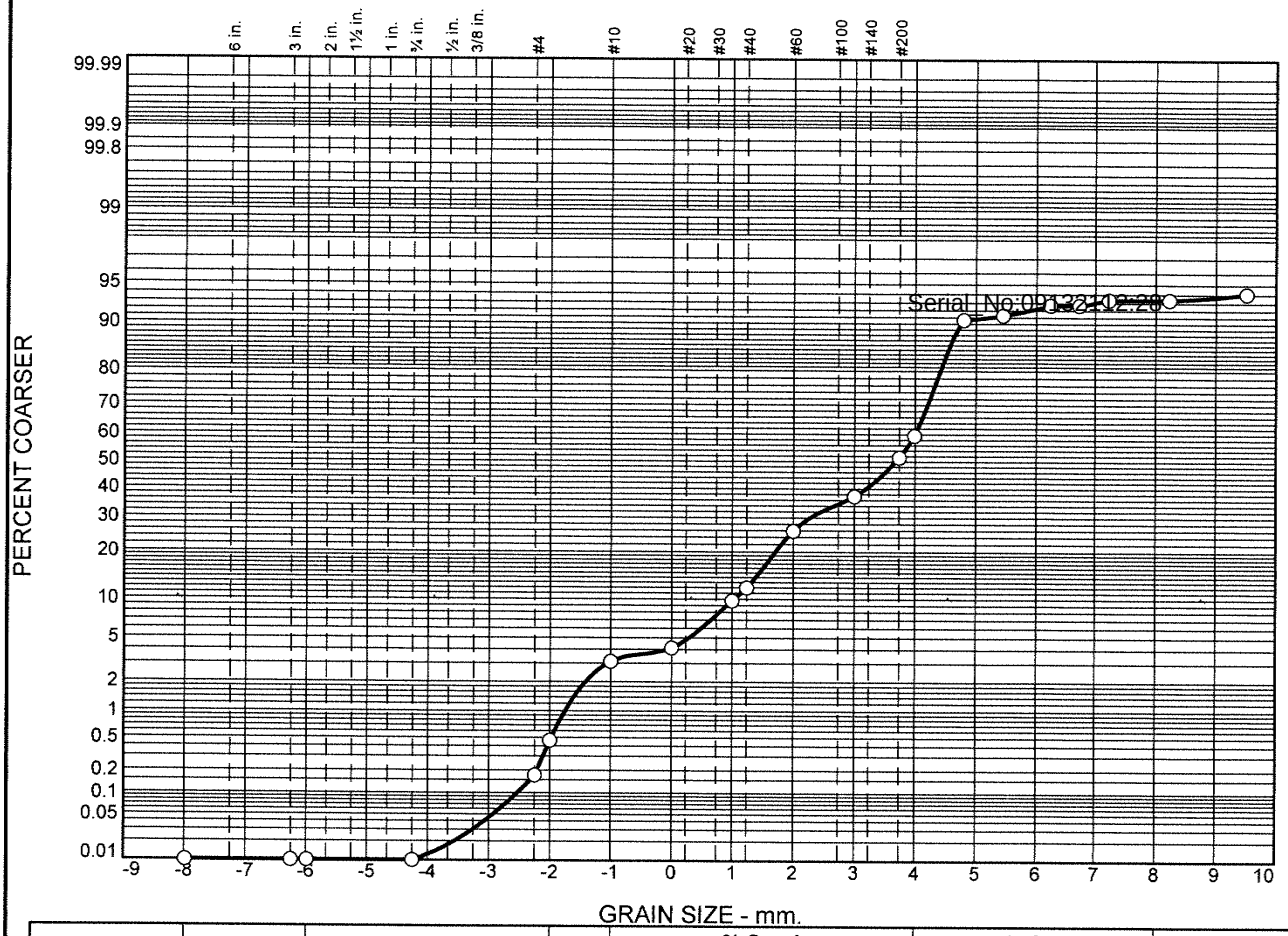
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.5	3.6	0.3	10.5	20.1	11.2	23.7	65.8	23.6	0.6	0.7	0.4	25.3	4.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0046	0.0422	0.0480	0.0528	0.0624	0.0759	0.1031	0.1945	0.4138	0.4982	0.6170	0.8932

Fineness Modulus	C_u	C_c
0.92	4.61	0.47

Serial_No:09132112:28

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.5	2.6	1.0	5.6	16.1	11.5	22.7	30.8	1.4	0.8	0.4	6.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3661	0.1092	0.0780	0.0542	0.0429	0.0371	0.72	2.94

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|156|SED|GS|01 **Sample No.:** L2140930-19

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/10/2021

Location: 3664|2021|WTG|156|SED|GS|01

Sample Number: L2140930-19

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 75.71
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
75.71	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.13	0.00	99.8
		#5	0.22	0.00	99.5
		#10	2.00	0.00	96.9
		#18	0.76	0.00	95.9
		#35	4.25	0.00	90.3
		#40	1.68	0.00	88.1
		#60	10.53	0.00	74.2
		#120	8.65	0.00	62.7
		#200	10.73	0.00	48.6
		#230	6.08	0.00	40.5

Serial_No:09132112:28

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 40.5
Weight of hydrometer sample =46.49
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	21.8	1.0065	1.0067	0.0133	6.5	14.6	0.0360	9.4
5.00	21.8	1.0060	1.0062	0.0133	6.0	14.7	0.0229	8.7
15.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0133	7.3
30.00	21.8	1.0050	1.0052	0.0133	5.0	15.0	0.0094	7.3
60.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0067	6.6
240.00	21.8	1.0045	1.0047	0.0133	4.5	15.1	0.0033	6.6
1440.00	21.8	1.0040	1.0042	0.0133	4.0	15.2	0.0014	5.9

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.5	2.6	1.0	5.6	16.1	11.5	22.7	56.9	30.8	1.4	0.8	0.4	33.4	6.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0371	0.0429	0.0470	0.0542	0.0625	0.0780	0.1092	0.3054	0.3661	0.4887	0.8197

Fineness Modulus	C_u	C_c
0.69	2.94	0.72

Serial_No:09132112:28

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

7/30/21

L2140930

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab

JOB #: 3664

SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|154|Sed|TOC|01	7/24/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|156|Sed|TOC|01	7/25/21	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #3
3664|2021|WTG|096|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|106|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|113|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|114|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|116|Sed|GS|01	7/28/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|117|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|120|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|120|Sed|GS|02	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
3664|2021|WTG|121|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|124|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|125|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|127|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
3664|2021|WTG|129|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -01
3664|2021|WTG|130|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -02
3664|2021|WTG|130|Sed|GS|02	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate -03
3664|2021|WTG|132|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -04

Shipper: FEDEX UPS USPS DHL COURIER

Custody Seal: Intact Broken None

Sample Condition: Intact Broken Leaking

Container Temperature:

RELINQUISHED BY: BG DATE/TIME: 7/29/21

RECEIVED BY: [signature] DATE/TIME: 7/29/21 1600

RELINQUISHED BY: [signature] DATE/TIME: 7/30/21

RECEIVED BY: [signature] DATE/TIME: 7/30/21 1135

T. Hunkeler 7/30/21 1250

CSA CONTACT NAME: Jason Clermont

TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable at the time of sample receipt. Note: Initials are not acceptable.

[signature] -AAC 7/30/21 1250

7/30/21

L2140930

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 7/29/21

Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
3664|2021|WTG|133|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -07
3664|2021|WTG|135|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -06
3664|2021|WTG|136|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -07
3664|2021|WTG|138|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -08
3664|2021|WTG|139|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -09
3664|2021|WTG|141|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -10
3664|2021|WTG|144|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -11
3664|2021|WTG|145|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -12
3664|2021|WTG|147|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2 -13
3664|2021|WTG|148|Sed|GS|01	7/27/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #3 -14
3664|2021|WTG|149|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #3 -15
3664|2021|WTG|151|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #3 -16
3664|2021|WTG|153|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #3 -17
3664|2021|WTG|154|Sed|GS|01	7/24/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #3 -18
3664|2021|WTG|156|Sed|GS|01	7/25/21	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #3 -19

Shipper: FEDEX UPS USPS DHL COURIER
Custody Seal Intact Broken None
Sample Condition Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: BG
DATE/TIME: 7/29/21
RECEIVED BY:
DATE/TIME: 7/29/21 1600

RELINQUISHED BY: T. Hamilton 7/30/21 1250
DATE/TIME: 7/30/21
RECEIVED BY: T. Hamilton Thompson AMM
DATE/TIME: 7/30/21 1135

CLIENT CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are complete and have weight as evidence in future litigation. Continuous custody means the samples have been in the sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

NCL - AAC 7/30/21 1250

ANALYTICAL REPORT

Lab Number:	L2143321
Client:	CSA Ocean Sciences Inc. 513 Broadway Newport, RI 02840
ATTN:	Jason Clermont
Phone:	(252) 258-1626
Project Name:	BEACON WIND
Project Number:	3664
Report Date:	09/21/21

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Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2143321-01	3664|2021|WTG|007|SED|01	SEDIMENT	OFFSHORE MA / NY	08/02/21 00:00	08/12/21
L2143321-02	3664|2021|WTG|009|SED|01	SEDIMENT	OFFSHORE MA / NY	08/02/21 00:00	08/12/21
L2143321-03	3664|2021|WTG|009|SED|02	SEDIMENT	OFFSHORE MA / NY	08/02/21 00:00	08/12/21
L2143321-04	3664|2021|WTG|010|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-05	3664|2021|WTG|010|SED|02	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-06	3664|2021|WTG|012|SED|01	SEDIMENT	OFFSHORE MA / NY	08/02/21 00:00	08/12/21
L2143321-07	3664|2021|WTG|013|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-08	3664|2021|WTG|014|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-09	3664|2021|WTG|016|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-10	3664|2021|WTG|018|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-11	3664|2021|WTG|019|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-12	3664|2021|WTG|022|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-13	3664|2021|WTG|023|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-14	3664|2021|WTG|024|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-15	3664|2021|WTG|026|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-16	3664|2021|WTG|028|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-17	3664|2021|WTG|030|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-18	3664|2021|WTG|031|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-19	3664|2021|WTG|035|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-20	3664|2021|WTG|038|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-21	3664|2021|WTG|041|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-22	3664|2021|WTG|043|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-23	3664|2021|WTG|044|SED|01	SEDIMENT	OFFSHORE MA / NY	08/01/21 00:00	08/12/21
L2143321-24	3664|2021|WTG|046|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2143321-25	3664|2021|WTG|050|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-26	3664|2021|WTG|050|SED|02	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-27	3664|2021|WTG|052|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-28	3664|2021|WTG|055|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-29	3664|2021|WTG|057|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-30	3664|2021|WTG|060|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-31	3664|2021|WTG|060|SED|02	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-32	3664|2021|WTG|062|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-33	3664|2021|WTG|063|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-34	3664|2021|WTG|064|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-35	3664|2021|WTG|069|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-36	3664|2021|WTG|070|SED|01	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-37	3664|2021|WTG|070|SED|02	SEDIMENT	OFFSHORE MA / NY	07/31/21 00:00	08/12/21
L2143321-38	3664|2021|WTG|073|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-39	3664|2021|WTG|079|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-40	3664|2021|WTG|080|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-41	3664|2021|WTG|082|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-42	3664|2021|WTG|089|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-43	3664|2021|WTG|091|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-44	3664|2021|WTG|093|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-45	3664|2021|WTG|099|SED|01	SEDIMENT	OFFSHORE MA / NY	07/29/21 00:00	08/12/21
L2143321-46	3664|2021|WTG|100|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-47	3664|2021|WTG|100|SED|02	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-48	3664|2021|WTG|102|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-49	3664|2021|WTG|109|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-50	3664|2021|WTG|110|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-51	3664|2021|WTG|110|SED|02	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-52	3664|2021|WTG|112|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2143321-53	3664|2021|WTG|118|SED|01	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21
L2143321-54	3664|2021|WTG|080|SED|02	SEDIMENT	OFFSHORE MA / NY	07/28/21 00:00	08/12/21

Project Name:	BEACON WIND	**Lab Number:**	L2143321
Project Number:	3664	**Report Date:**	09/21/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	BEACON WIND	**Lab Number:**	L2143321
Project Number:	3664	**Report Date:**	09/21/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Grain Size

The WG1547617-1 Laboratory Duplicate RPD for % granule (22%), % very coarse sand (46%) and % coarse sand (24%), performed on L2143321-01, is outside the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

The WG1547619-1 Laboratory Duplicate RPD for % very coarse sand (35%), performed on L2143321-21, is above the acceptance criteria. The elevated RPD has been attributed to the non-homogeneous nature of the native sample.

Total Organic Carbon

L2143321-01 - 54 was frozen upon receipt in order to arrest the holding time.

The WG1542828-4 MS recovery (Rep1 - 145%) performed on L2143321-07, is outside the 75-125% acceptance criteria, possibly due to sample matrix. The associated SRM recoveries are within criteria, indicating the sample batch was in control, and all sample results were accepted.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 09/21/21

INORGANICS
&
MISCELLANEOUS

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-01
Client ID: 3664|2021|WTG|007|SED|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 08/02/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.262		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	0.301		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	0.282		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	3.00		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	11.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	66.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	9.60		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	7.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.60		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-02
Client ID: 3664|2021|WTG|009|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/02/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.471		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	0.556		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	0.514		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	4.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	12.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	50.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	16.2		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.8		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-03
Client ID: 3664|2021|WTG|009|SED|02
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 08/02/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.577		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	0.538		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	0.558		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	4.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	11.7		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	51.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	16.3		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	12.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-04
Client ID: 3664|2021|WTG|010|SED|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.268		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	0.310		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	0.289		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.600		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	2.80		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	10.9		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	65.3		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	11.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	7.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-05
Client ID: 3664|2021|WTG|010|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.335		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	0.366		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	0.350		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	2.10		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	9.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	66.8		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	12.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	7.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-06
Client ID: 3664|2021|WTG|012|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/02/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.424		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	0.416		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	0.420		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.900		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	10.6		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	57.6		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	16.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	10.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.00		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-07
Client ID: 3664|2021|WTG|013|SED|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.395		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.346		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.370		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	5.80		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	11.9		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	57.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	13.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	7.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-08
Client ID: 3664|2021|WTG|014|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.296		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.263		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.280		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	3.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	12.7		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	65.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	10.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	6.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-09
Client ID: 3664|2021|WTG|016|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.819		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.854		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.836		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.600		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	1.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	9.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	65.8		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	14.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	6.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-10
Client ID: 3664|2021|WTG|018|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.269		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.319		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.294		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	5.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.90		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	4.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	10.8		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	45.8		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	13.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	13.7		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-11
Client ID: 3664|2021|WTG|019|SED|01
Sample Location: OFFSHORE MA / NY
Sample Depth:
Matrix: Sediment

Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.349		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.345		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.347		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	1.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	9.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	65.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	14.9		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	7.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.00		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-12
Client ID: 3664|2021|WTG|022|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.332		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.298		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.315		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	2.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	6.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	64.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	16.9		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	7.80		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.60		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-13
Client ID: 3664|2021|WTG|023|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.329		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.296		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.312		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	8.10		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	61.9		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	16.3		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	10.2		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.60		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-14
Client ID: 3664|2021|WTG|024|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.335		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.319		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.327		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	2.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	13.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	63.9		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	10.3		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	8.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-15
Client ID: 3664|2021|WTG|026|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.319		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.291		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.305		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	1.80		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	10.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	58.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	19.2		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	8.80		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-16
Client ID: 3664|2021|WTG|028|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.557		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.522		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.540		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	2.30		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	9.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	44.7		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	26.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	14.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-17
Client ID: 3664|2021|WTG|030|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.446		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.457		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.452		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	2.60		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	12.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	51.8		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	20.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.50		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-18
Client ID: 3664|2021|WTG|031|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.307		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.326		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.316		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	11.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	12.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	44.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	21.1		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	9.70		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-19
Client ID: 3664|2021|WTG|035|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.358		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.353		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.356		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.500		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	8.00		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	56.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	21.5		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	9.80		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	1.40		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-20
Client ID: 3664|2021|WTG|038|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.563		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	0.582		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	0.572		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Coarse Sand	0.900		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Medium Sand	2.00		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Fine Sand	33.0		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
% Very Fine Sand	43.2		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	17.4		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.20		%	0.100	NA	1	-	09/17/21 10:35	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-21
Client ID: 3664|2021|WTG|041|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.501		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.489		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.495		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	6.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	5.80		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	33.9		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	35.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	15.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.80		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-22
Client ID: 3664|2021|WTG|043|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.568		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.546		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.557		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
% Coarse Sand	0.900		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
% Medium Sand	3.90		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
% Fine Sand	44.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
% Very Fine Sand	31.9		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
Silt - (3.9-62.5 um)	15.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC
Clay - (<3.9 um)	2.80		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	MC

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-23
Client ID: 3664|2021|WTG|044|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 08/01/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.457		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.473		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.465		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	4.90		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	6.30		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	42.2		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	31.5		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	11.9		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-24
Client ID: 3664|2021|WTG|046|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.588		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.586		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.587		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	2.70		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	3.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	24.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	44.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.4		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-25
Client ID: 3664|2021|WTG|050|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.509		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.533		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.521		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.100		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	0.900		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	2.70		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	19.5		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	55.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	18.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-26
Client ID: 3664|2021|WTG|050|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.510		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.540		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.525		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	0.900		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	2.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	19.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	54.1		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-27
Client ID: 3664|2021|WTG|052|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.557		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.528		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.542		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.800		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	1.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	19.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	51.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	21.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.20		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-28
Client ID: 3664|2021|WTG|055|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.741		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.645		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.693		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.800		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	1.70		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	1.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	15.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	49.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	25.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-29
Client ID: 3664|2021|WTG|057|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.601		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.591		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.596		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	4.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	7.30		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	18.1		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	43.5		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	22.6		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-30
Client ID: 3664|2021|WTG|060|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.592		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.594		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.593		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	1.90		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	12.3		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	60.3		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.9		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.30		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-31
Client ID: 3664|2021|WTG|060|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.455		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.597		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.526		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.900		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	2.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	2.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	13.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	60.3		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	17.3		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.90		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-32
Client ID: 3664|2021|WTG|062|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.638		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.619		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.628		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.900		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	3.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	8.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	16.1		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	45.1		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	21.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-33
Client ID: 3664|2021|WTG|063|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.699		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.675		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.687		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.80		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	3.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	3.80		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	12.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	49.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	24.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-34
Client ID: 3664|2021|WTG|064|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.774		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.816		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.795		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	4.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	10.7		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	19.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	36.2		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	22.2		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.20		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-35
Client ID: 3664|2021|WTG|069|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.709		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.760		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.734		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	4.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	2.80		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	11.4		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	55.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	20.4		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-36
Client ID: 3664|2021|WTG|070|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.655		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.694		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.674		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	6.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	7.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	12.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	48.5		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.2		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.30		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-37
Client ID: 3664|2021|WTG|070|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/31/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.673		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.675		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.674		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.20		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	6.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	7.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	12.8		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	49.2		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-38
Client ID: 3664|2021|WTG|073|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.935		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.993		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.964		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	4.20		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	5.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	3.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	6.70		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	43.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	29.9		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-39
Client ID: 3664|2021|WTG|079|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.735		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.706		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.720		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.30		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	2.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	1.60		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	5.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	58.2		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	26.3		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-40
Client ID: 3664|2021|WTG|080|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.817		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	0.798		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	0.808		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.70		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Coarse Sand	3.00		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Medium Sand	2.50		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Fine Sand	6.40		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
% Very Fine Sand	50.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.0		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.10		%	0.100	NA	1	-	09/17/21 10:36	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-41
Client ID: 3664|2021|WTG|082|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.470		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.535		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.502		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.10		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	4.80		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	15.7		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	44.7		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	17.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	12.4		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.40		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-42
Client ID: 3664|2021|WTG|089|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.617		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.518		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.568		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.20		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	5.00		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	11.7		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	33.9		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	28.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	15.5		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	2.50		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-43
Client ID: 3664|2021|WTG|091|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.659		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.642		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.650		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	2.80		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	3.50		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	5.10		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	31.7		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	33.3		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.00		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-44
Client ID: 3664|2021|WTG|093|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.563		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.653		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.608		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.400		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.10		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	8.20		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	29.3		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	35.5		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	19.5		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.90		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-45
Client ID: 3664|2021|WTG|099|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/29/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.510		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.532		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.521		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	4.00		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	15.4		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	30.5		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	29.9		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	15.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.60		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-46
Client ID: 3664|2021|WTG|100|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.578		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.538		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.558		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.200		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.40		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	13.9		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	34.5		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	28.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	16.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	3.90		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-47
Client ID: 3664|2021|WTG|100|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.571		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.552		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.562		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.30		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	13.9		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	34.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	28.4		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	16.7		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	4.10		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-48
Client ID: 3664|2021|WTG|102|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.628		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.630		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.629		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.300		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.30		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	9.10		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	28.1		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	33.1		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	20.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.30		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-49
Client ID: 3664|2021|WTG|109|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.409		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.441		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.425		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.200		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	3.30		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	12.6		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	24.6		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	33.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	20.5		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.50		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-50
Client ID: 3664|2021|WTG|110|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.623		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.607		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.615		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.100		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.700		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.90		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	5.30		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	19.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	43.3		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	21.4		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.10		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-51
Client ID: 3664|2021|WTG|110|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.652		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.625		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.638		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.300		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.00		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	4.60		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	17.4		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	38.6		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	30.0		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	6.60		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-52
Client ID: 3664|2021|WTG|112|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.507		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.509		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.508		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.400		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.800		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	2.70		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	8.50		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	30.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	26.6		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	24.6		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	5.60		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-53
Client ID: 3664|2021|WTG|118|SED|01
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.814		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.856		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.835		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	0.500		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	0.500		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	1.90		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	5.00		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	11.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	38.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	35.2		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.50		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

SAMPLE RESULTS

Lab ID: L2143321-54
Client ID: 3664|2021|WTG|080|SED|02
Sample Location: OFFSHORE MA / NY
Date Collected: 07/28/21 00:00
Date Received: 08/12/21
Field Prep: Not Specified

Sample Depth:
Matrix: Sediment

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab										
Total Organic Carbon (Rep1)	0.852		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	0.834		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	0.843		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Grain Size (Wentworth Method) - Mansfield Lab										
Boulder (>256 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Cobbles	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Pebble (4.0-64 mm)	ND		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Granule (2.0-4.0 mm)	1.40		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Coarse Sand	1.70		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Coarse Sand	1.60		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Medium Sand	1.60		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Fine Sand	5.30		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
% Very Fine Sand	47.1		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Silt - (3.9-62.5 um)	33.8		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM
Clay - (<3.9 um)	7.50		%	0.100	NA	1	-	09/17/21 10:37	12,D6913/D7928(M)	SM

Project Name: BEACON WIND
Project Number: 3664
Lab Number: L2143321
Report Date: 09/21/21

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Organic Carbon - Mansfield Lab for sample(s): 01-06 Batch: WG1540763-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	09/02/21 09:41	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 41-54 Batch: WG1542349-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	09/07/21 09:22	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 07-20 Batch: WG1542828-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	09/02/21 13:04	1,9060A	SP
Total Organic Carbon - Mansfield Lab for sample(s): 21-40 Batch: WG1542961-1										
Total Organic Carbon (Rep1)	ND		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Rep2)	ND		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM
Total Organic Carbon (Average)	ND		%	0.010	0.010	1	-	09/03/21 09:56	1,9060A	SM

Lab Control Sample Analysis

Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-06 Batch: WG1540763-2								
Total Organic Carbon (Rep1)	114		-		75-125	-		25
Total Organic Carbon (Rep2)	106		-		75-125	-		25
Total Organic Carbon (Average)	110		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 41-54 Batch: WG1542349-2								
Total Organic Carbon (Rep1)	106		-		75-125	-		25
Total Organic Carbon (Rep2)	104		-		75-125	-		25
Total Organic Carbon (Average)	105		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 07-20 Batch: WG1542828-2								
Total Organic Carbon (Rep1)	101		-		75-125	-		25
Total Organic Carbon (Rep2)	103		-		75-125	-		25
Total Organic Carbon (Average)	102		-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 21-40 Batch: WG1542961-2								
Total Organic Carbon (Rep1)	111		-		75-125	-		25
Total Organic Carbon (Rep2)	109		-		75-125	-		25
Total Organic Carbon (Average)	110		-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1540763-4 QC Sample: L2143321-01 Client ID: 3664|2021|WTG|007|SED|01												
Total Organic Carbon (Rep1)	0.262	1.04	1.34	103		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.301	1.06	1.35	99		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 41-54 QC Batch ID: WG1542349-4 QC Sample: L2143321-41 Client ID: 3664|2021|WTG|082|SED|01												
Total Organic Carbon (Rep1)	0.470	0.783	1.28	103		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.535	0.644	1.16	97		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 41-54 QC Batch ID: WG1542349-5 QC Sample: L2143321-42 Client ID: 3664|2021|WTG|089|SED|01												
Total Organic Carbon (Rep1)	0.617	1.2	1.73	93		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.518	1.47	2.03	103		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 07-20 QC Batch ID: WG1542828-4 QC Sample: L2143321-07 Client ID: 3664|2021|WTG|013|SED|01												
Total Organic Carbon (Rep1)	0.395	1.03	1.89	**145**	Q	-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.346	0.825	1.20	103		-	-		75-125	-		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 07-20 QC Batch ID: WG1542828-5 QC Sample: L2143321-08 Client ID: 3664|2021|WTG|014|SED|01												
Total Organic Carbon (Rep1)	0.296	0.788	1.07	98		-	-		75-125	-		25
Total Organic Carbon (Rep2)	0.263	0.797	1.11	106		-	-		75-125	-		25

Matrix Spike Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 21-40 QC Batch ID: WG1542961-4 QC Sample: L2143321-21 Client ID: 3664|2021|WTG|041|SED|01									
Total Organic Carbon (Rep1)	0.501	0.921	1.46	104	-	-	75-125	-	25
Total Organic Carbon (Rep2)	0.489	1.06	1.60	104	-	-	75-125	-	25
Total Organic Carbon - Mansfield Lab Associated sample(s): 21-40 QC Batch ID: WG1542961-5 QC Sample: L2143321-24 Client ID: 3664|2021|WTG|046|SED|01									
Total Organic Carbon (Rep1)	0.588	1.24	1.88	104	-	-	75-125	-	25
Total Organic Carbon (Rep2)	0.586	1.1	1.72	102	-	-	75-125	-	25

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Organic Carbon - Mansfield Lab Associated sample(s): 01-06 QC Batch ID: WG1540763-3 QC Sample: L2143321-01 Client ID: 3664|2021|WTG|007|SED|01						
Total Organic Carbon (Rep1)	0.262	0.298	%	13		25
Total Organic Carbon (Rep2)	0.301	0.273	%	10		25
Total Organic Carbon (Average)	0.282	0.286	%	1		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 41-54 QC Batch ID: WG1542349-3 QC Sample: L2143321-41 Client ID: 3664|2021|WTG|082|SED|01						
Total Organic Carbon (Rep1)	0.470	0.507	%	8		25
Total Organic Carbon (Rep2)	0.535	0.515	%	4		25
Total Organic Carbon (Average)	0.502	0.511	%	2		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 07-20 QC Batch ID: WG1542828-3 QC Sample: L2143321-07 Client ID: 3664|2021|WTG|013|SED|01						
Total Organic Carbon (Rep1)	0.395	0.380	%	4		25
Total Organic Carbon (Rep2)	0.346	0.334	%	4		25
Total Organic Carbon (Average)	0.370	0.357	%	4		25
Total Organic Carbon - Mansfield Lab Associated sample(s): 21-40 QC Batch ID: WG1542961-3 QC Sample: L2143321-21 Client ID: 3664|2021|WTG|041|SED|01						
Total Organic Carbon (Rep1)	0.501	0.490	%	2		25
Total Organic Carbon (Rep2)	0.489	0.488	%	0		25
Total Organic Carbon (Average)	0.495	0.489	%	1		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 01-20 QC Batch ID: WG1547617-1 QC Sample: L2143321-01 Client ID: 3664|2021|WTG|007|SED|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	0.100	ND	%	NC		20
Granule (2.0-4.0 mm)	0.500	0.400	%	**22**	Q	20
% Very Coarse Sand	0.500	0.800	%	**46**	Q	20
% Coarse Sand	3.00	3.80	%	**24**	Q	20
% Medium Sand	11.0	11.9	%	8		20
% Fine Sand	66.5	64.8	%	3		20
% Very Fine Sand	9.60	9.50	%	1		20
Silt - (3.9-62.5 um)	7.20	7.00	%	3		20
Clay - (<3.9 um)	1.60	1.80	%	12		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Grain Size (Wentworth Method) - Mansfield Lab Associated sample(s): 21-40 QC Batch ID: WG1547619-1 QC Sample: L2143321-21 Client ID: 3664|2021|WTG|041|SED|01						
Boulder (>256 mm)	ND	ND	%	NC		20
Cobbles	ND	ND	%	NC		20
Pebble (4.0-64 mm)	ND	ND	%	NC		20
Granule (2.0-4.0 mm)	0.100	0.100	%	0		20
% Very Coarse Sand	1.00	0.700	%	**35**	Q	20
% Coarse Sand	6.40	6.00	%	6		20
% Medium Sand	5.80	6.10	%	5		20
% Fine Sand	33.9	35.0	%	3		20
% Very Fine Sand	35.0	33.7	%	4		20
Silt - (3.9-62.5 um)	15.0	15.9	%	6		20
Clay - (<3.9 um)	2.80	2.50	%	11		20

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	*Custody Seal*
A	Absent
B	Absent

Container Information

Container ID	*Container Type*	*Cooler*	*Initial pH*	*Final pH*	*Temp deg C*	*Pres*	*Seal*	*Frozen Date/Time*	*Analysis(*)*
L2143321-01A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-01B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-02A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-02B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-03A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-03B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-04A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2143321-04B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-05A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-05B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-06A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-06B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-07A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-07B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-08A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-08B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-09A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2143321-09B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-10A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-10B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-11A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-11B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-12A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-12B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-13A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-13B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-14A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-14B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-15A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-15B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-16A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2143321-16B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-17A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-17B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-18A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2143321-18B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-19A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-19B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-20A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2143321-20B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-21A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-21B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-22A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-22B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-23A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-23B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-24A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-24B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-25A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-25B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-26A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-26B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-27A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-27B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-28A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-28B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-29A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-29B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-30A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-30B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-31A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-31B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-32A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-32B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-33A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)()
L2143321-33B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-34A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-34B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-35A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-35B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

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Project Number: 3664

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Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-36A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-36B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-37A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-37B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-38A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-38B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-39A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-39B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-40A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2143321-40B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-41A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-41B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-42A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-42B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-43A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-43B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-44A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-44B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-45A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-MSAND(W)()
L2143321-45B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-46A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-46B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-47A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)()
L2143321-47B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-48A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-48B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-49A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2143321-49B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-50A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)()
L2143321-50B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name: BEACON WIND
Project Number: 3664

Lab Number: L2143321
Report Date: 09/21/21

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2143321-51A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)()
L2143321-51B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-52A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-52B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-53A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-COBBLES(W)(),A2-HYDRO-GRANULE(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-VCSAND(W)()
L2143321-53B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)
L2143321-54A	Plastic 8oz unpreserved for Grain Size	B	NA		2.2	Y	Absent		A2-HYDRO-GRANULE(W)(),A2-HYDRO-COBBLES(W)(),A2-HYDRO-CLAY(W)(),A2-HYDRO-VFSAND(W)(),A2-HYDRO-SILT(W)(),A2-HYDRO-PEBBLE(W)(),A2-HYDRO-FSAND(W)(),A2-HYDRO-VCSAND(W)(),A2-HYDRO-BOULDER(W)(),A2-HYDRO-CSAND(W)(),A2-HYDRO-MSAND(W)()
L2143321-54B	Glass 120ml/4oz unpreserved	A	NA		2.0	Y	Absent		A2-TOC-9060-2REPS(28)

*Values in parentheses indicate holding time in days

Project Name:	BEACON WIND	**Lab Number:**	L2143321
Project Number:	3664	**Report Date:**	09/21/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2143321
Project Number:	3664	**Report Date:**	09/21/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BEACON WIND	**Lab Number:**	L2143321
Project Number:	3664	**Report Date:**	09/21/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Project Name:	BEACON WIND	**Lab Number:**	L2143321
Project Number:	3664	**Report Date:**	09/21/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

12 Annual Book of ASTM Standards. (American Society for Testing and Materials) ASTM International.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

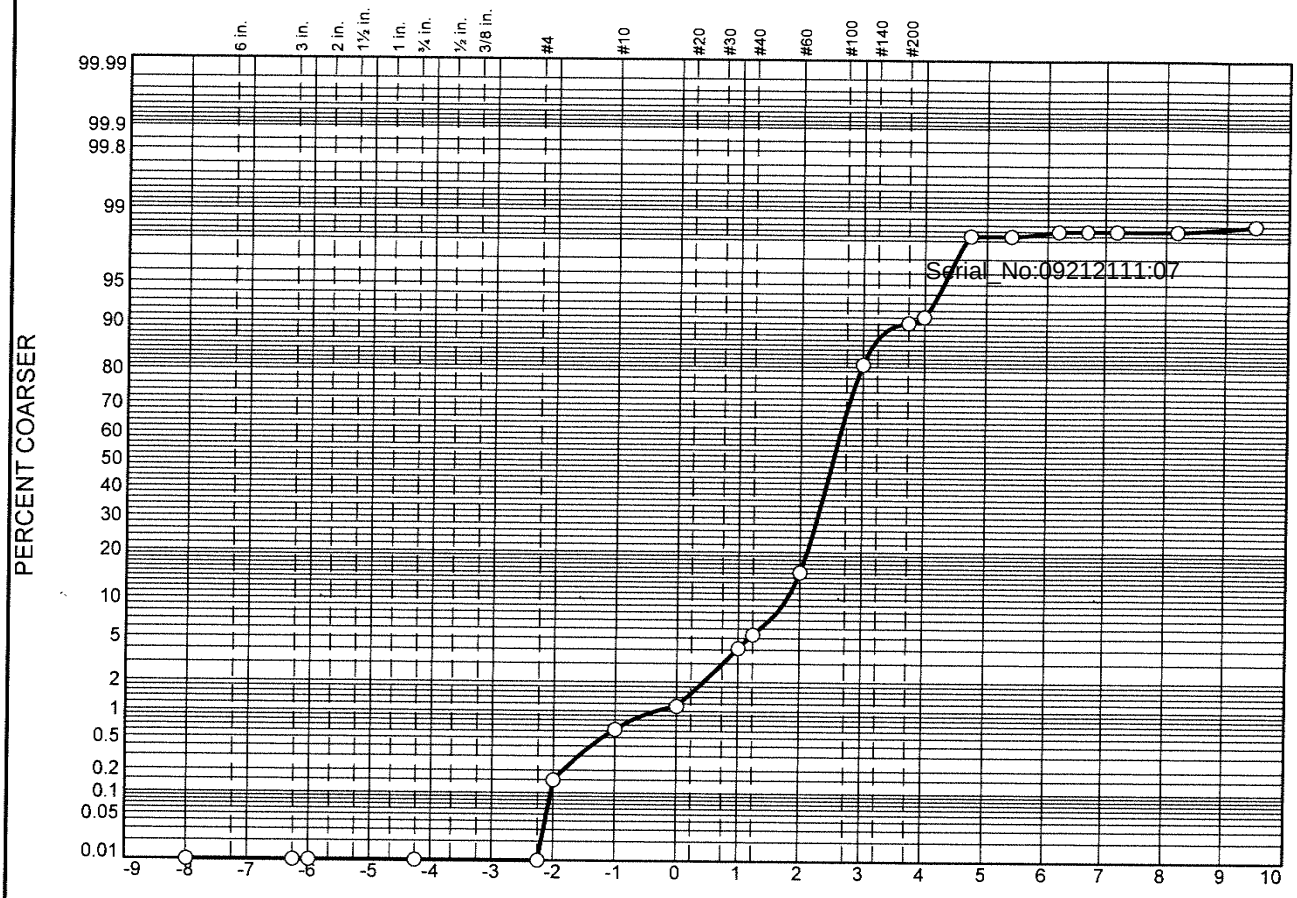
We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Serial_No:09212111:07

ASTM D6913/D7928

GRAIN SIZE ANALYSIS

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.5	0.5	3.0	11.0	66.5	9.6	7.0	0.1	0.1		1.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2506	0.1885	0.1739	0.1462	0.1153	0.0793	1.43	2.38

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|007|SED|01 **Sample No.:** L2143321-01

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|007|SED|01

Sample Number: L2143321-01

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 33.67
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
33.67	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.05	0.00	99.9
		#10	0.16	0.00	99.4
		#18	0.17	0.00	98.9
		#35	1.00	0.00	95.9
		#40	0.42	0.00	94.7
		#60	3.29	0.00	84.9
		#120	22.38	0.00	18.4
		#200	2.88	0.00	9.9
		#230	0.32	0.00	8.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 8.9
Weight of hydrometer sample =35.59
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0375	1.8
5.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0237	1.8
15.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0138	1.6
30.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0097	1.6
60.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0069	1.6
240.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0034	1.6
1440.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.4

Fractional Components

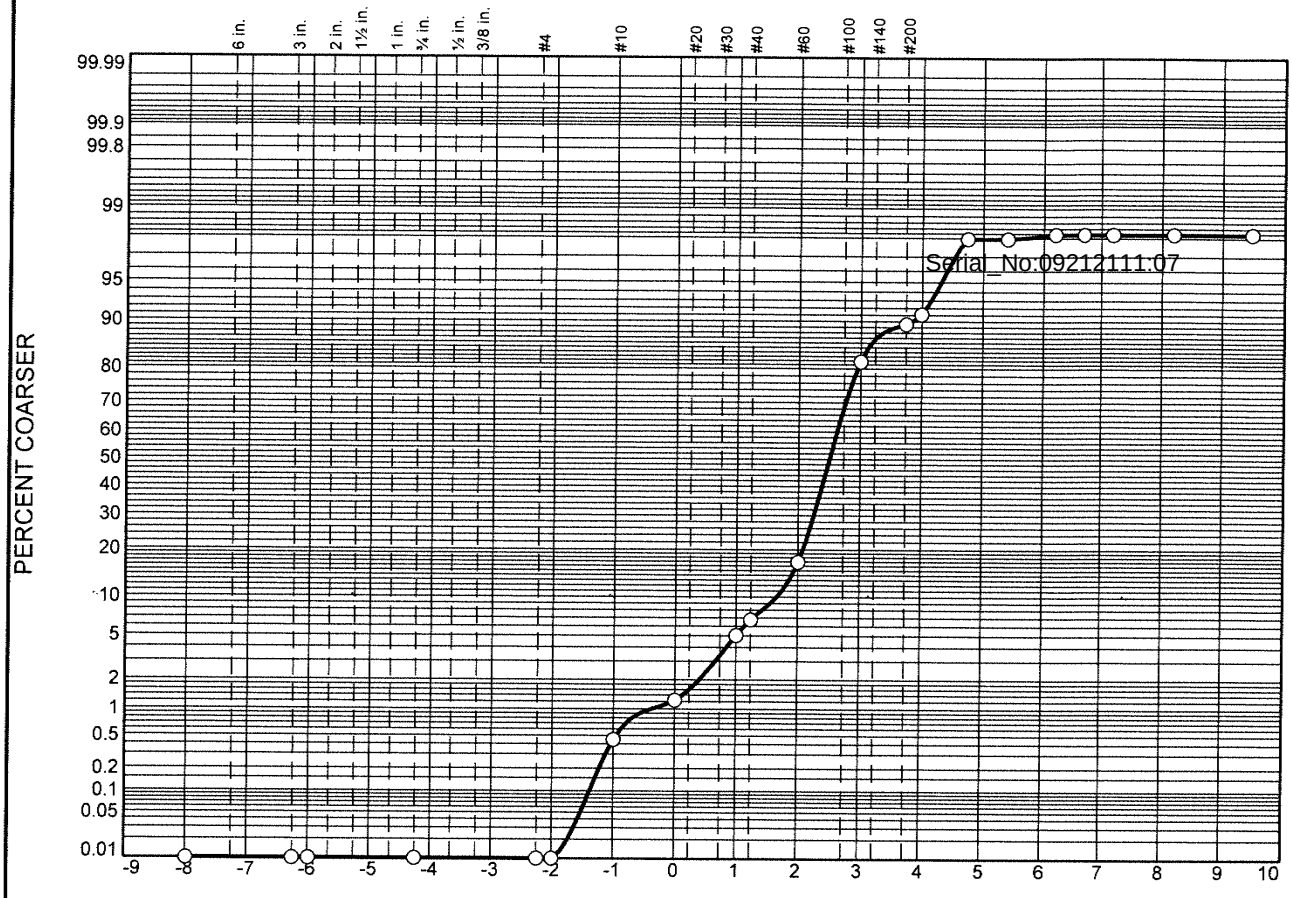
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.5	0.5	3.0	11.0	66.5	9.6	90.6	7.0	0.1	0.1		7.2	1.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0505	0.0793	0.1153	0.1286	0.1462	0.1603	0.1739	0.1885	0.2306	0.2506	0.2896	0.4440

Fineness Modulus	C_u	C_c
0.81	2.38	1.43

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.8	3.8	11.9	64.8	9.5	6.8	0.1	0.1	0.0	1.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2605	0.1913	0.1762	0.1475	0.1146	0.0695	1.64	2.75

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|007|SED|01 **Sample No.:** WG1547617-1

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|007|SED|01

Sample Number: WG1547617-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 35.60
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
35.60	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.16	0.00	99.6
		#18	0.28	0.00	98.8
		#35	1.35	0.00	95.0
		#40	0.61	0.00	93.3
		#60	3.60	0.00	83.1
		#120	23.10	0.00	18.3
		#200	2.77	0.00	10.5
		#230	0.55	0.00	8.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 8.9
Weight of hydrometer sample =35.15
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0373	2.0
5.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0236	2.0
15.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0137	1.8
30.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0097	1.8
60.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0068	1.8
240.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0034	1.8
1440.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0014	1.8

Fractional Components

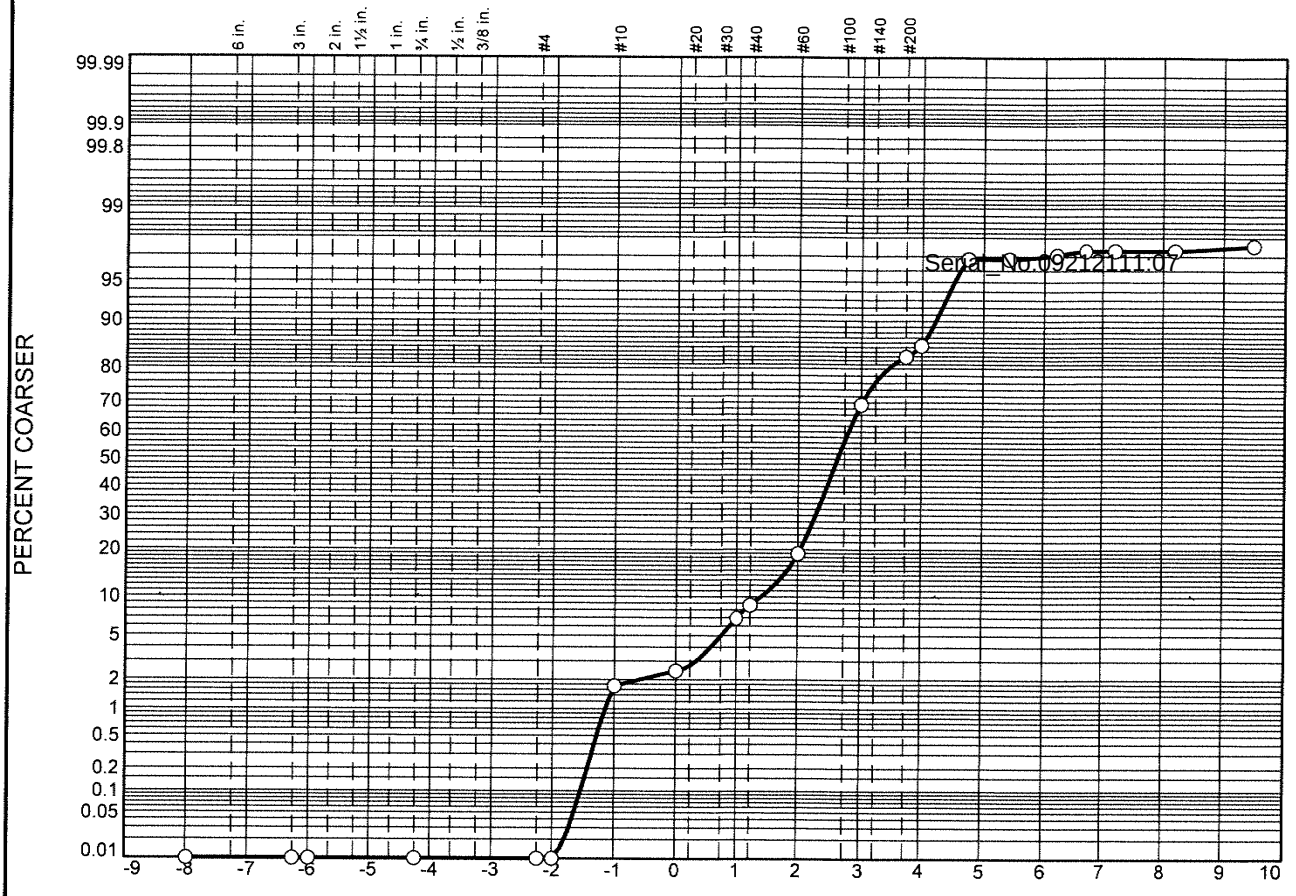
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.8	3.8	11.9	64.8	9.5	90.8	6.8	0.1	0.1	0.0	7.0	1.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0503	0.0695	0.1146	0.1292	0.1475	0.1622	0.1762	0.1913	0.2367	0.2605	0.3160	0.5014

Fineness Modulus	C_u	C_c
0.84	2.75	1.64

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.7	0.7	4.5	12.0	50.4	16.2	11.3	0.2	0.3	0.0	2.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.2811	0.1818	0.1621	0.1234	0.0640	0.0533	1.57	3.41

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|009|SED|01 **Sample No.:** L2143321-02

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|009|SED|01

Sample Number: L2143321-02

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 82.70
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
82.70	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	1.43	0.00	98.3
		#18	0.58	0.00	97.6
		#35	3.72	0.00	93.1
		#40	1.45	0.00	91.3
		#60	8.47	0.00	81.1
		#120	41.66	0.00	30.7
		#200	11.22	0.00	17.1
		#230	2.04	0.00	14.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 14.7
Weight of hydrometer sample =44.14
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0060	1.0060	0.0136	6.0	14.7	0.0370	3.2
5.00	20.0	1.0060	1.0060	0.0136	6.0	14.7	0.0234	3.2
15.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0136	2.9
30.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0096	2.7
60.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0068	2.7
240.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0034	2.7
1440.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0014	2.4

Fractional Components

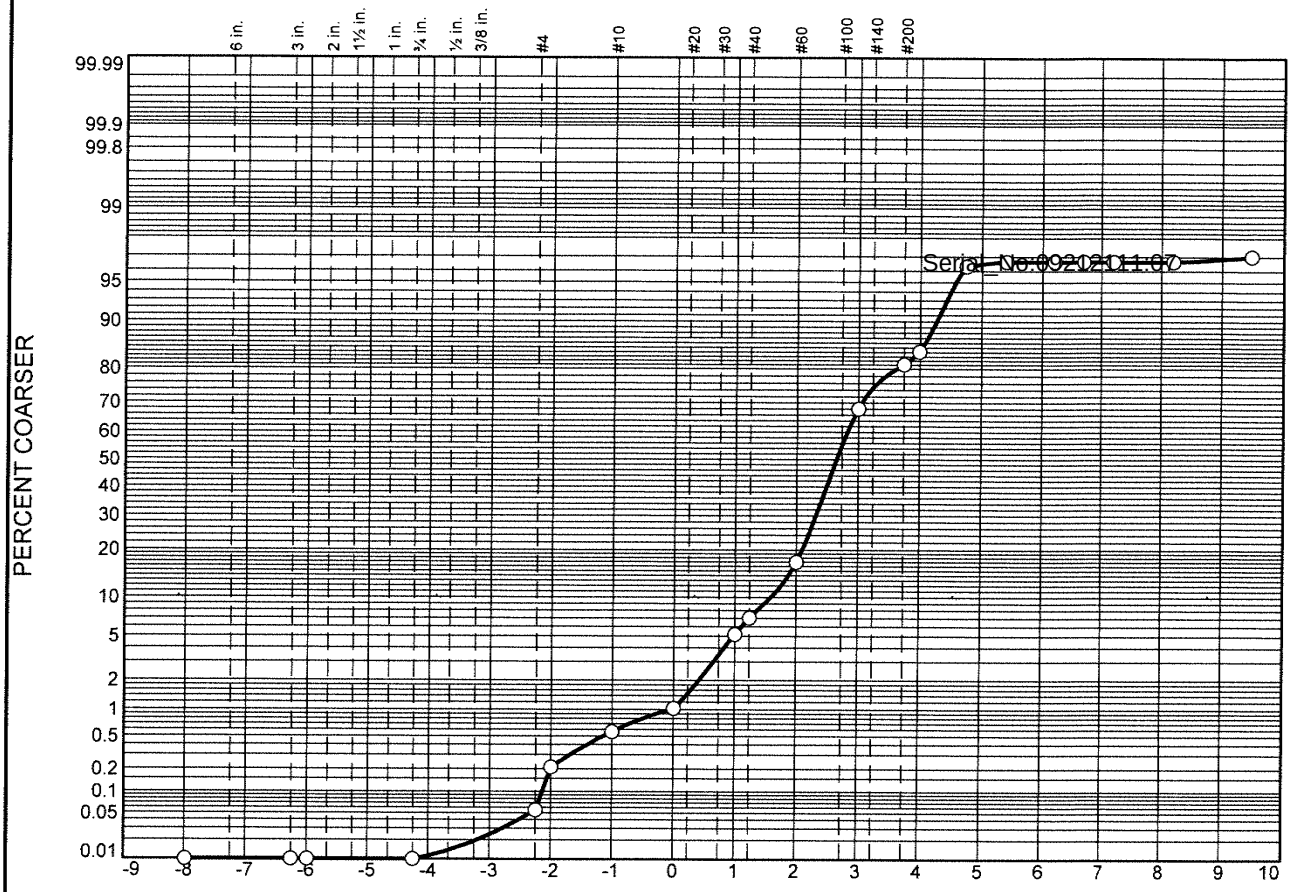
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.7	0.7	4.5	12.0	50.4	16.2	83.8	11.3	0.2	0.3	0.0	11.8	2.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0433	0.0533	0.0640	0.0915	0.1234	0.1437	0.1621	0.1818	0.2439	0.2811	0.3767	0.5998

Fineness Modulus	C_u	C_c
0.78	3.41	1.57

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.2	0.4	0.4	4.2	11.7	51.1	16.3	12.2	0.2	0.0	0.0	3.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2638	0.1780	0.1593	0.1202	0.0610	0.0519	1.57	3.43

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|009|SED|02 **Sample No.:** L2143321-03

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|009|SED|02

Sample Number: L2143321-03

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 90.33
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
90.33	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.05	0.00	99.9
		#5	0.14	0.00	99.8
		#10	0.32	0.00	99.4
		#18	0.42	0.00	99.0
		#35	3.76	0.00	94.8
		#40	1.65	0.00	93.0
		#60	8.97	0.00	83.1
		#120	46.14	0.00	32.0
		#200	11.77	0.00	18.9
		#230	2.78	0.00	15.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 15.9
Weight of hydrometer sample =38.27
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0372	3.6
5.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0236	3.3
15.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0136	3.3
30.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0096	3.3
60.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0068	3.3
240.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0034	3.3
1440.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0014	3.0

Fractional Components

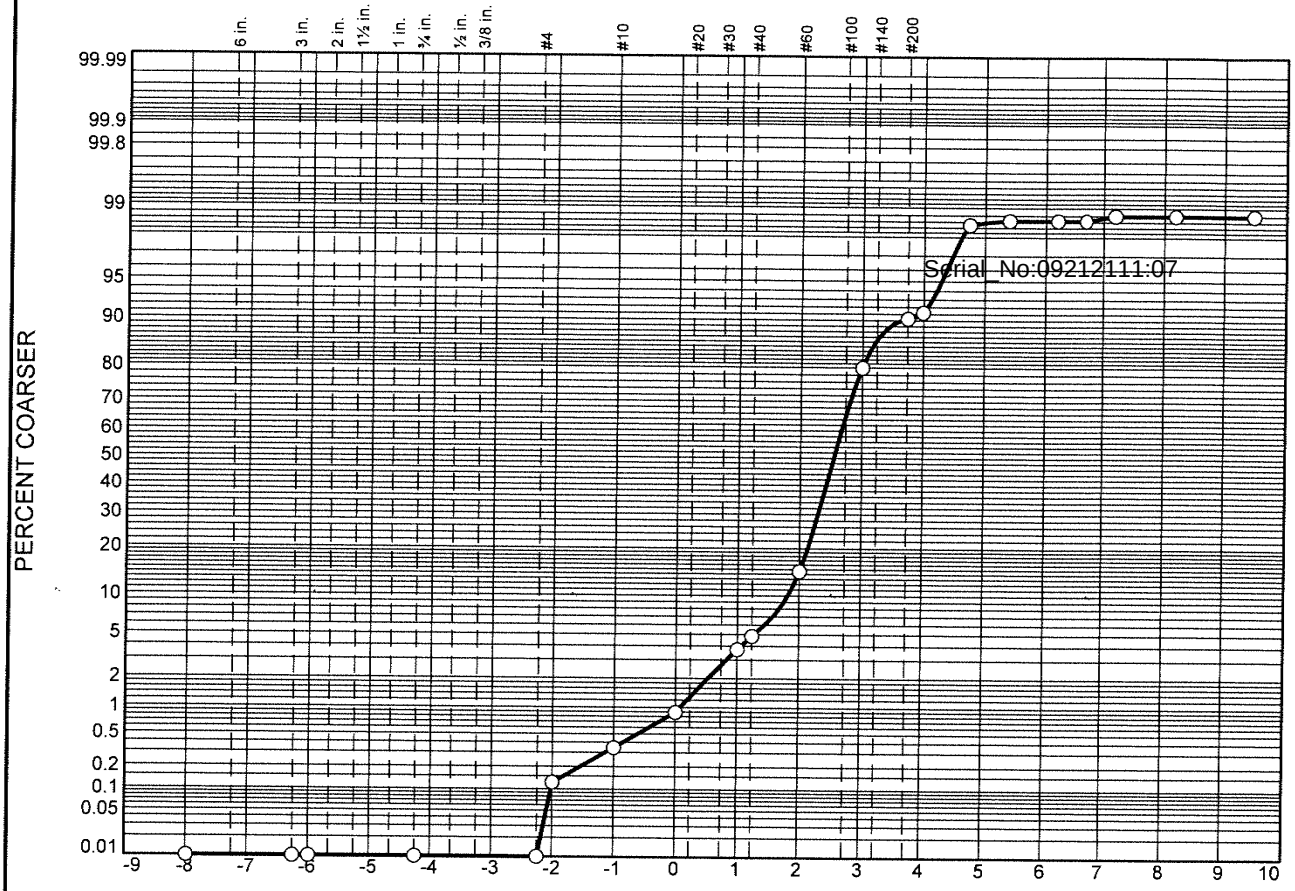
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.2	0.4	0.4	4.2	11.7	51.1	16.3	83.7	12.2	0.2	0.0	0.0	12.4	3.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0419	0.0519	0.0610	0.0811	0.1202	0.1413	0.1593	0.1780	0.2340	0.2638	0.3324	0.5092

Fineness Modulus	C_u	C_c
0.72	3.43	1.57

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.2	0.6	2.8	10.9	65.3	11.4	7.3	0.0	0.1	0.1	1.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2478	0.1858	0.1711	0.1428	0.1112	0.0803	1.37	2.31

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|010|SED|01 **Sample No.:** L2143321-04

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|010|SED|01

Sample Number: L2143321-04

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 81.45
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
81.45	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.10	0.00	99.9
		#10	0.18	0.00	99.7
		#18	0.44	0.00	99.1
		#35	2.31	0.00	96.3
		#40	0.92	0.00	95.2
		#60	7.92	0.00	85.4
		#120	53.23	0.00	20.1
		#200	8.42	0.00	9.7
		#230	0.78	0.00	8.8

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 8.8
Weight of hydrometer sample =46.49
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0373	1.5
5.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0237	1.4
15.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0137	1.4
30.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0097	1.4
60.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0069	1.2
240.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0034	1.2
1440.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0014	1.2

Fractional Components

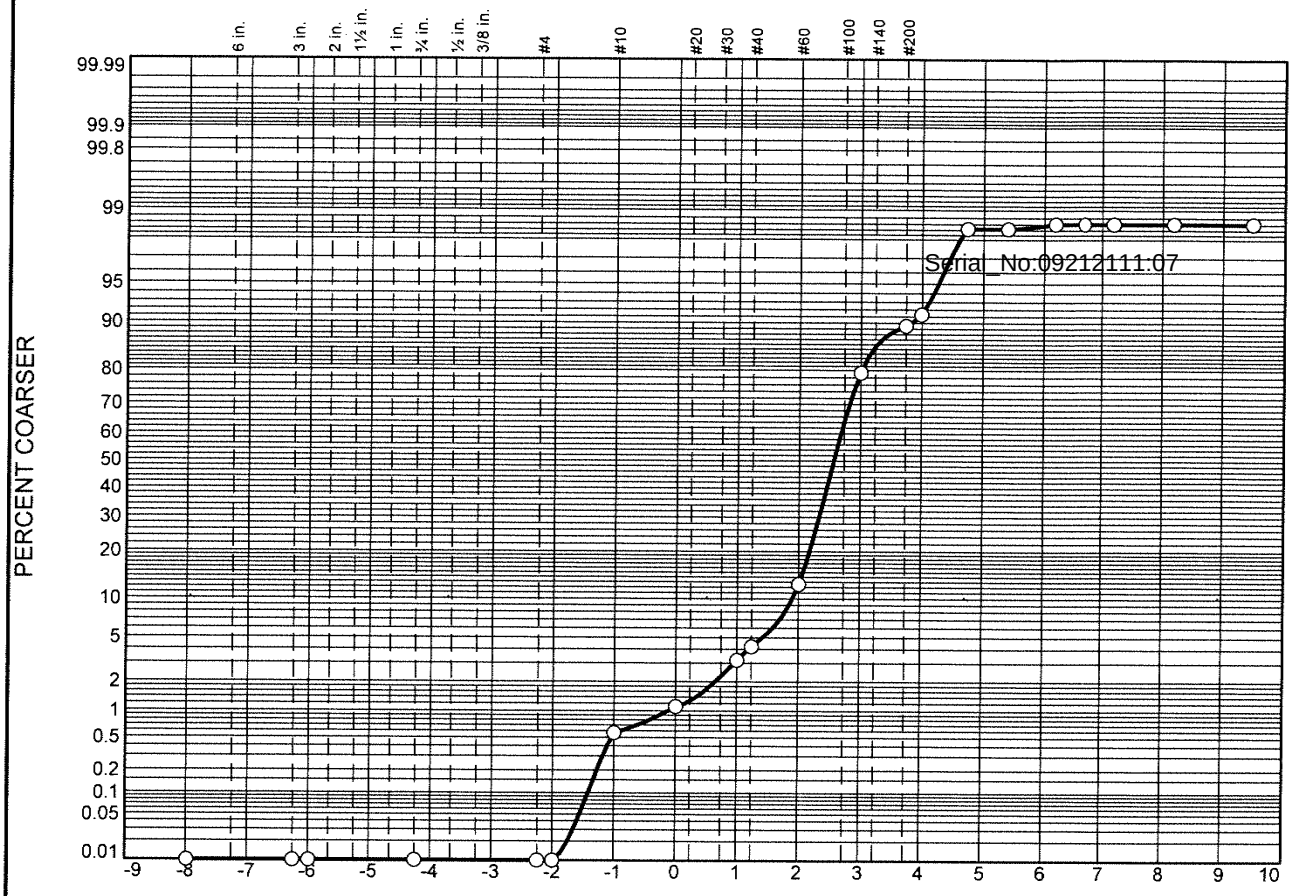
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.2	0.6	2.8	10.9	65.3	11.4	91.0	7.3	0.0	0.1	0.1	7.5	1.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0511	0.0803	0.1112	0.1248	0.1428	0.1572	0.1711	0.1858	0.2282	0.2478	0.2842	0.4165

Fineness Modulus	C_u	C_c
0.78	2.31	1.37

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	0.5	2.1	9.3	66.8	12.1	7.0	0.2	0.0		1.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2381	0.1824	0.1686	0.1415	0.1082	0.0702	1.56	2.60

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|010|SED|02 **Sample No.:** L2143321-05

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|010|SED|02

Sample Number: L2143321-05

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 75.57
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
75.57	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.43	0.00	99.4
		#18	0.41	0.00	98.9
		#35	1.56	0.00	96.8
		#40	0.77	0.00	95.8
		#60	6.31	0.00	87.5
		#120	50.43	0.00	20.7
		#200	7.72	0.00	10.5
		#230	1.37	0.00	8.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 8.7
Weight of hydrometer sample =39.92
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x** Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0375	1.6
5.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0237	1.6
15.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0138	1.4
30.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0097	1.4
60.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0069	1.4
240.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0034	1.4
1440.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0014	1.4

Fractional Components

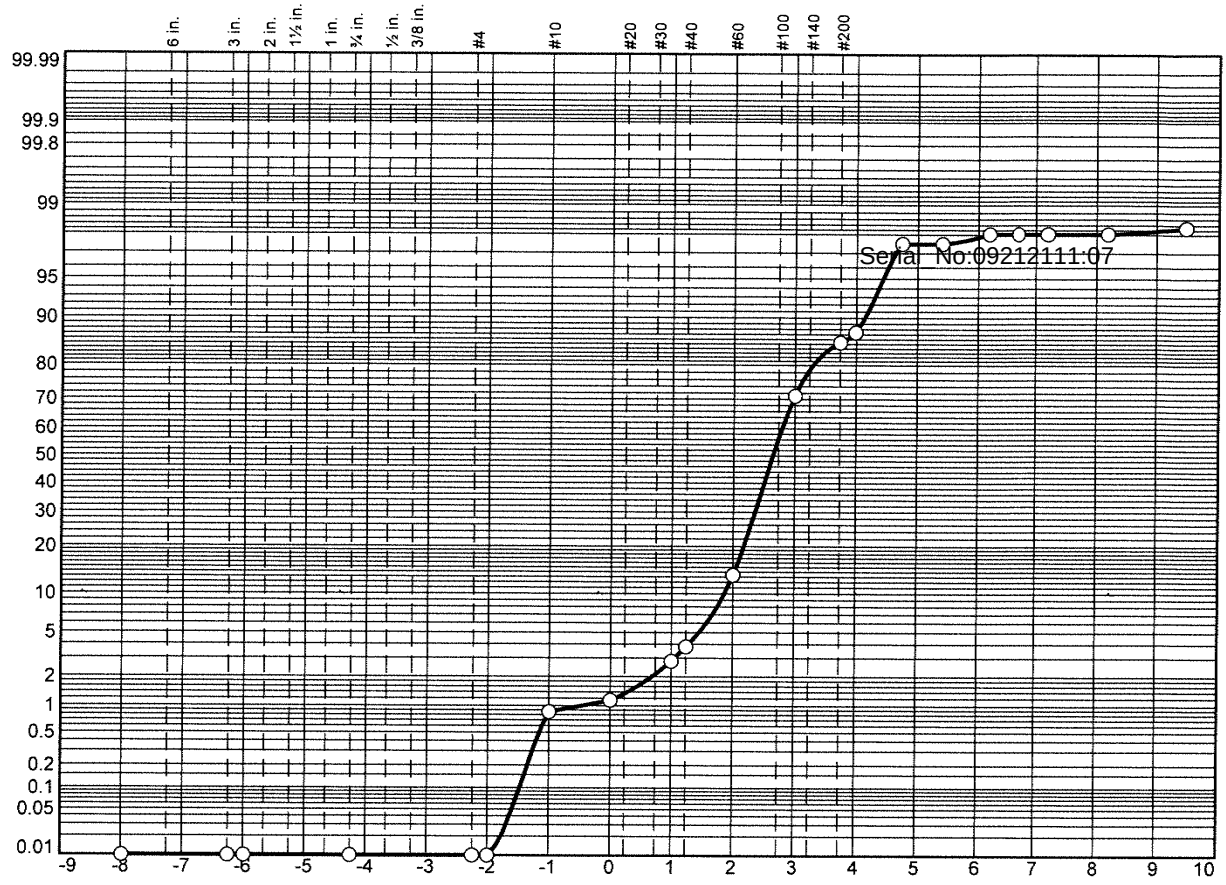
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	0.5	2.1	9.3	66.8	12.1	90.8	7.0	0.2	0.0		7.2	1.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0519	0.0702	0.1082	0.1234	0.1415	0.1554	0.1686	0.1824	0.2210	0.2381	0.2679	0.3762

Fineness Modulus	C_u	C_c
0.75	2.60	1.56

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.9	0.2	1.7	10.6	57.6	16.6	9.9	0.4	0.1	0.0	2.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2413	0.1761	0.1598	0.1270	0.0775	0.0566	1.62	3.11

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|012|SED|01 **Sample No.:** L2143321-06

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|012|SED|01

Sample Number: L2143321-06

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 91.92
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.92	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.79	0.00	99.1
		#18	0.26	0.00	98.9
		#35	1.52	0.00	97.2
		#40	0.91	0.00	96.2
		#60	8.81	0.00	86.6
		#120	52.98	0.00	29.0
		#200	13.15	0.00	14.7
		#230	1.91	0.00	12.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 12.6
Weight of hydrometer sample =40.98
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0373	2.5
5.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0236	2.5
15.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0138	2.0
30.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0097	2.0
60.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0069	2.0
240.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0034	2.0
1440.00	20.0	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.7

Fractional Components

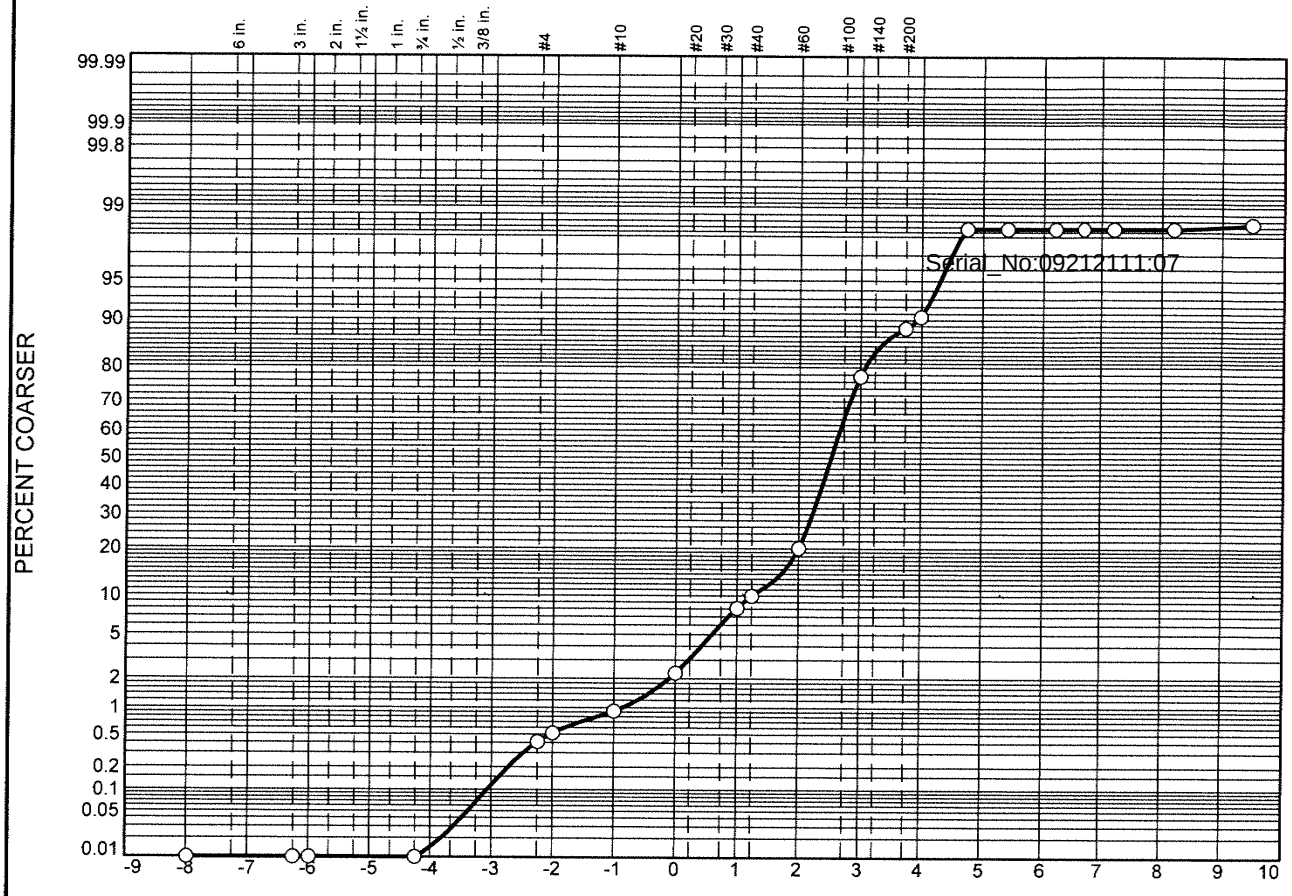
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.9	0.2	1.7	10.6	57.6	16.6	86.7	9.9	0.4	0.1	0.0	10.4	2.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0463	0.0566	0.0775	0.1021	0.1270	0.1442	0.1598	0.1761	0.2214	0.2413	0.2750	0.3672

Fineness Modulus	C_u	C_c
0.68	3.11	1.62

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.5	0.4	1.4	5.8	11.9	57.5	13.2	7.6	0.0	0.0	0.0	1.7

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2901	0.1913	0.1734	0.1402	0.0997	0.0651	1.58	2.94

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|013|SED|01 **Sample No.:** L2143321-07

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|013|SED|01

Sample Number: L2143321-07

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 100.14
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
100.14	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.41	0.00	99.6
		#5	0.11	0.00	99.5
		#10	0.40	0.00	99.1
		#18	1.34	0.00	97.7
		#35	5.86	0.00	91.9
		#40	1.82	0.00	90.1
		#60	10.11	0.00	80.0
		#120	57.51	0.00	22.5
		#200	11.08	0.00	11.5
		#230	2.00	0.00	9.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 9.5
Weight of hydrometer sample =45.37
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0373	1.7
5.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0236	1.7
15.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0136	1.7
30.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0096	1.7
60.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0068	1.7
240.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0034	1.7
1440.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0014	1.5

Fractional Components

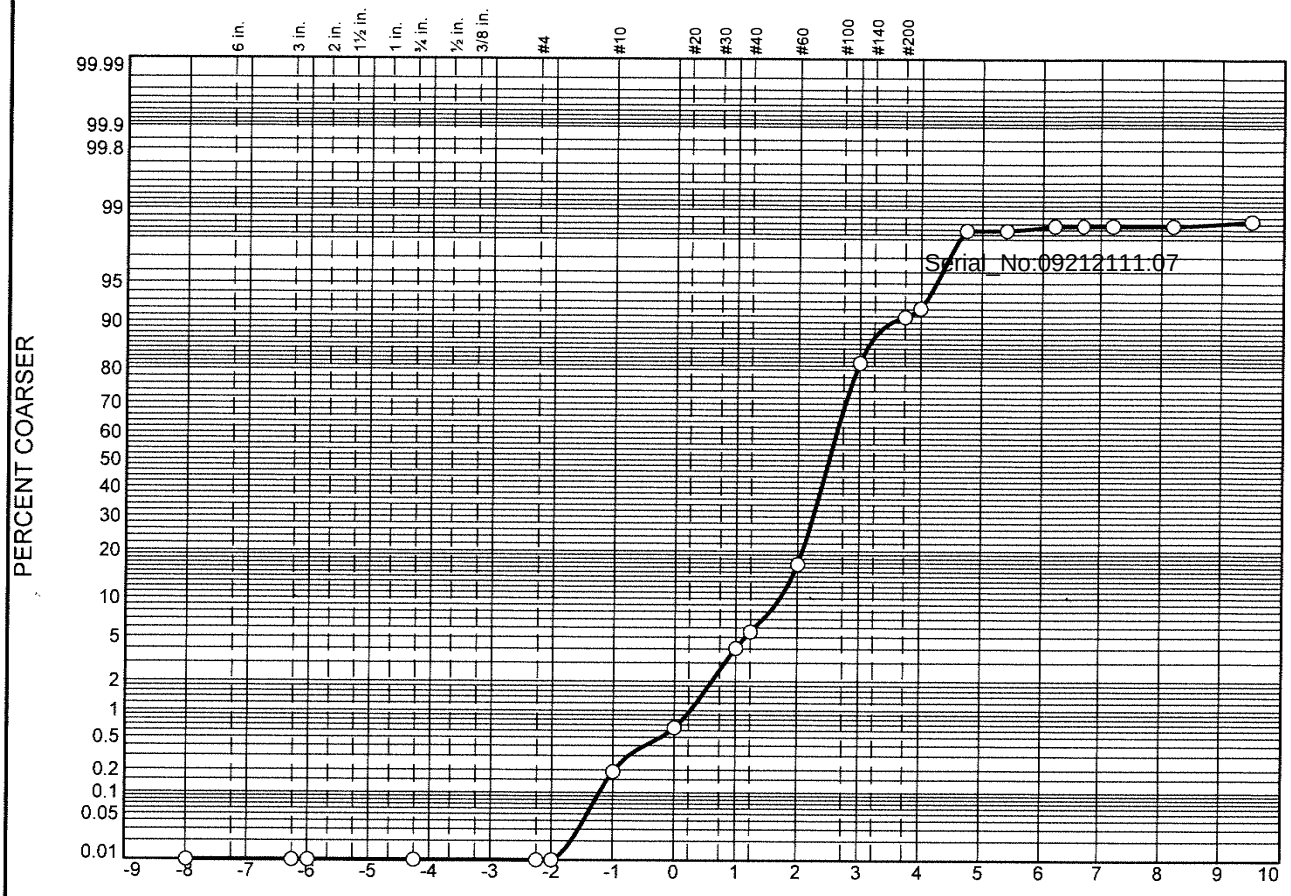
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.5	0.4	1.4	5.8	11.9	57.5	13.2	89.8	7.6	0.0	0.0	0.0	7.6	1.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0506	0.0651	0.0997	0.1184	0.1402	0.1571	0.1734	0.1913	0.2501	0.2901	0.4220	0.6654

Fineness Modulus	C_u	C_c
0.88	2.94	1.58

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.4	3.4	12.7	65.0	10.5	6.2	0.1	0.0	0.0	1.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2592	0.1913	0.1760	0.1470	0.1156	0.0873	1.29	2.19

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|014|SED|01 **Sample No.:** L2143321-08

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|014|SED|01

Sample Number: L2143321-08

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 79.11
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
79.11	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.15	0.00	99.8
		#18	0.36	0.00	99.4
		#35	2.69	0.00	96.0
		#40	1.20	0.00	94.4
		#60	8.85	0.00	83.3
		#120	51.39	0.00	18.3
		#200	7.25	0.00	9.1
		#230	0.98	0.00	7.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 7.9
Weight of hydrometer sample =38.65
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0373	1.6
5.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0236	1.6
15.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0137	1.5
30.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0097	1.5
60.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0068	1.5
240.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0034	1.5
1440.00	20.0	1.0040	1.0040	0.0136	4.0	15.2	0.0014	1.3

Fractional Components

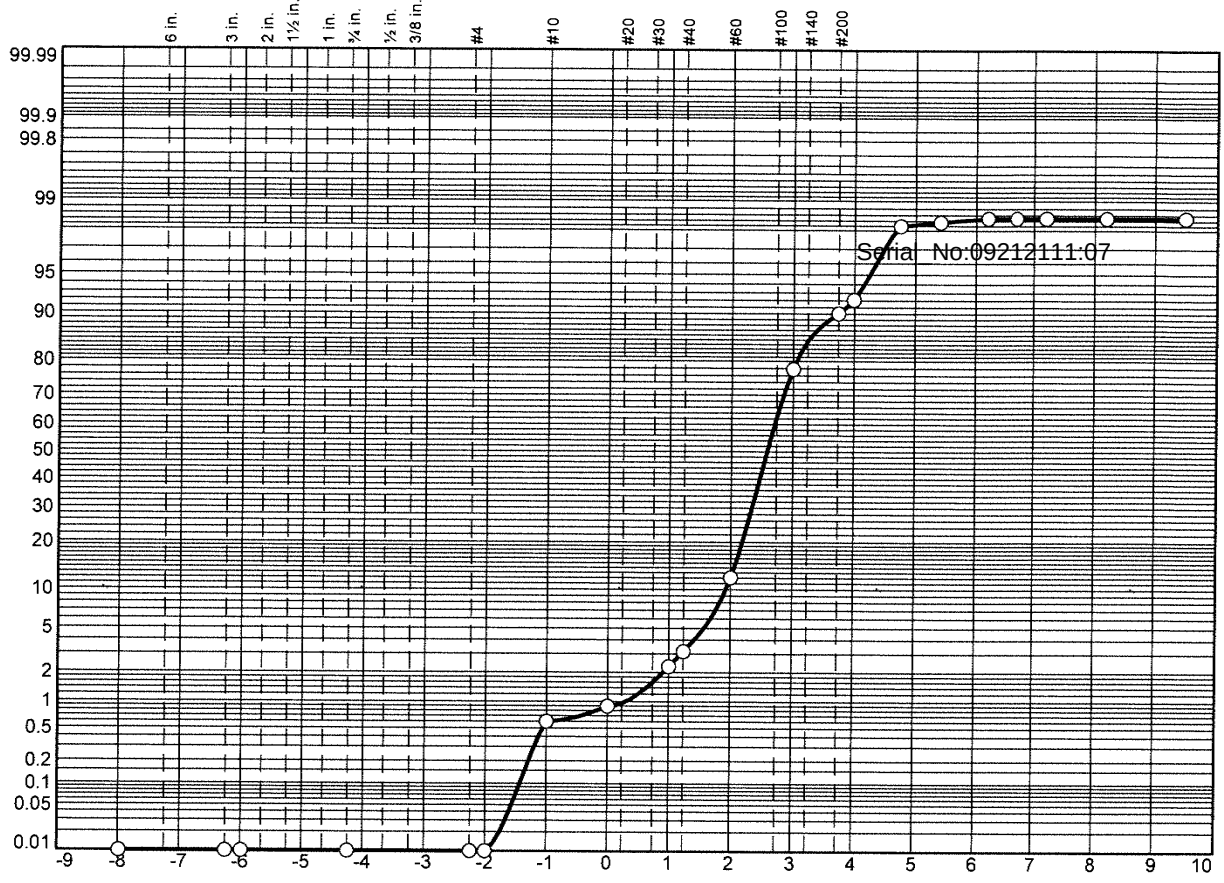
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.4	3.4	12.7	65.0	10.5	92.0	6.2	0.1	0.0	0.0	6.3	1.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0525	0.0873	0.1156	0.1290	0.1470	0.1618	0.1760	0.1913	0.2367	0.2592	0.3038	0.4508

Fineness Modulus	C_u	C_c
0.82	2.19	1.29

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.6	0.3	1.4	9.7	65.8	14.4	6.1	0.2	0.0		1.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2361	0.1807	0.1666	0.1388	0.1049	0.0753	1.42	2.40

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|016|SED|01 **Sample No.:** L2143321-09

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|016|SED|01

Sample Number: L2143321-09

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 88.64
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
88.64	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.53	0.00	99.4
		#18	0.26	0.00	99.1
		#35	1.23	0.00	97.7
		#40	0.77	0.00	96.9
		#60	7.89	0.00	88.0
		#120	58.29	0.00	22.2
		#200	10.84	0.00	10.0
		#230	1.81	0.00	7.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 7.9
Weight of hydrometer sample =41.98
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0060	1.0060	0.0136	6.0	14.7	0.0370	1.8
5.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0235	1.7
15.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0136	1.5
30.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0096	1.5
60.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0068	1.5
240.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0034	1.5
1440.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0014	1.5

Fractional Components

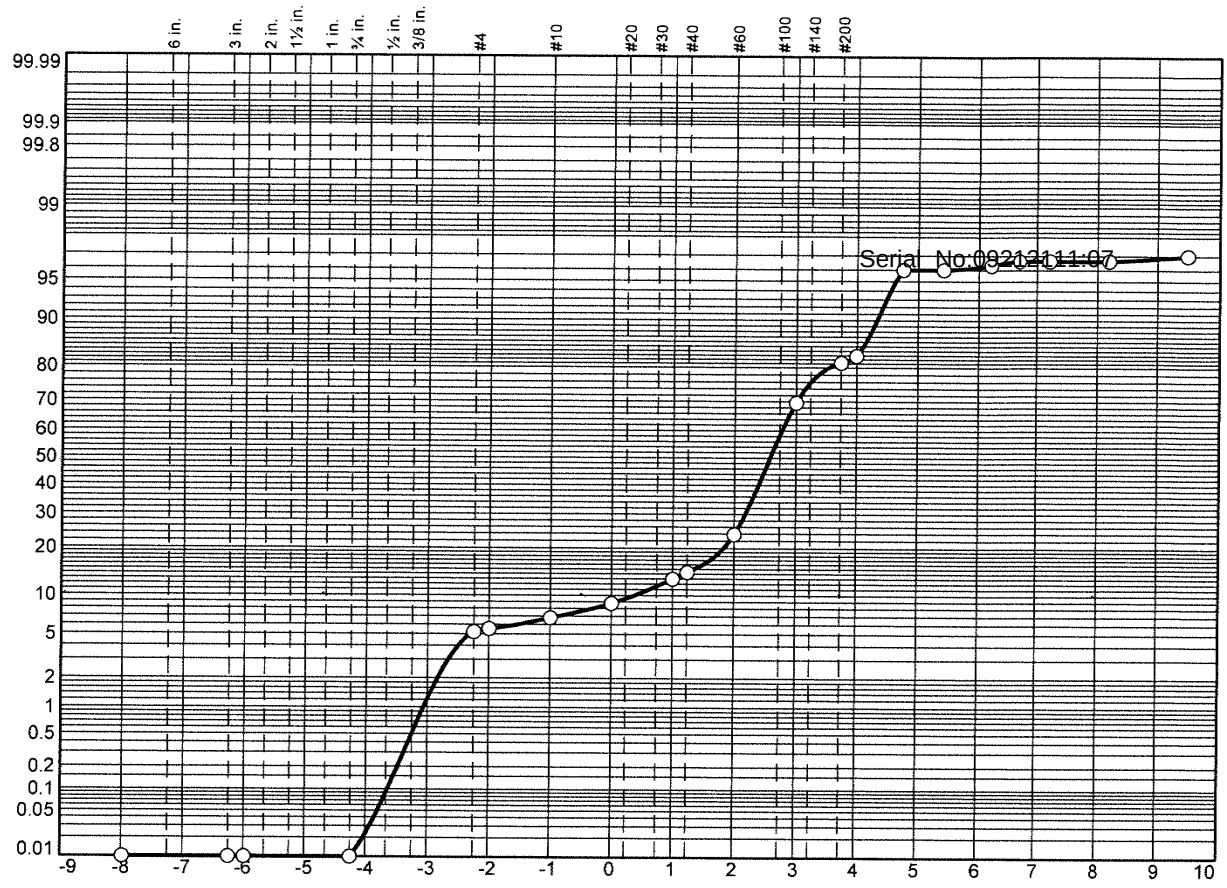
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.6	0.3	1.4	9.7	65.8	14.4	91.6	6.1	0.2	0.0		6.3	1.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0524	0.0753	0.1049	0.1201	0.1388	0.1532	0.1666	0.1807	0.2195	0.2361	0.2633	0.3368

Fineness Modulus	C_u	C_c
0.72	2.40	1.42

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			5.5	1.3	1.9	4.3	10.8	45.8	13.4	13.0	0.2	0.5		3.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3938	0.1902	0.1671	0.1239	0.0579	0.0498	1.62	3.82

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|018|SED|01 **Sample No.:** L2143321-10

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|018|SED|01

Sample Number: L2143321-10

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 54.89
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
54.89	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	2.86	0.00	94.8
		#5	0.18	0.00	94.5
		#10	0.68	0.00	93.2
		#18	1.07	0.00	91.3
		#35	2.32	0.00	87.0
		#40	0.76	0.00	85.7
		#60	5.20	0.00	76.2
		#120	25.11	0.00	30.4
		#200	6.39	0.00	18.8
		#230	0.90	0.00	17.2

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 17.2
Weight of hydrometer sample =41.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.0	1.0060	1.0060	0.0136	6.0	14.7	0.0370	4.0
5.00	20.0	1.0060	1.0060	0.0136	6.0	14.7	0.0234	4.0
15.00	20.0	1.0055	1.0055	0.0136	5.5	14.8	0.0136	3.7
30.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0096	3.3
60.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0068	3.3
240.00	20.0	1.0050	1.0050	0.0136	5.0	15.0	0.0034	3.3
1440.00	20.0	1.0045	1.0045	0.0136	4.5	15.1	0.0014	3.0

Fractional Components

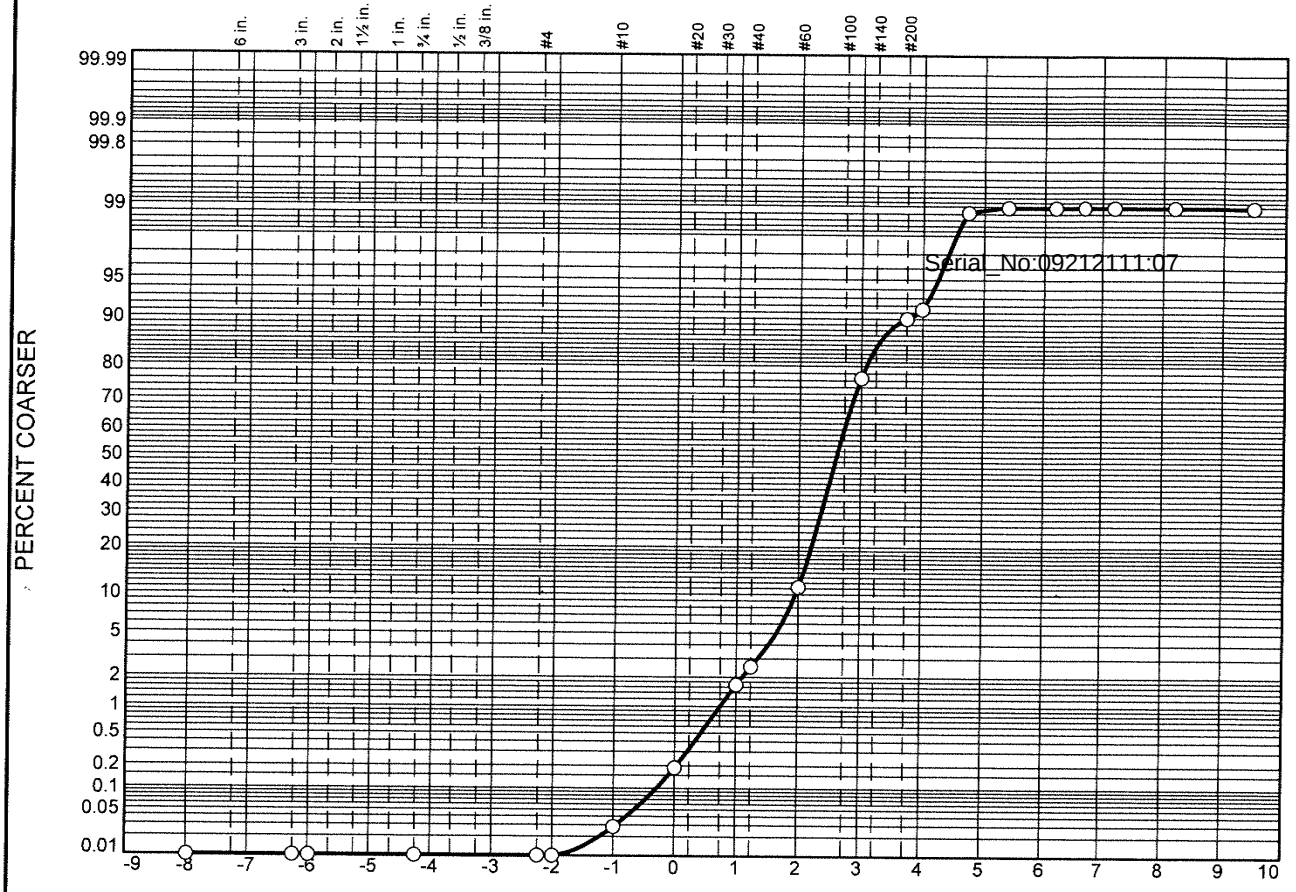
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		5.5	1.3	1.9	4.3	10.8	45.8	13.4	76.2	13.0	0.2	0.5		13.7	3.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0404	0.0498	0.0579	0.0860	0.1239	0.1463	0.1671	0.1902	0.2812	0.3938	0.7668	4.9549

Fineness Modulus	C_u	C_c
1.09	3.82	1.62

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.2	1.5	9.5	65.5	14.9	7.3	0.1	0.0		1.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2322	0.1779	0.1639	0.1363	0.1040	0.0749	1.39	2.37

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|019|SED|01 **Sample No.:** L2143321-11

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|019|SED|01

Sample Number: L2143321-11

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 106.54
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
106.54	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	100.0
		#18	0.17	0.00	99.8
		#35	1.59	0.00	98.3
		#40	0.89	0.00	97.5
		#60	9.25	0.00	88.8
		#120	69.75	0.00	23.3
		#200	14.20	0.00	10.0
		#230	1.58	0.00	8.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 8.5
Weight of hydrometer sample =47.09
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	1.2
5.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0238	1.0
15.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0137	1.0
30.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0097	1.0
60.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0069	1.0
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	1.0
1440.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.0

Fractional Components

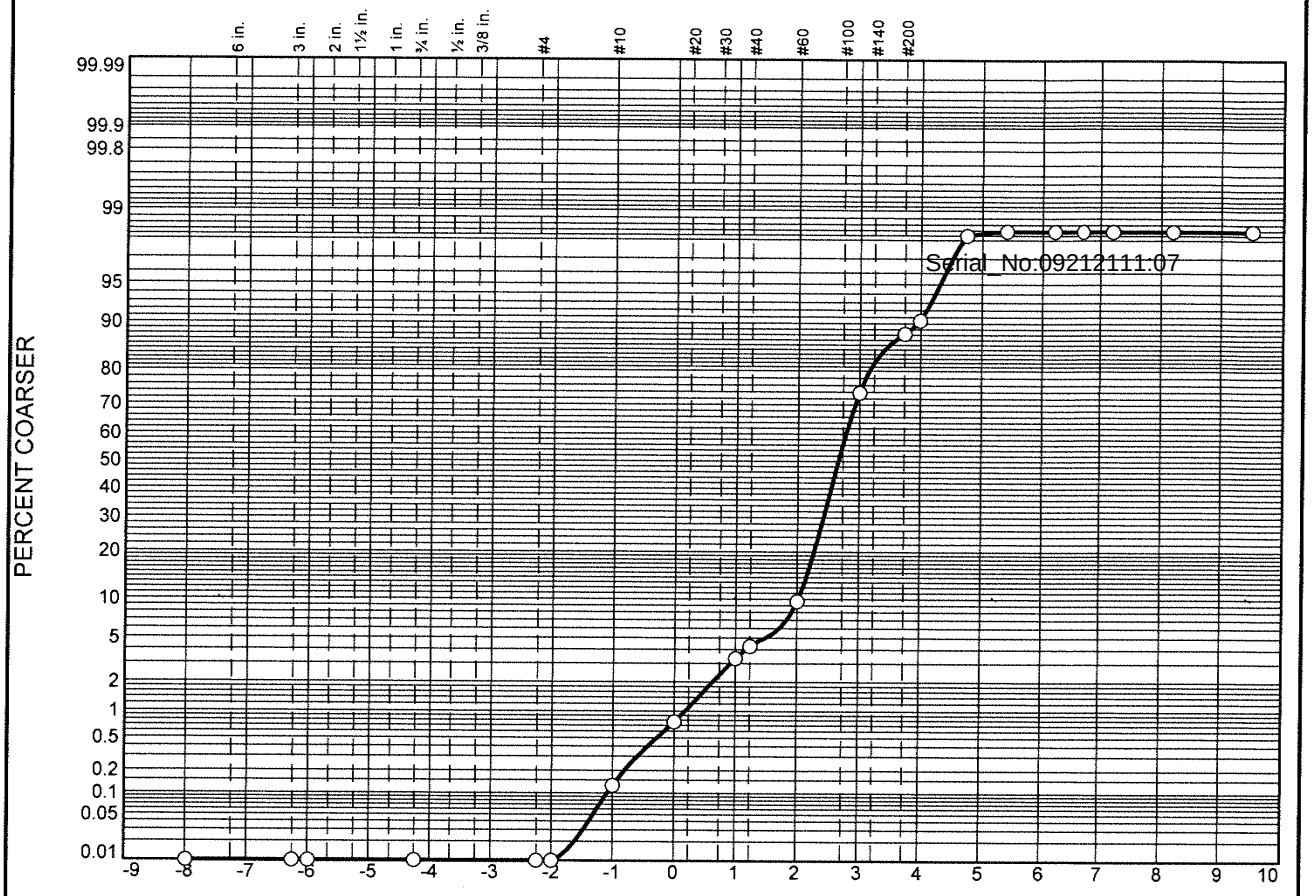
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.2	1.5	9.5	65.5	14.9	91.6	7.3	0.1	0.0		7.4	1.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0526	0.0749	0.1040	0.1180	0.1363	0.1505	0.1639	0.1779	0.2162	0.2322	0.2576	0.3196

Fineness Modulus	C_u	C_c
0.68	2.37	1.39

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.7	2.5	6.3	64.1	16.9	7.7	0.1	0.0		1.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2220	0.1710	0.1579	0.1312	0.0942	0.0648	1.55	2.64

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|022|SED|01 **Sample No.:** L2143321-12

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|022|SED|01

Sample Number: L2143321-12

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 86.71
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
86.71	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.11	0.00	99.9
		#18	0.55	0.00	99.2
		#35	2.22	0.00	96.7
		#40	0.81	0.00	95.7
		#60	4.65	0.00	90.4
		#120	55.60	0.00	26.3
		#200	12.51	0.00	11.8
		#230	1.99	0.00	9.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 9.5
Weight of hydrometer sample =42.52
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	1.8
5.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0236	1.6
15.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0136	1.6
30.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0096	1.6
60.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0068	1.6
240.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0034	1.6
1440.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0014	1.6

Fractional Components

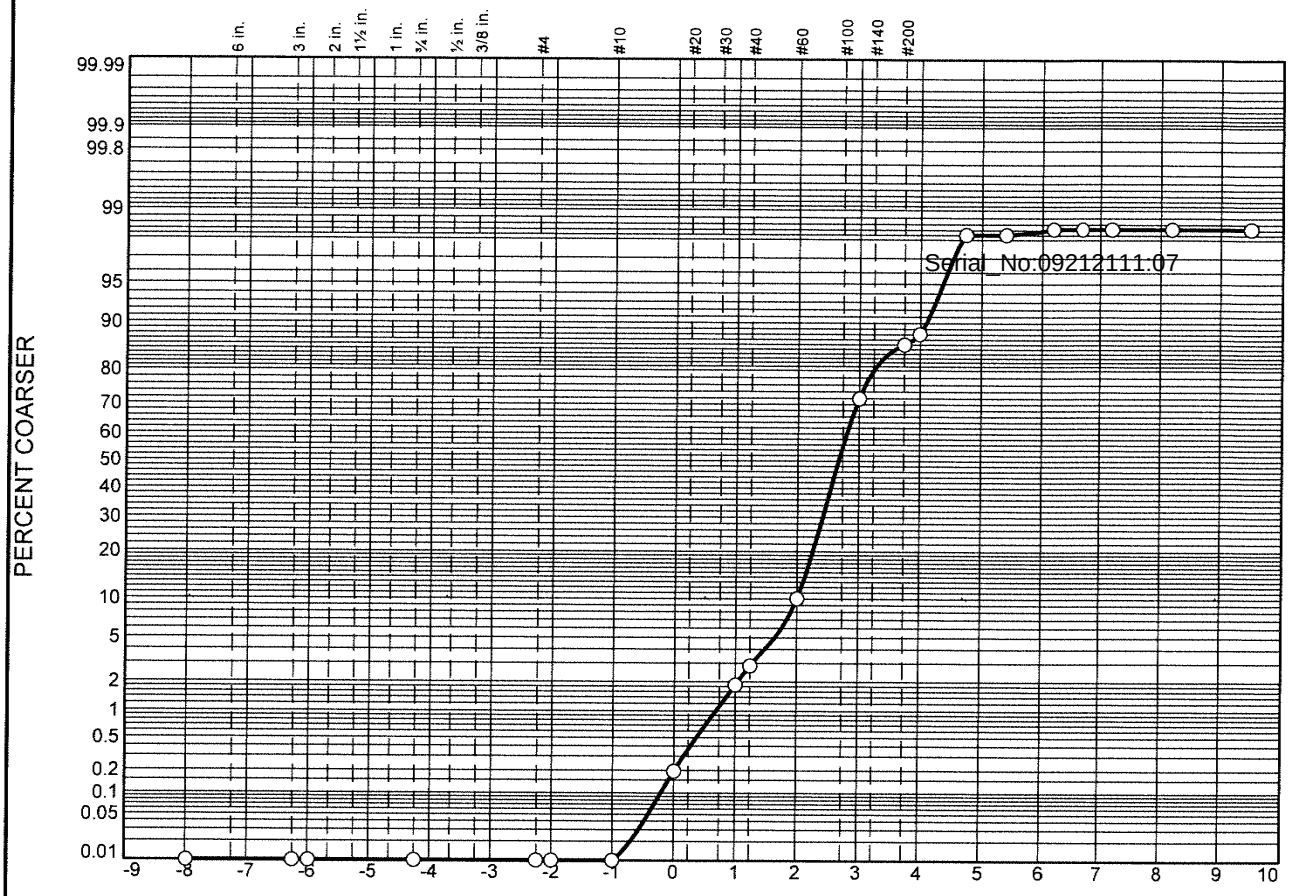
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	2.5	6.3	64.1	16.9	90.5	7.7	0.1	0.0		7.8	1.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0502	0.0648	0.0942	0.1116	0.1312	0.1451	0.1579	0.1710	0.2068	0.2220	0.2471	0.3580

Fineness Modulus	C_u	C_c
0.65	2.64	1.55

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.2	1.7	8.1	61.9	16.3	10.0	0.2	0.0	0.0	1.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2248	0.1712	0.1571	0.1283	0.0832	0.0583	1.65	2.94

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|023|SED|01 **Sample No.:** L2143321-13

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|023|SED|01

Sample Number: L2143321-13

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 93.02
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
93.02	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.00	0.00	100.0
		#18	0.18	0.00	99.8
		#35	1.55	0.00	98.1
		#40	0.91	0.00	97.2
		#60	6.68	0.00	90.0
		#120	57.54	0.00	28.1
		#200	13.13	0.00	14.0
		#230	1.92	0.00	11.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 11.9
Weight of hydrometer sample =43.35
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	1.8
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	1.8
15.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0137	1.6
30.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0097	1.6
60.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0069	1.6
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	1.6
1440.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.6

Fractional Components

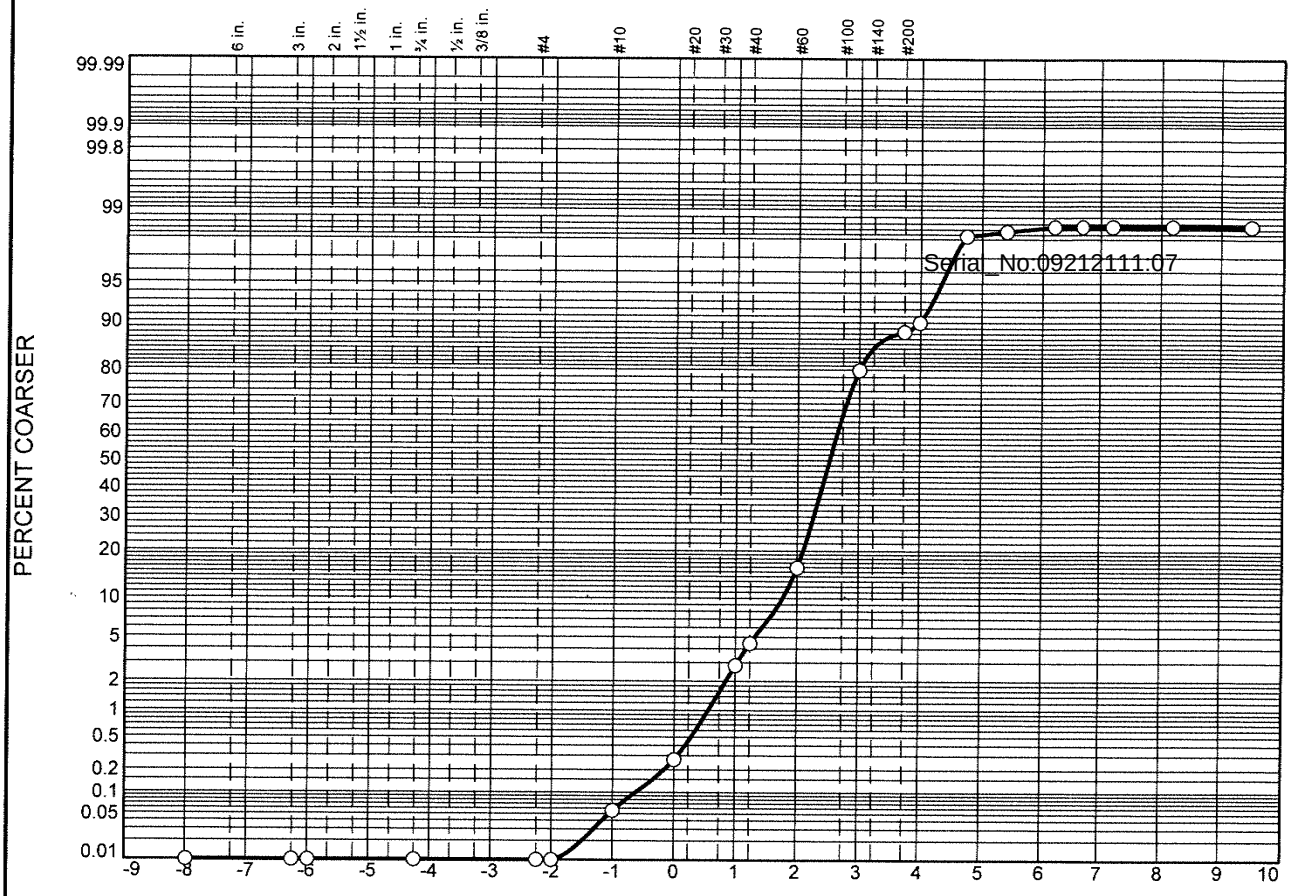
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.2	1.7	8.1	61.9	16.3	88.2	10.0	0.2	0.0	0.0	10.2	1.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0484	0.0583	0.0832	0.1060	0.1283	0.1435	0.1571	0.1712	0.2090	0.2248	0.2501	0.3211

Fineness Modulus	C_u	C_c
0.62	2.94	1.65

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.2	2.5	13.1	63.9	10.3	8.1	0.3	0.0		1.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2544	0.1892	0.1739	0.1442	0.1072	0.0628	1.75	3.01

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|024|SED|01 **Sample No.:** L2143321-14

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|024|SED|01

Sample Number: L2143321-14

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 107.91
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
107.91	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.06	0.00	99.9
		#18	0.23	0.00	99.7
		#35	2.75	0.00	97.2
		#40	1.74	0.00	95.6
		#60	12.35	0.00	84.1
		#120	69.01	0.00	20.2
		#200	9.19	0.00	11.7
		#230	1.74	0.00	10.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 10.0
Weight of hydrometer sample =43.42
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	1.9
5.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0236	1.7
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	1.5
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	1.5
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	1.5
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	1.5
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	1.5

Fractional Components

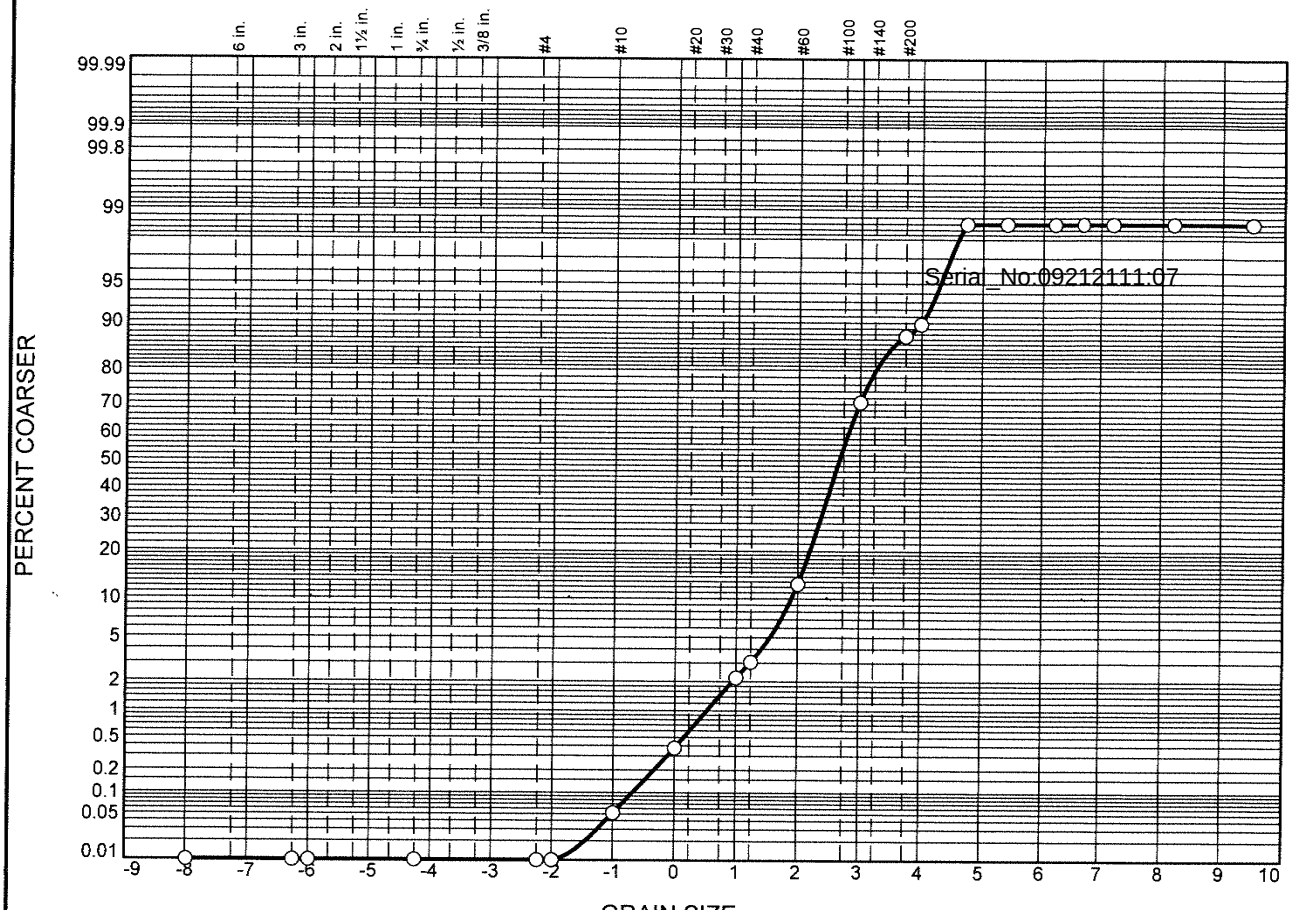
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.2	2.5	13.1	63.9	10.3	90.0	8.1	0.3	0.0		8.4	1.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0493	0.0628	0.1072	0.1246	0.1442	0.1595	0.1739	0.1892	0.2335	0.2544	0.2935	0.4034

Fineness Modulus	C_u	C_c
0.78	3.01	1.75

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.3	1.8	10.4	58.0	19.3	8.7	0.0	0.0		1.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2374	0.1738	0.1577	0.1261	0.0886	0.0621	1.47	2.80

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|026|SED|01 **Sample No.:** L2143321-15

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|026|SED|01

Sample Number: L2143321-15

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 114.73
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
114.73	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.06	0.00	99.9
		#18	0.37	0.00	99.6
		#35	2.07	0.00	97.8
		#40	1.00	0.00	96.9
		#60	10.92	0.00	87.4
		#120	66.59	0.00	29.4
		#200	19.50	0.00	12.4
		#230	2.43	0.00	10.3

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 10.3
Weight of hydrometer sample =47.37
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	1.4
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	1.4
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	1.4
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	1.4
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	1.4
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	1.4
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	1.4

Fractional Components

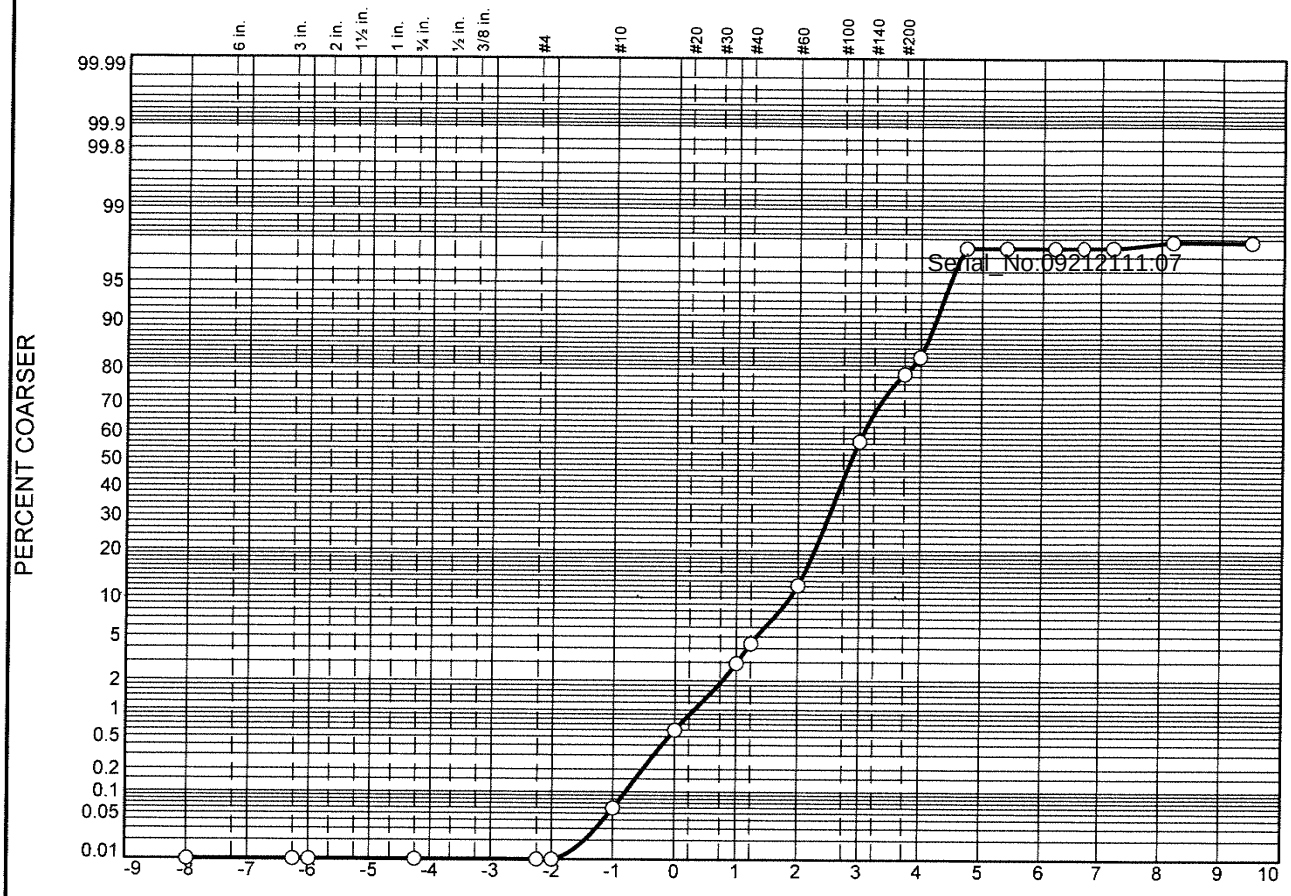
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.3	1.8	10.4	58.0	19.3	89.8	8.7	0.0	0.0		8.7	1.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0505	0.0621	0.0886	0.1048	0.1261	0.1424	0.1577	0.1738	0.2183	0.2374	0.2680	0.3418

Fineness Modulus	C_u	C_c
0.64	2.80	1.47

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.5	2.3	9.2	44.7	26.5	14.2	0.0	0.0	0.3	2.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2299	0.1553	0.1371	0.0987	0.0597	0.0529	1.19	2.94

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|028|SED|01 **Sample No.:** L2143321-16

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|028|SED|01

Sample Number: L2143321-16

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 84.21
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
84.21	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.05	0.00	99.9
		#18	0.45	0.00	99.4
		#35	1.96	0.00	97.1
		#40	1.23	0.00	95.6
		#60	6.54	0.00	87.9
		#120	37.63	0.00	43.2
		#200	18.44	0.00	21.3
		#230	3.63	0.00	17.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 17.0
Weight of hydrometer sample =44.74
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x** Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	2.5
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	2.5
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	2.5
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	2.5
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	2.5
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	2.1
1440.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0014	2.1

Fractional Components

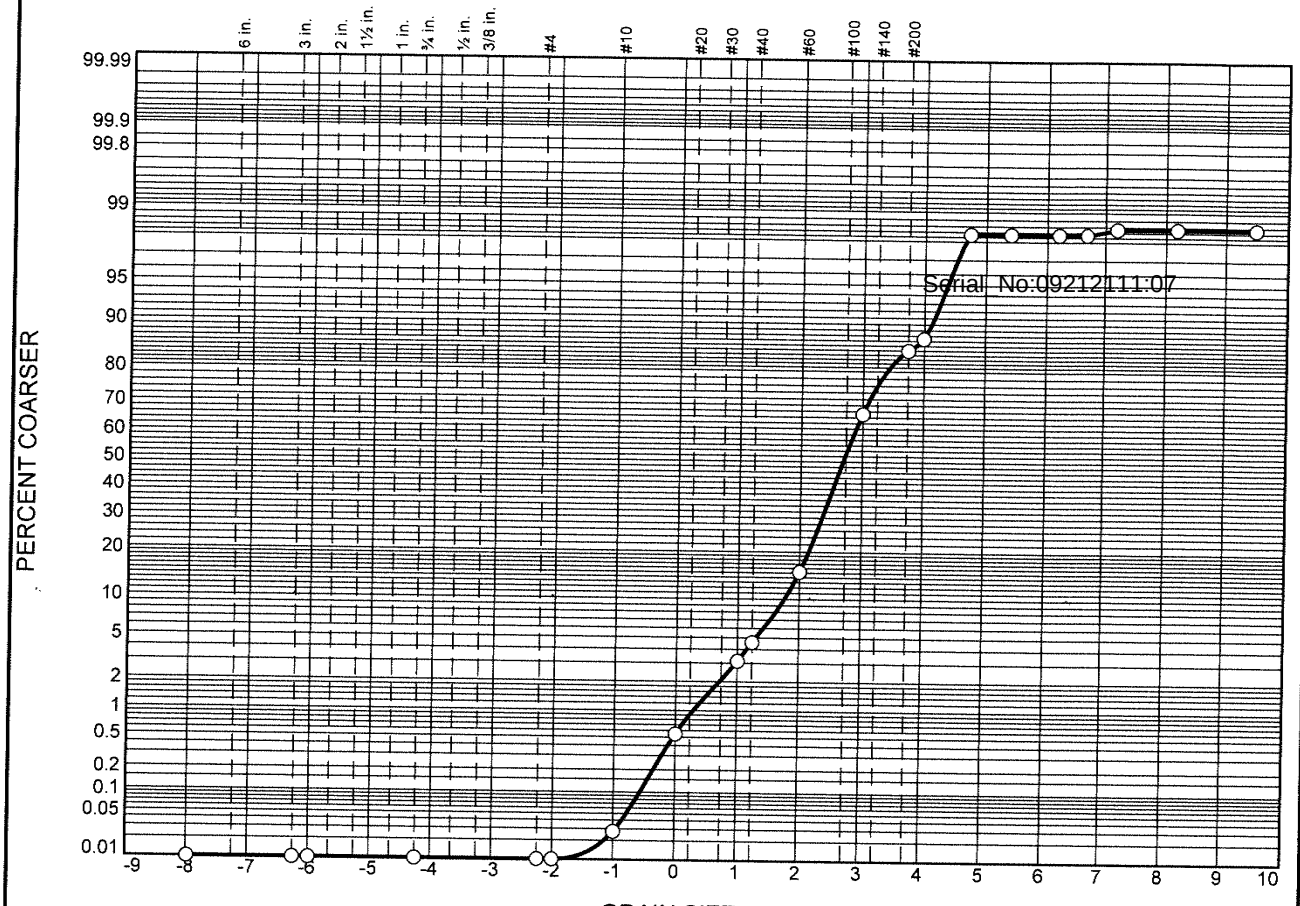
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.5	2.3	9.2	44.7	26.5	83.2	14.2	0.0	0.0	0.3	14.5	2.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0451	0.0529	0.0597	0.0707	0.0987	0.1192	0.1371	0.1553	0.2066	0.2299	0.2728	0.3993

Fineness Modulus	C_u	C_c
0.53	2.94	1.19

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.5	2.6	12.1	51.8	20.6	10.7	0.0	0.1	0.1	1.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2511	0.1730	0.1547	0.1192	0.0746	0.0573	1.43	3.02

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|030|SED|01 **Sample No.:** L2143321-17

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|030|SED|01

Sample Number: L2143321-17

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 109.89
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
109.89	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	100.0
		#18	0.57	0.00	99.5
		#35	2.84	0.00	96.9
		#40	1:58	0.00	95.4
		#60	11.65	0.00	84.8
		#120	56.98	0.00	33.0
		#200	19.69	0.00	15.1
		#230	2.69	0.00	12.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 12.6
Weight of hydrometer sample =47.87
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	1.7
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	1.7
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	1.7
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	1.7
60.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0069	1.5
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	1.5
1440.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.5

Fractional Components

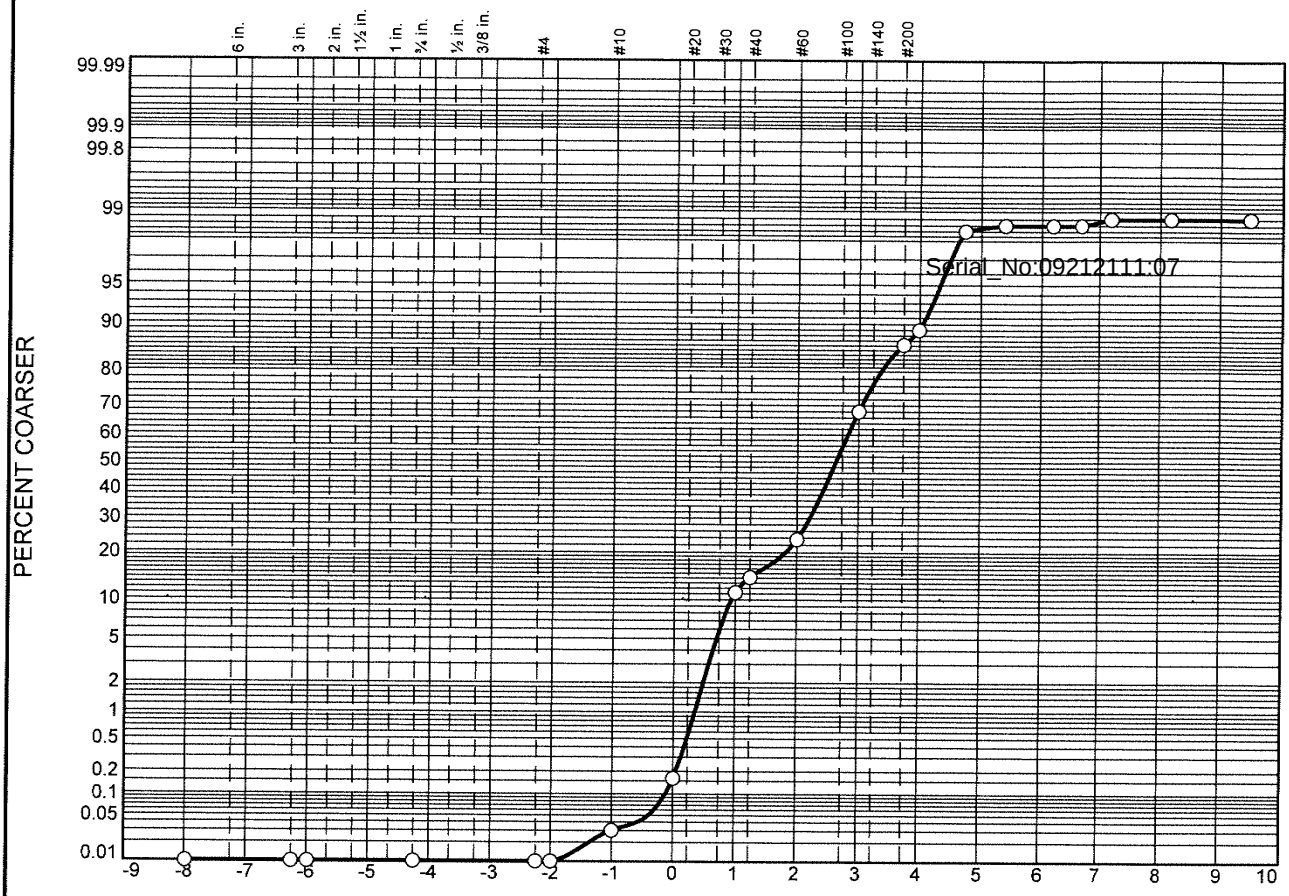
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.5	2.6	12.1	51.8	20.6	87.6	10.7	0.0	0.1	0.1	10.9	1.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0482	0.0573	0.0746	0.0951	0.1192	0.1376	0.1547	0.1730	0.2262	0.2511	0.2954	0.4079

Fineness Modulus	C_u	C_c
0.65	3.02	1.43

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.2	11.0	12.4	44.4	21.2	9.3	0.1	0.1	0.1	1.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.3972	0.1846	0.1612	0.1208	0.0803	0.0604	1.31	3.06

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|031|SED|01 **Sample No.:** L2143321-18

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|031|SED|01

Sample Number: L2143321-18

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 98.98
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
98.98	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	100.0
		#18	0.13	0.00	99.8
		#35	10.96	0.00	88.8
		#40	2.89	0.00	85.8
		#60	9.30	0.00	76.4
		#120	44.00	0.00	32.0
		#200	18.01	0.00	13.8
		#230	2.78	0.00	11.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 11.0
Weight of hydrometer sample =44.48
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x** Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	1.6
5.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0238	1.4
15.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0137	1.4
30.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0097	1.4
60.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0069	1.2
240.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0035	1.2
1440.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0014	1.2

Fractional Components

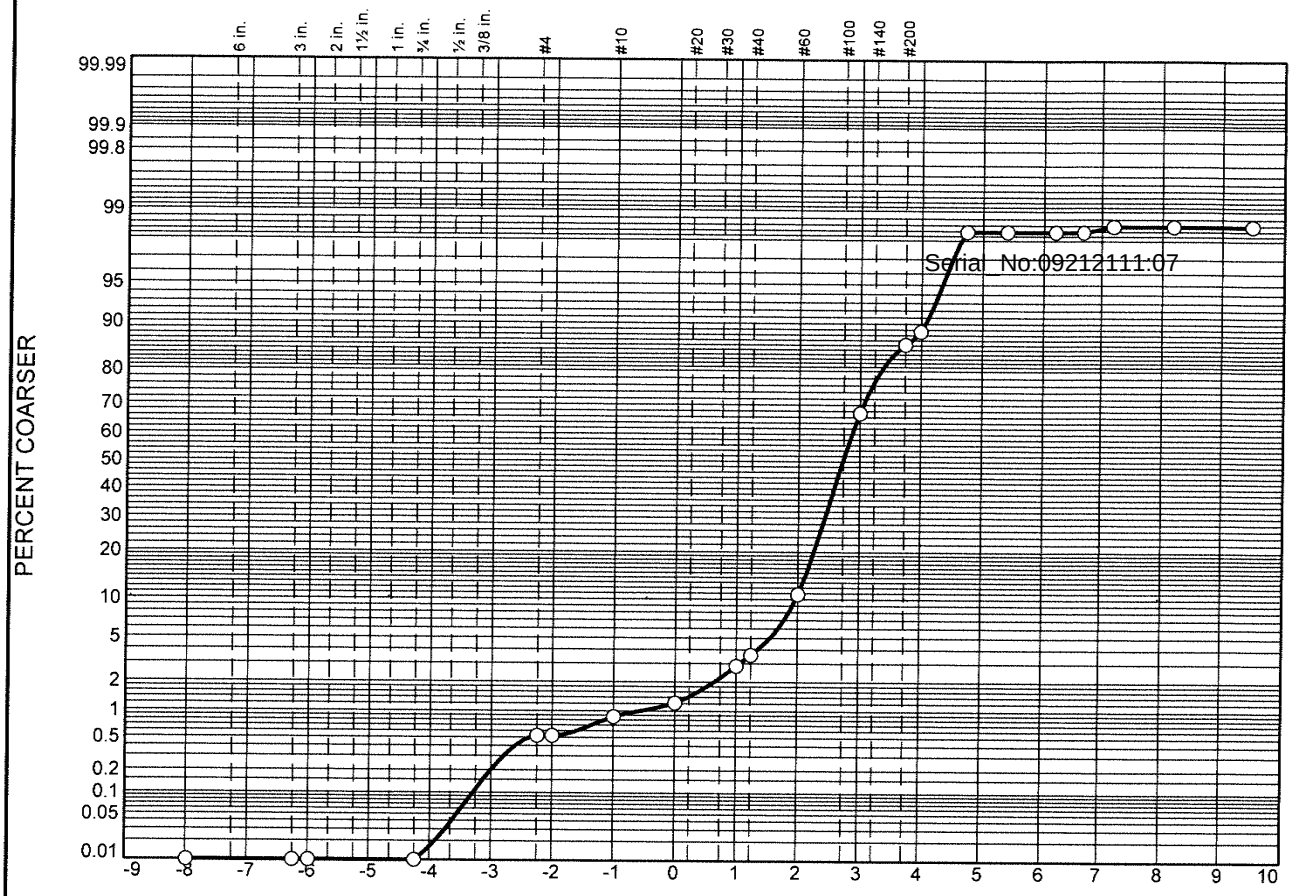
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.2	11.0	12.4	44.4	21.2	89.2	9.3	0.1	0.1	0.1	9.6	1.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0496	0.0604	0.0803	0.0969	0.1208	0.1410	0.1612	0.1846	0.2835	0.3972	0.5228	0.6172

Fineness Modulus	C_u	C_c
0.80	3.06	1.31

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.5	0.4	0.3	1.6	8.0	56.5	21.5	9.6	0.0	0.1	0.1	1.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2267	0.1666	0.1512	0.1203	0.0808	0.0596	1.46	2.80

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|035|SED|01 **Sample No.:** L2143321-19

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|035|SED|01

Sample Number: L2143321-19

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 91.55
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.55	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.48	0.00	99.5
		#5	0.00	0.00	99.5
		#10	0.31	0.00	99.1
		#18	0.33	0.00	98.8
		#35	1.48	0.00	97.2
		#40	0.67	0.00	96.4
		#60	6.62	0.00	89.2
		#120	51.72	0.00	32.7
		#200	17.23	0.00	13.9
		#230	2.31	0.00	11.4

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 11.4
Weight of hydrometer sample =44.97
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	1.6
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	1.6
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	1.6
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	1.6
60.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0069	1.4
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	1.4
1440.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0014	1.4

Fractional Components

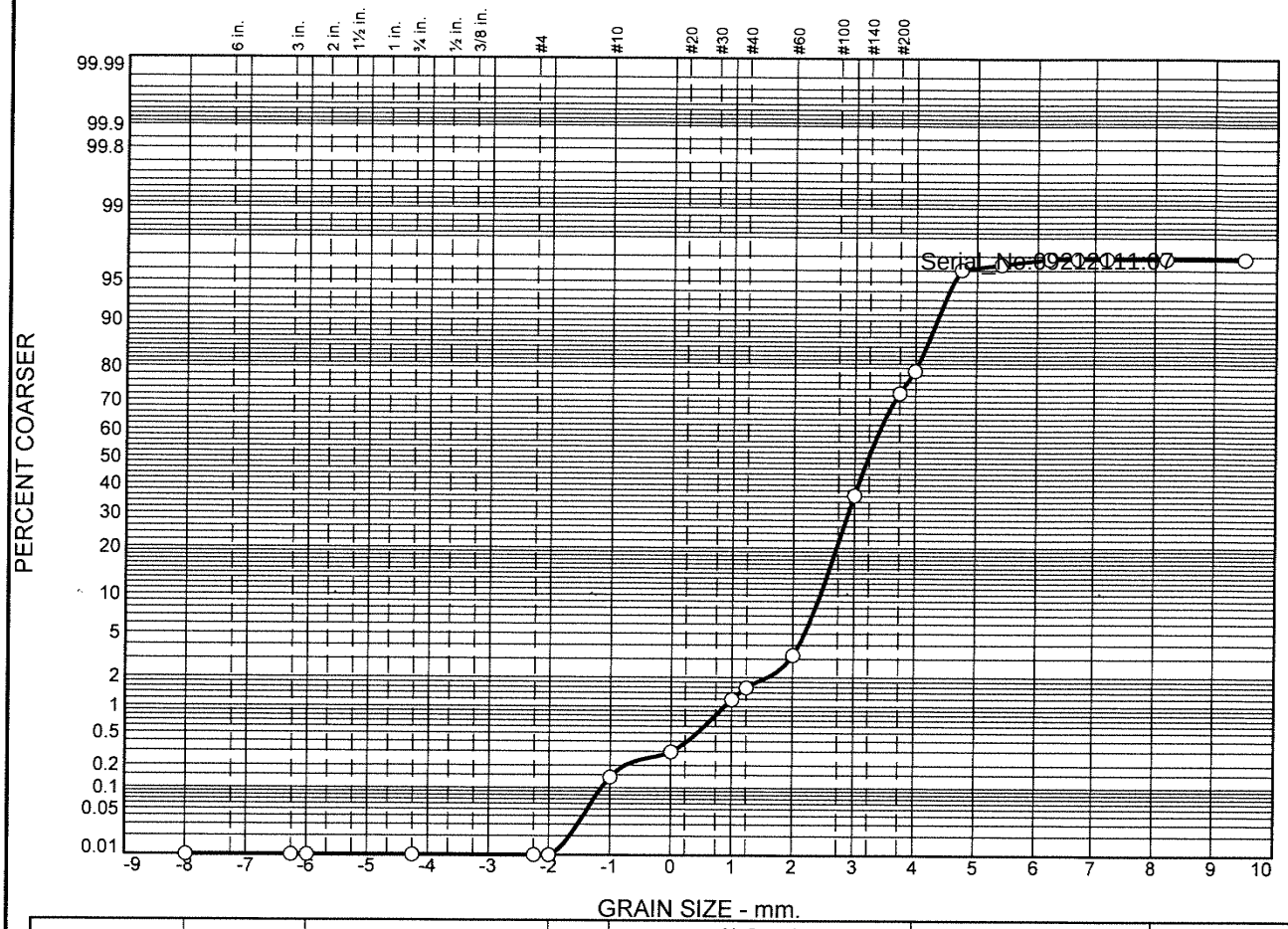
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.5	0.4	0.3	1.6	8.0	56.5	21.5	87.9	9.6	0.0	0.1	0.1	9.8	1.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0493	0.0596	0.0808	0.0984	0.1203	0.1365	0.1512	0.1666	0.2087	0.2267	0.2562	0.3420

Fineness Modulus	C_u	C_c
0.62	2.80	1.46

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.2	0.9	2.0	33.0	43.3	16.7	0.5	0.1	0.0	3.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1651	0.1199	0.1069	0.0796	0.0553	0.0490	1.08	2.44

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|038|SED|01 **Sample No.:** L2143321-20

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|038|SED|01

Sample Number: L2143321-20

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 57.33
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
57.33	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	0.09	0.00	99.7
		#35	0.51	0.00	98.8
		#40	0.22	0.00	98.4
		#60	0.96	0.00	96.8
		#120	18.92	0.00	63.8
		#200	20.88	0.00	27.3
		#230	3.71	0.00	20.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 20.9
Weight of hydrometer sample =42.61
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	4.0
5.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0236	3.6
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	3.2
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	3.2
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	3.2
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	3.2
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	3.2

Fractional Components

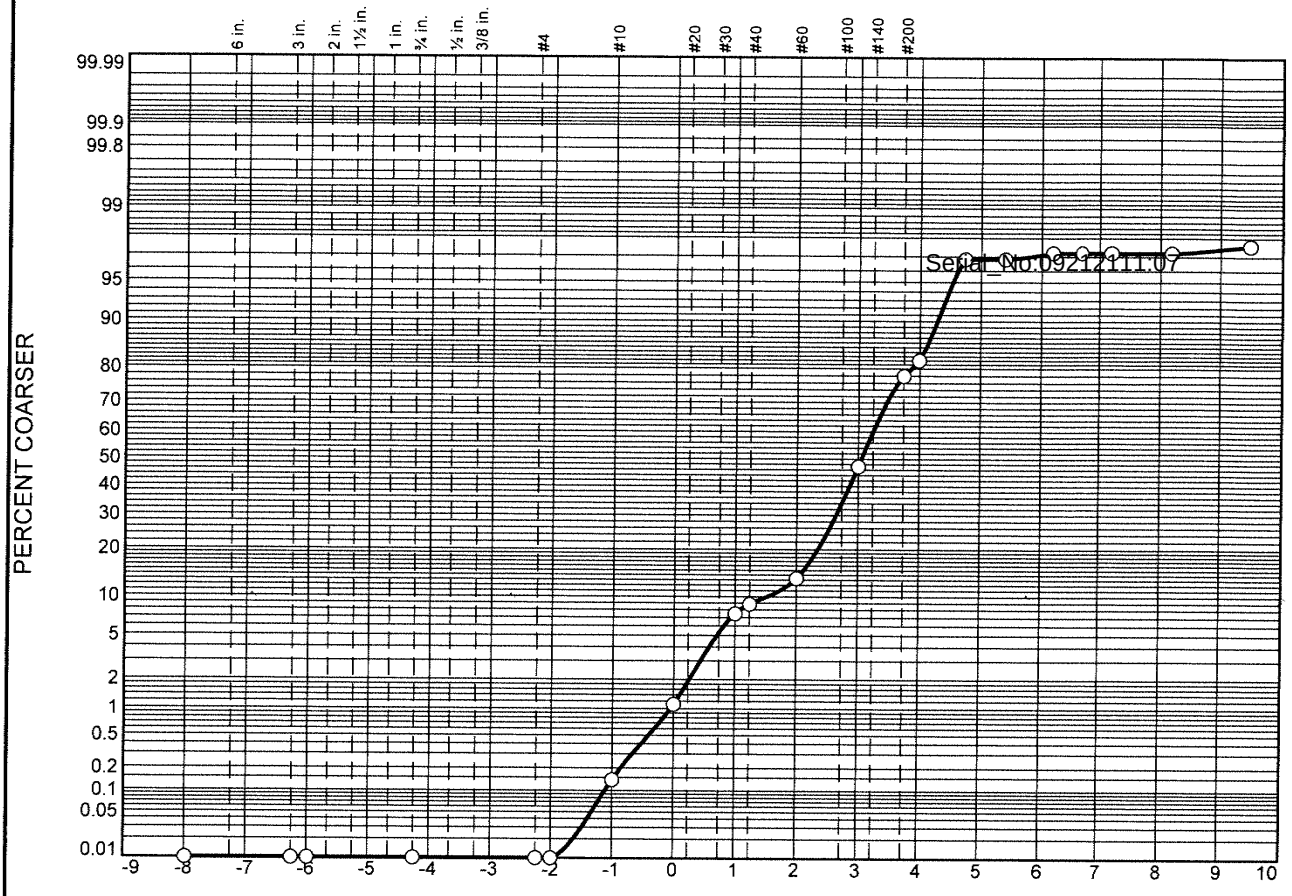
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.2	0.9	2.0	33.0	43.3	79.4	16.7	0.5	0.1	0.0	17.3	3.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0405	0.0490	0.0553	0.0617	0.0796	0.0941	0.1069	0.1199	0.1526	0.1651	0.1832	0.2189

Fineness Modulus	C_u	C_c
0.25	2.44	1.08

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.0	6.4	5.8	33.9	35.1	14.5	0.3	0.1		2.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2305	0.1375	0.1205	0.0908	0.0580	0.0512	1.17	2.68

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|041|SED|01 **Sample No.:** L2143321-21

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|041|SED|01

Sample Number: L2143321-21

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 35.83
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
35.83	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.05	0.00	99.9
		#18	0.35	0.00	98.9
		#35	2.28	0.00	92.5
		#40	0.48	0.00	91.2
		#60	1.61	0.00	86.7
		#120	12.13	0.00	52.8
		#200	11.02	0.00	22.1
		#230	1.48	0.00	17.9

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 17.9
Weight of hydrometer sample =36.81
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	3.2
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	3.2
15.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0137	2.8
30.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0097	2.8
60.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0069	2.8
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	2.8
1440.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0014	2.4

Fractional Components

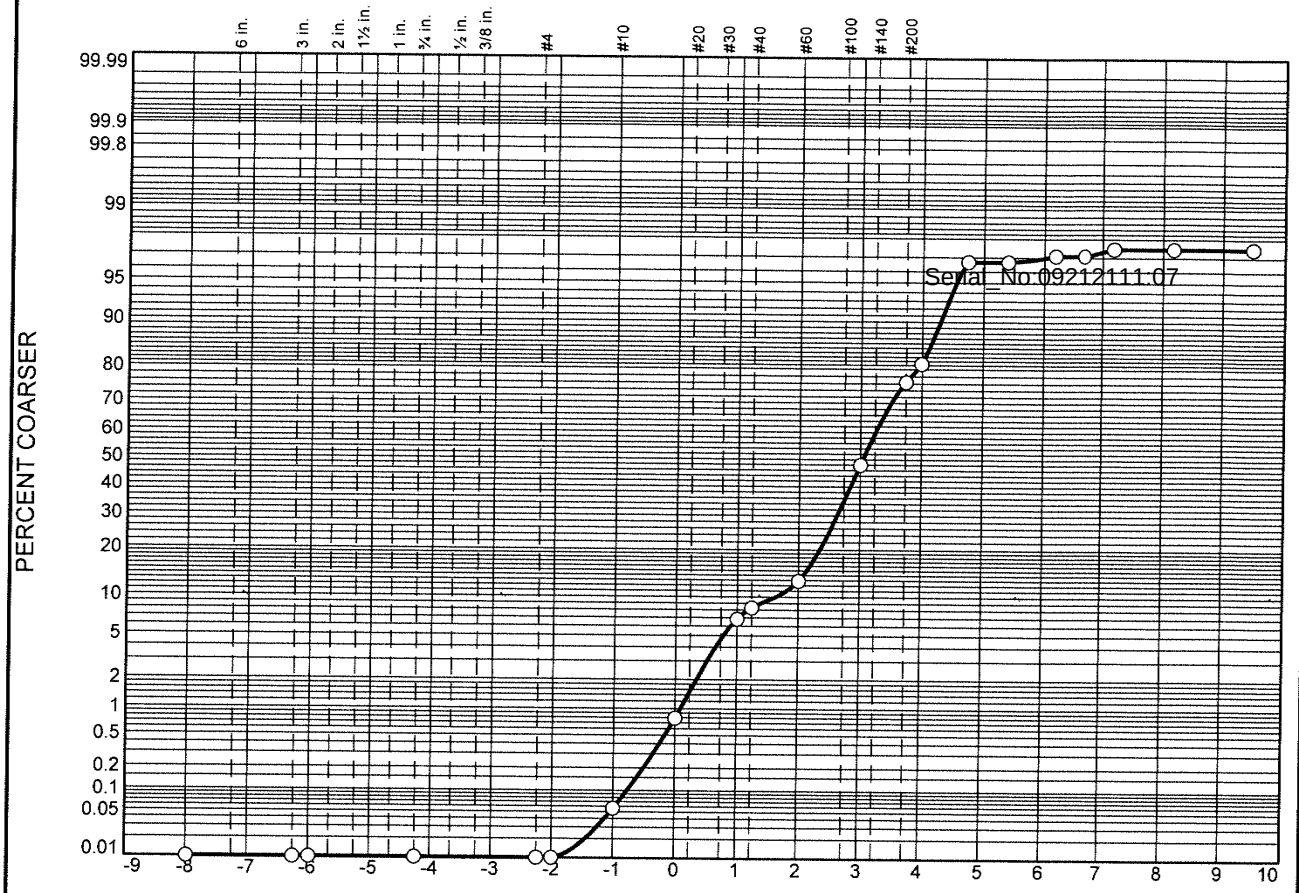
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.0	6.4	5.8	33.9	35.1	82.2	14.5	0.3	0.1		14.9	2.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0431	0.0512	0.0580	0.0684	0.0908	0.1058	0.1205	0.1375	0.1962	0.2305	0.3475	0.6152

Fineness Modulus	C_u	C_c
0.51	2.68	1.17

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.7	6.0	6.1	35.0	33.7	15.1	0.3	0.4	0.1	2.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2276	0.1394	0.1215	0.0885	0.0575	0.0509	1.10	2.74

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|041|SED|01 **Sample No.:** WG1547619-1

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|041|SED|01

Sample Number: WG1547619-1

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 35.59
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
35.59	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.02	0.00	99.9
		#18	0.26	0.00	99.2
		#35	2.15	0.00	93.2
		#40	0.52	0.00	91.7
		#60	1.63	0.00	87.1
		#120	12.47	0.00	52.1
		#200	10.15	0.00	23.6
		#230	1.75	0.00	18.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 18.7
Weight of hydrometer sample =36.56
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0375	3.3
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	3.3
15.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0137	2.9
30.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0097	2.9
60.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0069	2.5
240.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0035	2.5
1440.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0014	2.5

Fractional Components

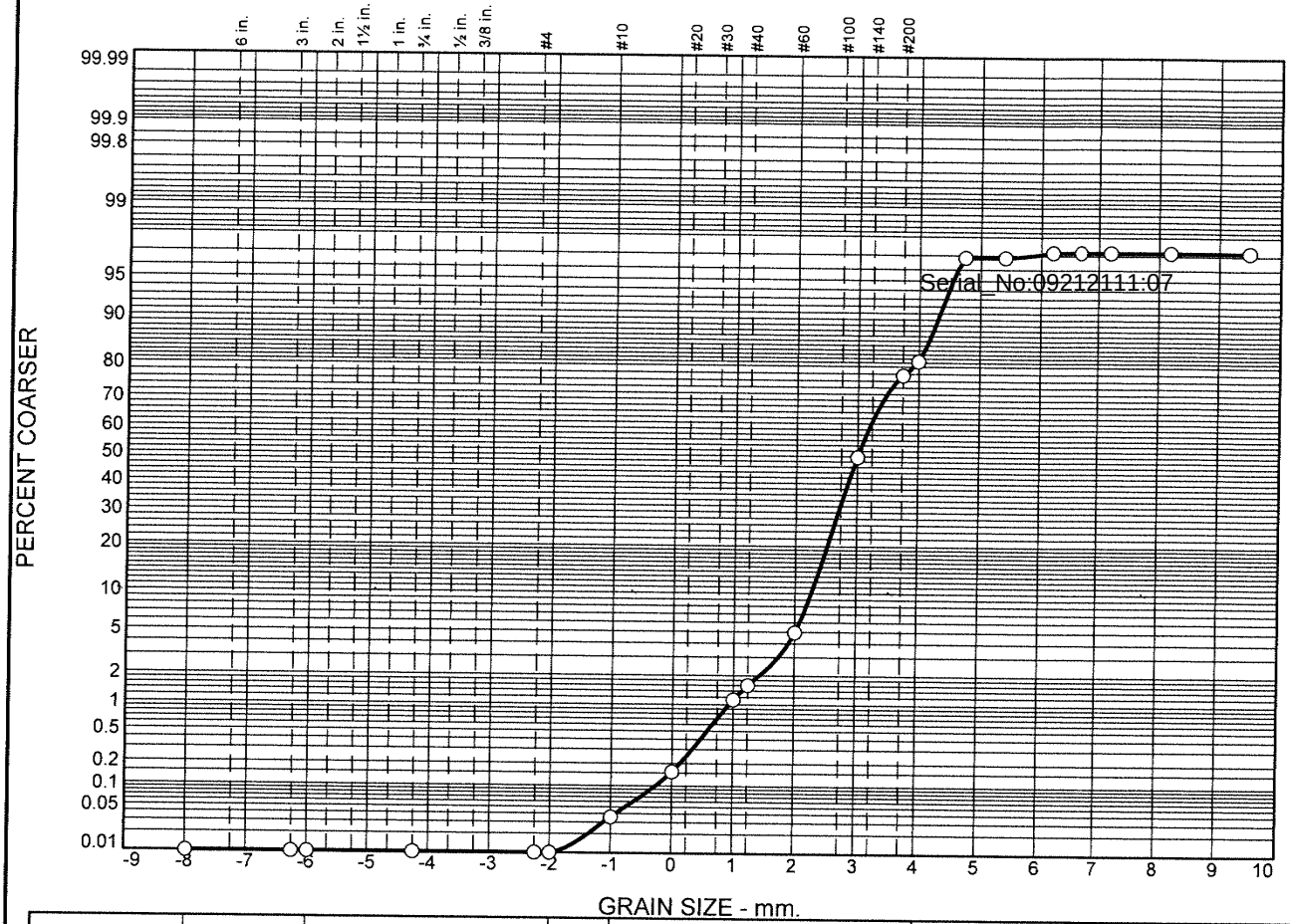
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	6.0	6.1	35.0	33.7	81.5	15.1	0.3	0.4	0.1	15.9	2.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0427	0.0509	0.0575	0.0657	0.0885	0.1053	0.1215	0.1394	0.1965	0.2276	0.3219	0.5841

Fineness Modulus	C_u	C_c
0.51	2.74	1.10

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.2	0.9	3.9	44.6	32.0	15.3	0.2	0.1		2.8

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1877	0.1385	0.1244	0.0935	0.0571	0.0506	1.25	2.73

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|043|SED|01 **Sample No.:** L2143321-22

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|043|SED|01

Sample Number: L2143321-22

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 83.53
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
83.53	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.03	0.00	100.0
		#18	0.10	0.00	99.8
		#35	0.81	0.00	98.9
		#40	0.39	0.00	98.4
		#60	2.81	0.00	95.0
		#120	37.28	0.00	50.4
		#200	23.38	0.00	22.4
		#230	3.11	0.00	18.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 18.7
Weight of hydrometer sample =43.34
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0373	3.1
5.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0236	3.1
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	2.8
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	2.8
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	2.8
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	2.8
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	2.8

Fractional Components

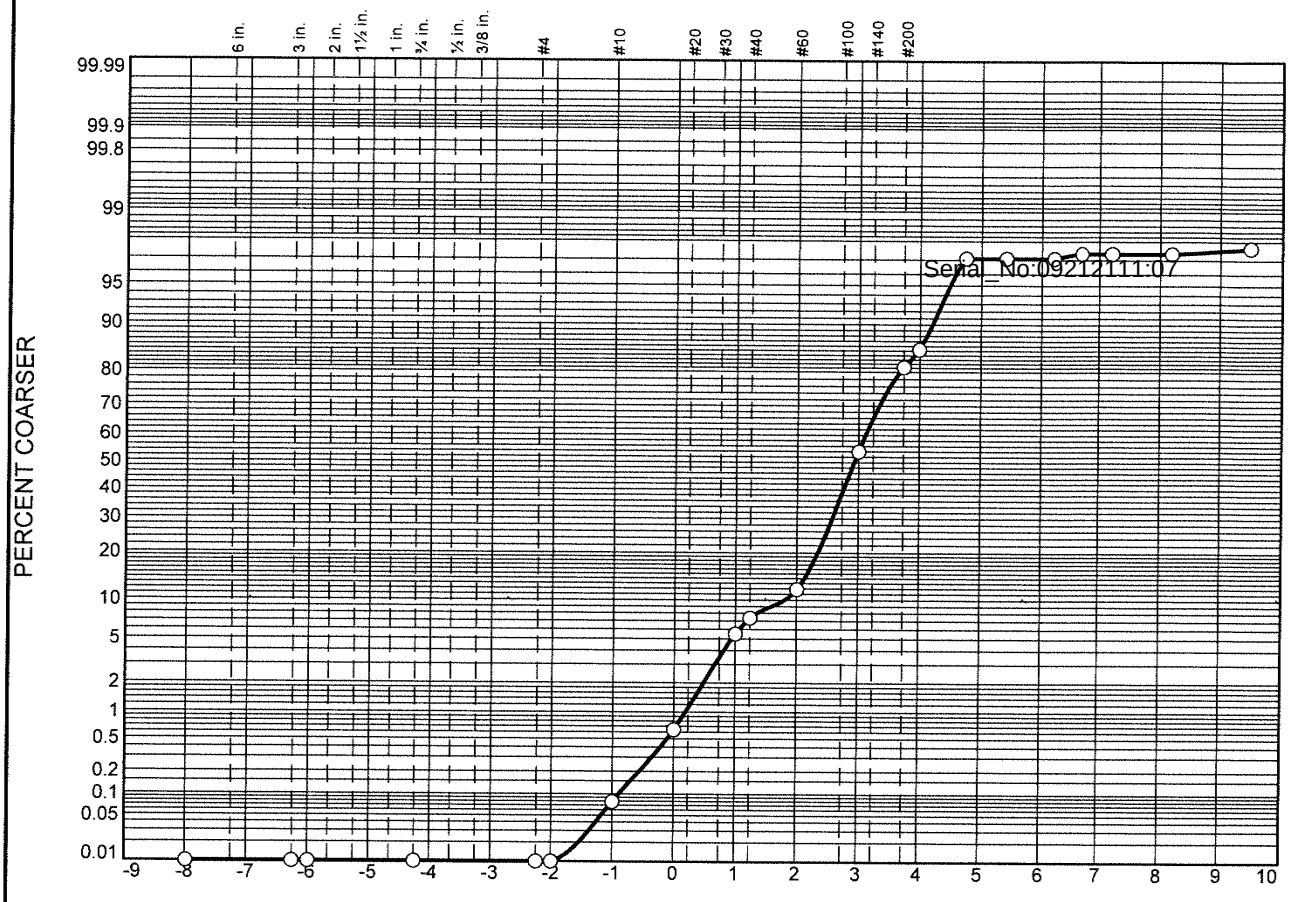
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.2	0.9	3.9	44.6	32.0	81.6	15.3	0.2	0.1		15.6	2.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0428	0.0506	0.0571	0.0662	0.0935	0.1101	0.1244	0.1385	0.1739	0.1877	0.2079	0.2494

Fineness Modulus	C_u	C_c
0.36	2.73	1.25

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.5	4.9	6.3	42.2	31.5	11.6	0.0	0.3	0.0	2.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2220	0.1478	0.1312	0.0990	0.0637	0.0542	1.22	2.73

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|044|SED|01 **Sample No.:** L2143321-23

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|044|SED|01

Sample Number: L2143321-23

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 102.11
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
102.11	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	0.57	0.00	99.4
		#35	4.96	0.00	94.5
		#40	1.90	0.00	92.6
		#60	4.57	0.00	88.2
		#120	43.01	0.00	46.0
		#200	27.76	0.00	18.9
		#230	4.23	0.00	14.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 14.7
Weight of hydrometer sample =41.08
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	2.9
5.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0235	2.9
15.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0136	2.9
30.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0096	2.6
60.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0068	2.6
240.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0034	2.6
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	2.3

Fractional Components

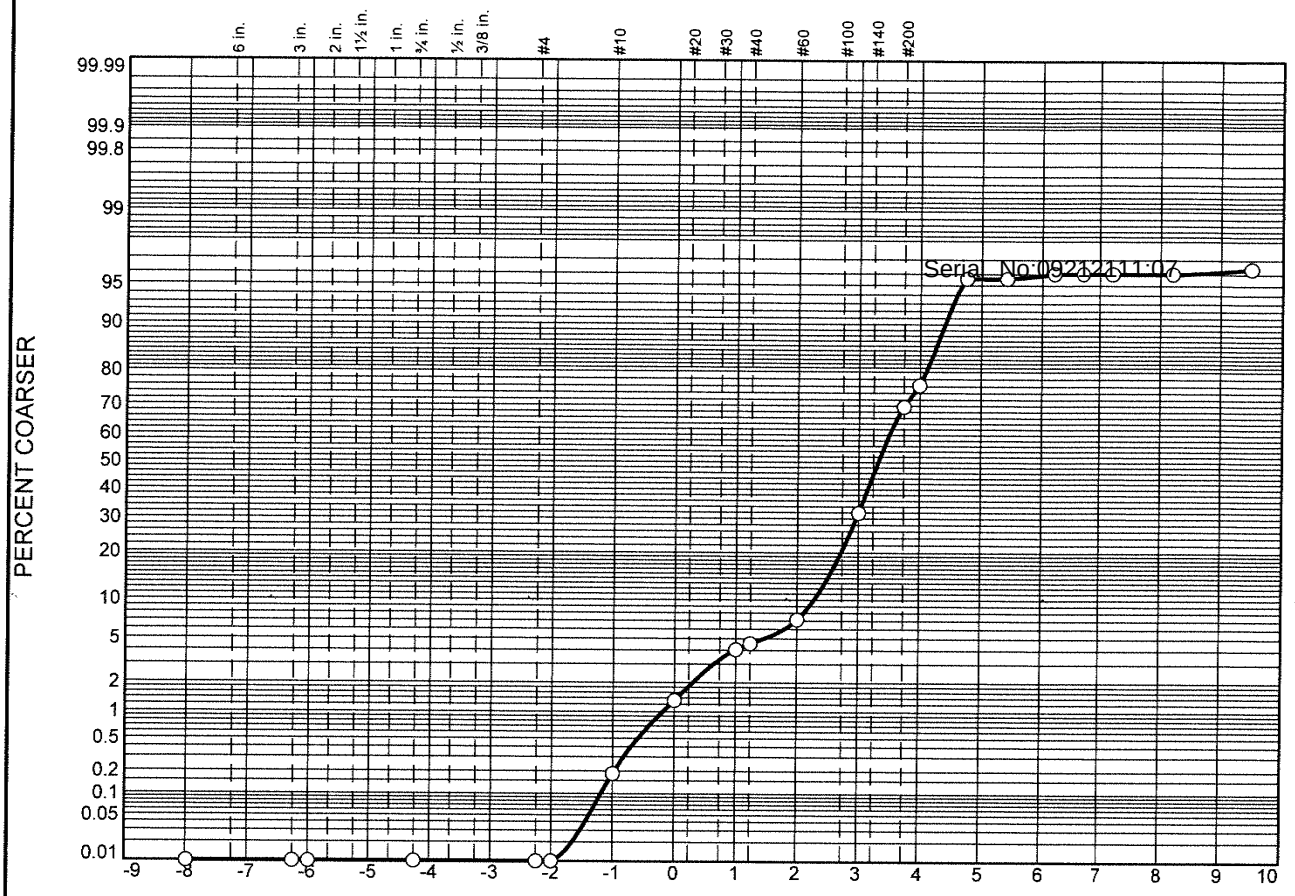
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.5	4.9	6.3	42.2	31.5	85.4	11.6	0.0	0.3	0.0	11.9	2.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0445	0.0542	0.0637	0.0782	0.0990	0.1155	0.1312	0.1478	0.1972	0.2220	0.2852	0.5211

Fineness Modulus	C_u	C_c
0.52	2.73	1.22

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	1.1	2.7	3.1	24.7	44.8	19.0	0.3	0.1	0.0	4.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1714	0.1127	0.1002	0.0743	0.0529	0.0473	1.04	2.38

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|046|SED|01 **Sample No.:** L2143321-24

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|046|SED|01

Sample Number: L2143321-24

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 81.34
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
81.34	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.15	0.00	99.8
		#18	0.92	0.00	98.7
		#35	2.22	0.00	96.0
		#40	0.41	0.00	95.5
		#60	2.11	0.00	92.9
		#120	20.03	0.00	68.2
		#200	30.78	0.00	30.4
		#230	5.42	0.00	23.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 23.7
Weight of hydrometer sample =47.95
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0055	1.0055	0.0136	5.5	14.8	0.0370	4.4
5.00	20.4	1.0055	1.0055	0.0136	5.5	14.8	0.0234	4.4
15.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0136	4.0
30.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0096	4.0
60.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0068	4.0
240.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0034	4.0
1440.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0014	3.6

Fractional Components

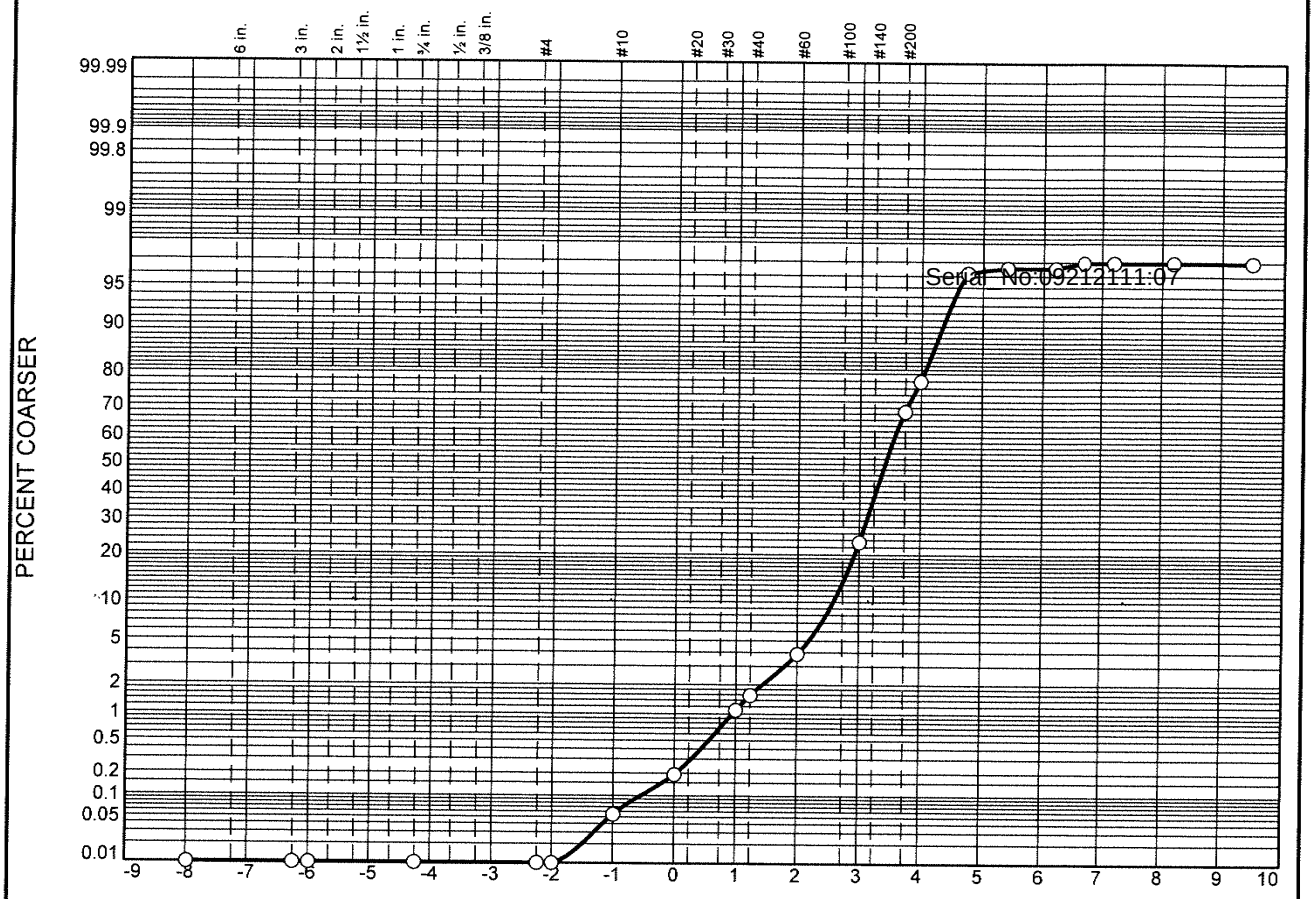
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	1.1	2.7	3.1	24.7	44.8	76.4	19.0	0.3	0.1	0.0	19.4	4.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0389	0.0473	0.0529	0.0583	0.0743	0.0883	0.1002	0.1127	0.1518	0.1714	0.2063	0.3631

Fineness Modulus	C_u	C_c
0.31	2.38	1.04

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.1	0.9	2.7	19.5	55.0	18.1	0.2	0.4		3.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1447	0.1034	0.0936	0.0734	0.0550	0.0491	1.06	2.10

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|050|SED|01 **Sample No.:** L2143321-25

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|050|SED|01

Sample Number: L2143321-25

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 73.12
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
73.12	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	99.9
		#18	0.10	0.00	99.8
		#35	0.66	0.00	98.9
		#40	0.34	0.00	98.4
		#60	1.67	0.00	96.2
		#120	14.26	0.00	76.7
		#200	33.18	0.00	31.3
		#230	6.71	0.00	22.1

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.1
Weight of hydrometer sample =47.04
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	3.8
5.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0236	3.4
15.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0136	3.4
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	3.0
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	3.0
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	3.0
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	3.0

Fractional Components

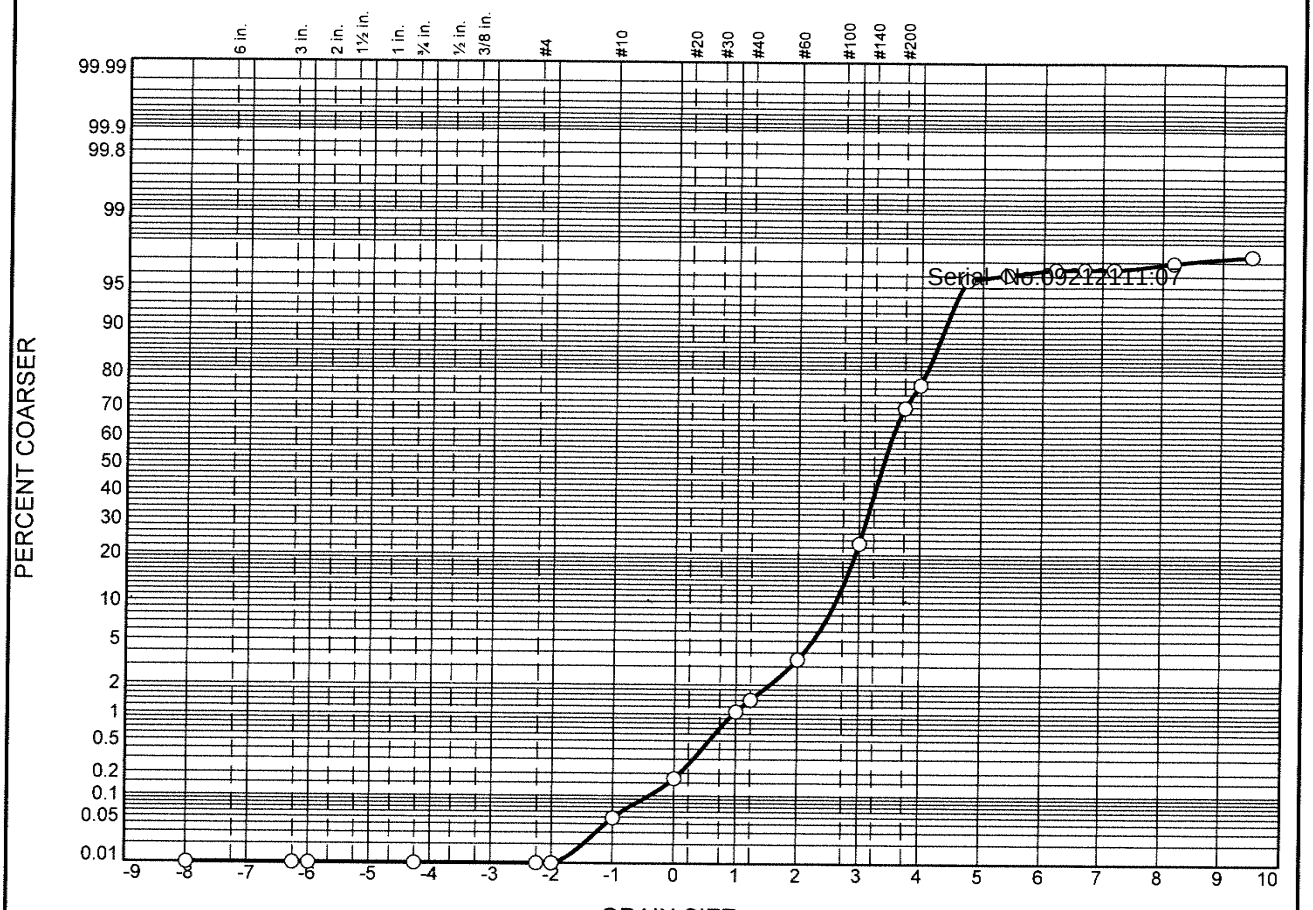
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.1	0.9	2.7	19.5	55.0	78.2	18.1	0.2	0.4		18.7	3.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0409	0.0491	0.0550	0.0605	0.0734	0.0842	0.0936	0.1034	0.1315	0.1447	0.1664	0.2197

Fineness Modulus	C_u	C_c
0.17	2.10	1.06

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.2	0.9	2.4	19.6	54.1	18.6	0.6	0.1	0.4	3.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1426	0.1046	0.0954	0.0749	0.0532	0.0475	1.13	2.20

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|050|SED|02 **Sample No.:** L2143321-26

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|050|SED|02

Sample Number: L2143321-26

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 82.18
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
82.18	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	100.0
		#18	0.10	0.00	99.8
		#35	0.73	0.00	98.9
		#40	0.29	0.00	98.6
		#60	1.68	0.00	96.5
		#120	16.13	0.00	76.9
		#200	38.50	0.00	30.1
		#230	5.72	0.00	23.1

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 23.1
Weight of hydrometer sample =42.8
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	4.4
5.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0236	3.9
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	3.5
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	3.5
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	3.5
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	3.1
1440.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0014	2.6

Fractional Components

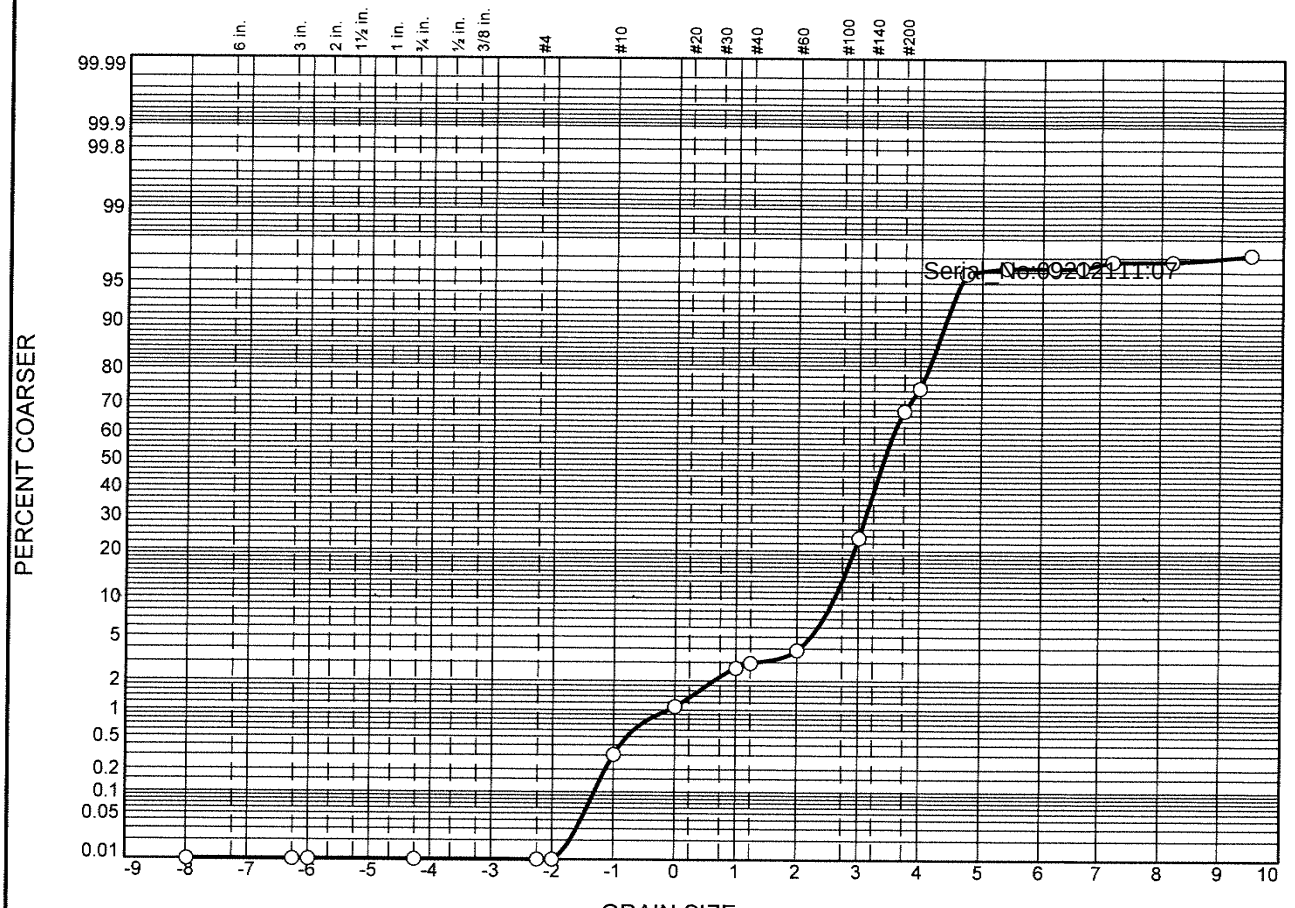
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.2	0.9	2.4	19.6	54.1	77.2	18.6	0.6	0.1	0.4	19.7	3.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0391	0.0475	0.0532	0.0589	0.0749	0.0862	0.0954	0.1046	0.1305	0.1426	0.1624	0.2106

Fineness Modulus	C_u	C_c
0.16	2.20	1.13

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.8	1.6	1.1	19.6	51.7	21.0	0.2	0.3	0.2	3.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1436	0.1041	0.0942	0.0709	0.0522	0.0471	1.03	2.21

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664\|2021\|WTG\|052\|SED\|01 **Sample No.:** L2143321-27

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|052|SED|01

Sample Number: L2143321-27

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 107.72
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
107.72	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.33	0.00	99.7
		#18	0.84	0.00	98.9
		#35	1.69	0.00	97.3
		#40	0.30	0.00	97.1
		#60	0.98	0.00	96.2
		#120	21.10	0.00	76.6
		#200	47.53	0.00	32.4
		#230	7.71	0.00	25.3

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 25.3
Weight of hydrometer sample =44.07
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0373	4.2
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	3.7
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	3.7
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	3.7
60.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0069	3.2
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	3.2
1440.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0014	2.8

Fractional Components

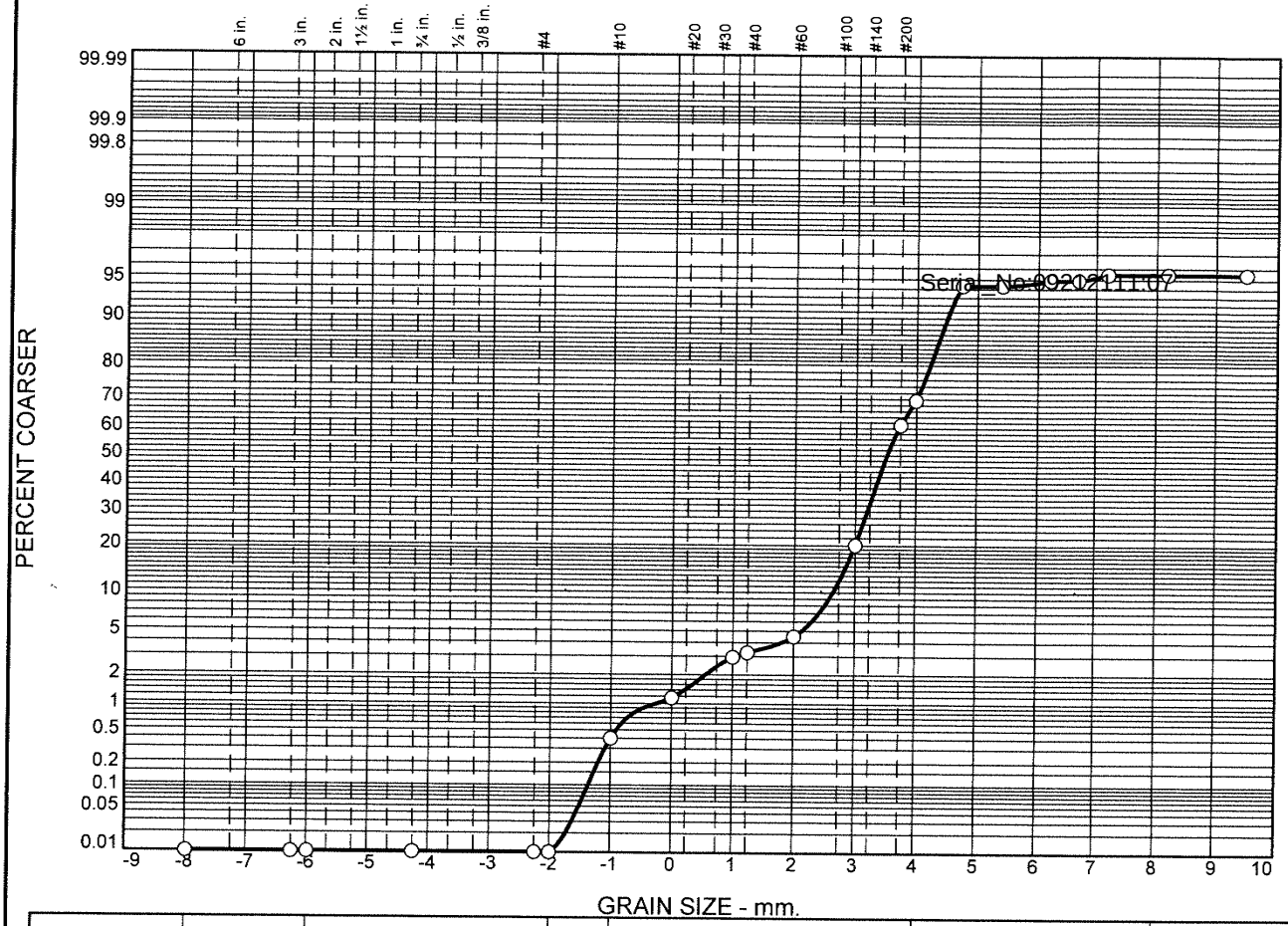
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.8	1.6	1.1	19.6	51.7	74.8	21.0	0.2	0.3	0.2	21.7	3.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0396	0.0471	0.0522	0.0570	0.0709	0.0843	0.0942	0.1041	0.1313	0.1436	0.1636	0.2140

Fineness Modulus	C_u	C_c
0.20	2.21	1.03

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.8	1.7	1.6	15.6	49.9	24.3	0.4	0.5	0.3	4.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1380	0.0976	0.0874	0.0625	0.0492	0.0442	0.90	2.21

	Material Description	USCS	AASHTO
○			

Project No. **Client:**
Project:

○ **Source:** 3664|2021|WTG|055|SED|01 **Sample No.:** L2143321-28

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|055|SED|01

Sample Number: L2143321-28

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 92.61
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
92.61	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.37	0.00	99.6
		#18	0.70	0.00	98.8
		#35	1.65	0.00	97.1
		#40	0.29	0.00	96.7
		#60	1.17	0.00	95.5
		#120	14.42	0.00	79.9
		#200	38.00	0.00	38.9
		#230	7.80	0.00	30.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 30.5
Weight of hydrometer sample =43.46
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	5.7
5.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0235	5.7
15.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0136	5.1
30.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0096	5.1
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	4.5
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	4.5
1440.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0014	4.5

Fractional Components

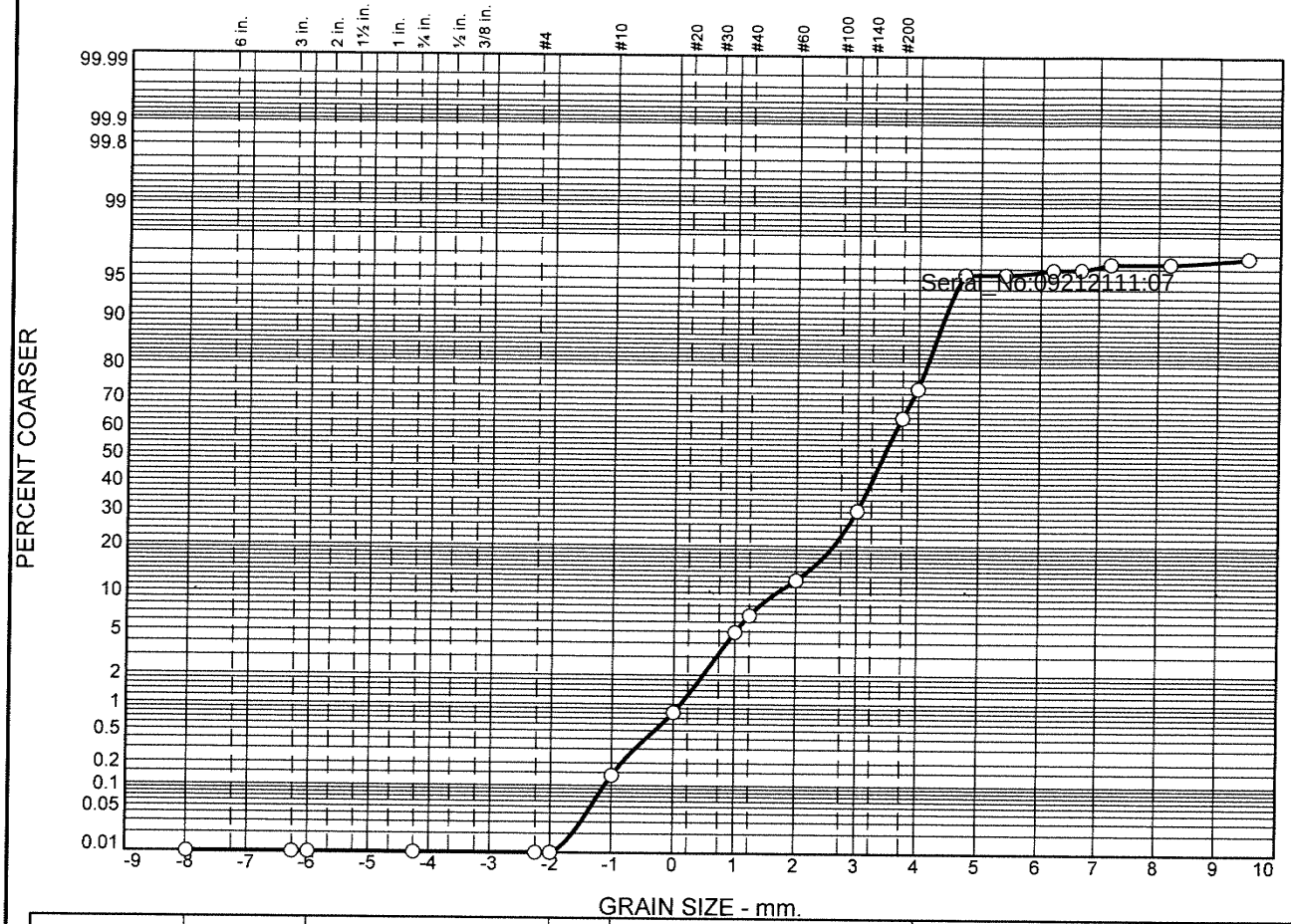
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.8	1.7	1.6	15.6	49.9	69.6	24.3	0.4	0.5	0.3	25.5	4.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0089	0.0442	0.0492	0.0534	0.0625	0.0765	0.0874	0.0976	0.1252	0.1380	0.1604	0.2298

Fineness Modulus	C_u	C_c
0.19	2.21	0.90

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.7	4.1	7.3	18.1	43.6	21.6	0.3	0.4	0.2	3.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_u
○			0.2047	0.1066	0.0924	0.0669	0.0521	0.0469	0.90	2.27

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|057|SED|01 **Sample No.:** L2143321-29

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|057|SED|01

Sample Number: L2143321-29

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 72.76
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
72.76	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.10	0.00	99.9
		#18	0.49	0.00	99.2
		#35	2.99	0.00	95.1
		#40	1.33	0.00	93.3
		#60	3.99	0.00	87.8
		#120	13.18	0.00	69.7
		#200	24.29	0.00	36.3
		#230	7.02	0.00	26.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 26.6
Weight of hydrometer sample =47.45
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0371	4.5
5.00	20.4	1.0050	1.0050	0.0136	5.0	15.0	0.0235	4.5
15.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0136	4.1
30.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0096	4.1
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	3.6
240.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0034	3.6
1440.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0014	3.2

Fractional Components

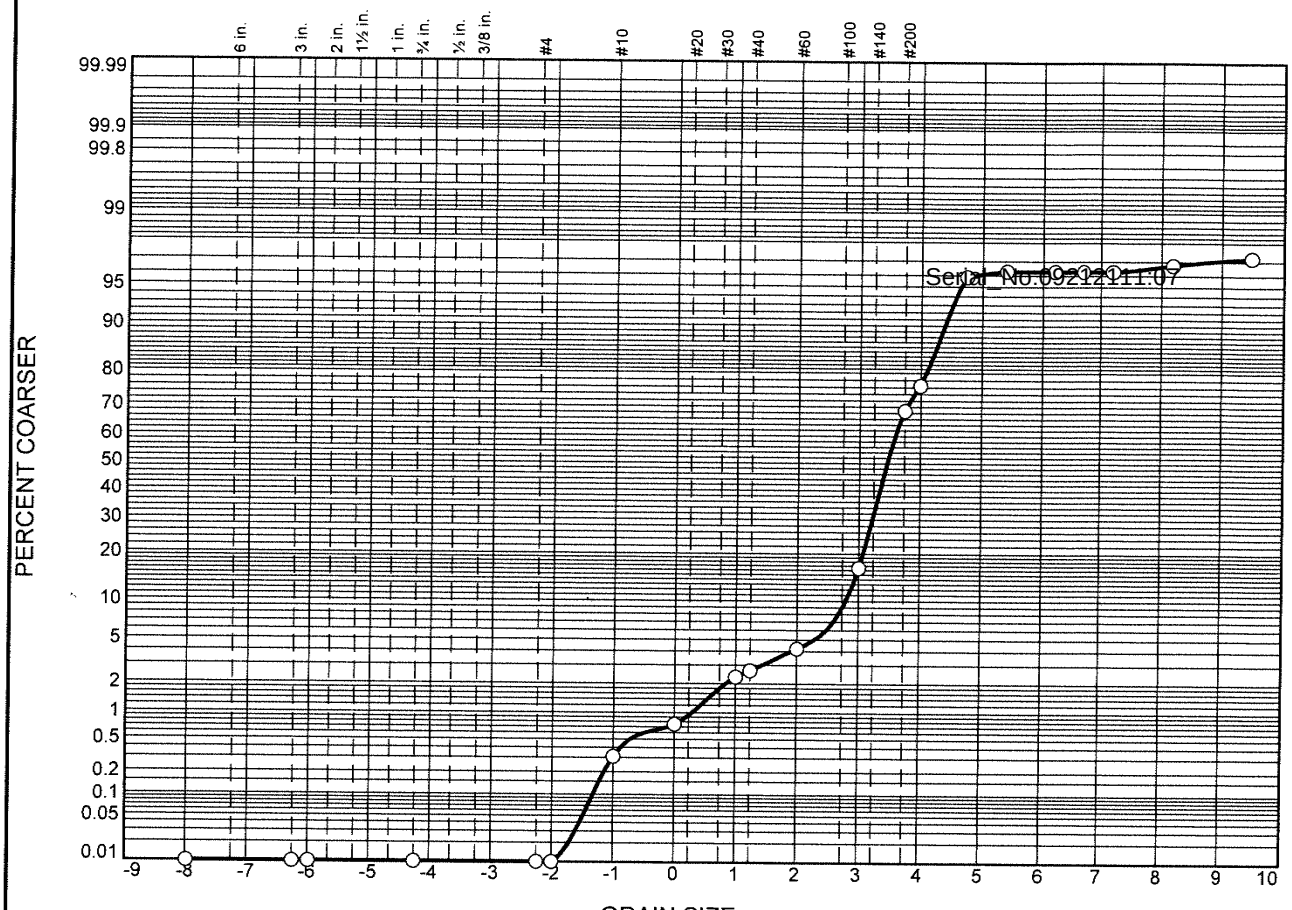
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	4.1	7.3	18.1	43.6	73.8	21.6	0.3	0.4	0.2	22.5	3.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0386	0.0469	0.0521	0.0566	0.0669	0.0798	0.0924	0.1066	0.1628	0.2047	0.3102	0.4963

Fineness Modulus	C_u	C_c
0.37	2.27	0.90

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.4	1.6	1.9	12.3	60.4	19.2	0.2	0.0	0.4	3.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1281	0.0987	0.0911	0.0733	0.0533	0.0477	1.14	2.07

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|060|SED|01 **Sample No.:** L2143321-30

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|060|SED|01

Sample Number: L2143321-30

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 73.92
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
73.92	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.23	0.00	99.7
		#18	0.32	0.00	99.3
		#35	1.16	0.00	97.7
		#40	0.26	0.00	97.3
		#60	1.14	0.00	95.8
		#120	9.07	0.00	83.5
		#200	38.58	0.00	31.3
		#230	5.79	0.00	23.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 23.5
Weight of hydrometer sample =41.15
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.4	1.0045	1.0045	0.0136	4.5	15.1	0.0373	4.2
5.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0237	3.7
15.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0137	3.7
30.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0097	3.7
60.00	20.4	1.0040	1.0040	0.0136	4.0	15.2	0.0068	3.7
240.00	20.4	1.0035	1.0035	0.0136	3.5	15.4	0.0034	3.2
1440.00	20.4	1.0030	1.0030	0.0136	3.0	15.5	0.0014	2.8

Fractional Components

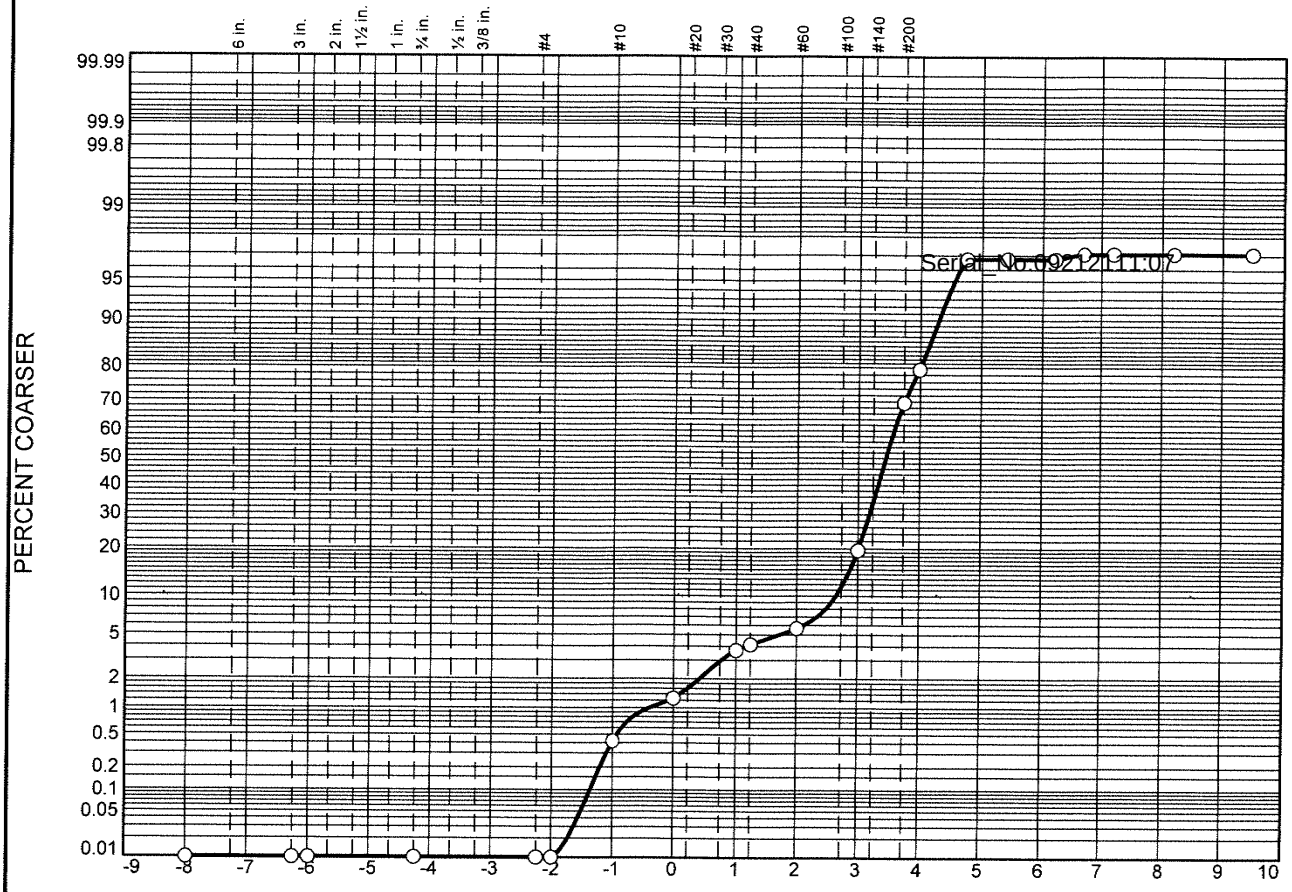
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.4	1.6	1.9	12.3	60.4	76.6	19.2	0.2	0.0	0.4	19.8	3.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0398	0.0477	0.0533	0.0586	0.0733	0.0834	0.0911	0.0987	0.1190	0.1281	0.1442	0.2053

Fineness Modulus	C_u	C_c
0.15	2.07	1.14

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.9	2.4	2.0	13.8	60.3	17.0	0.0	0.3	0.0	2.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1359	0.1001	0.0918	0.0746	0.0566	0.0507	1.09	1.98

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|060|SED|02 **Sample No.:** L2143321-31

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|060|SED|02

Sample Number: L2143321-31

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 76.61
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
76.61	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.32	0.00	99.6
		#18	0.65	0.00	98.7
		#35	1.85	0.00	96.3
		#40	0.35	0.00	95.9
		#60	1.17	0.00	94.3
		#120	10.60	0.00	80.5
		#200	38.37	0.00	30.4
		#230	7.53	0.00	20.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 20.6
Weight of hydrometer sample =46.8
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	3.2
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	3.2
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	3.2
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	2.9
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	2.9
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	2.9
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	2.9

Fractional Components

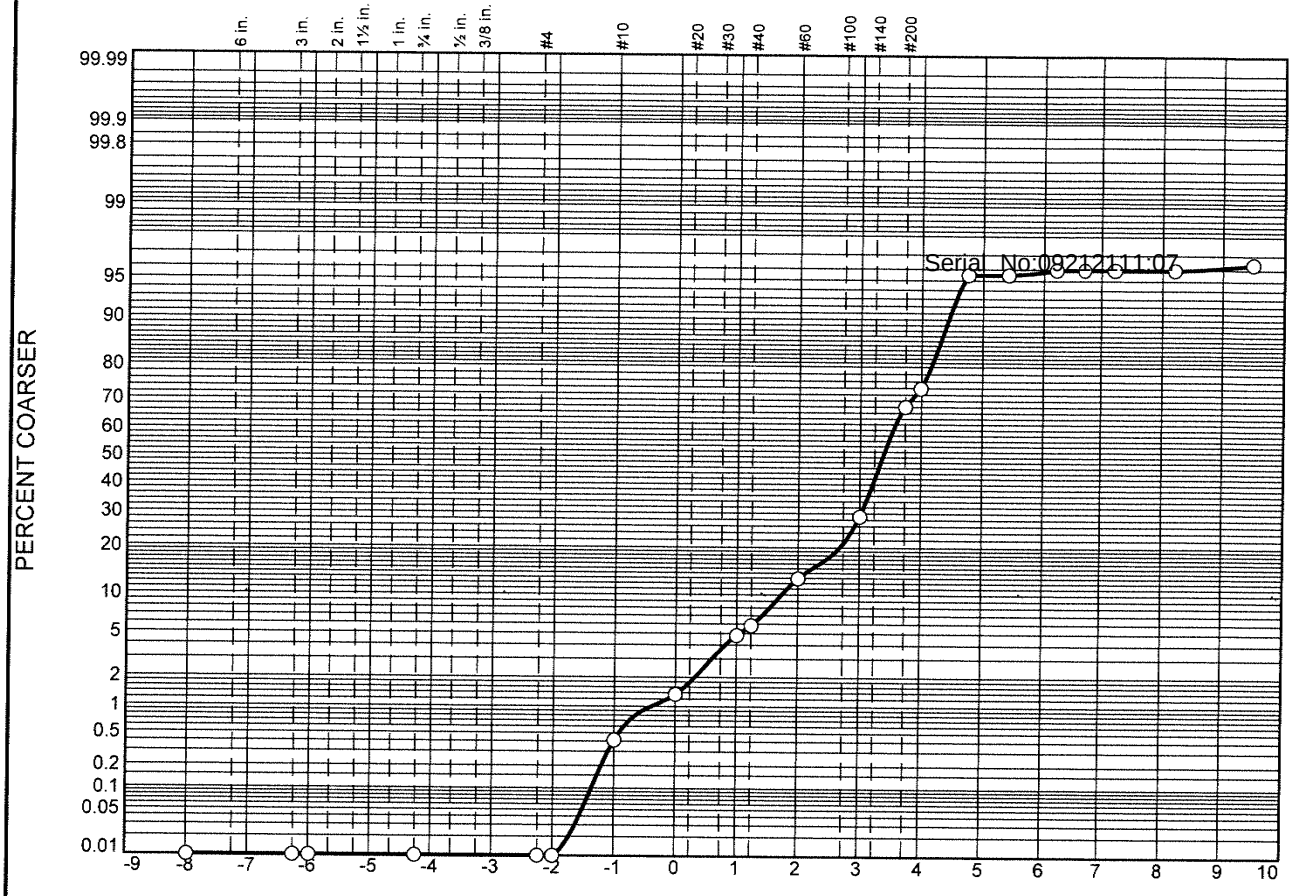
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.9	2.4	2.0	13.8	60.3	79.4	17.0	0.0	0.3	0.0	17.3	2.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0426	0.0507	0.0566	0.0623	0.0746	0.0838	0.0918	0.1001	0.1240	0.1359	0.1590	0.3051

Fineness Modulus	C_u	C_c
0.21	1.98	1.09

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.9	3.5	8.1	16.1	45.2	21.3	0.3	0.1	0.0	4.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2118	0.1080	0.0967	0.0709	0.0511	0.0461	1.01	2.35

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|062|SED|01 **Sample No.:** L2143321-32

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|062|SED|01

Sample Number: L2143321-32

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 58.18
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
58.18	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.24	0.00	99.6
		#18	0.54	0.00	98.7
		#35	2.03	0.00	95.2
		#40	0.57	0.00	94.2
		#60	4.12	0.00	87.1
		#120	9.35	0.00	71.0
		#200	22.73	0.00	32.0
		#230	3.37	0.00	26.2

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 26.2
Weight of hydrometer sample =47.63
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	4.5
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	4.5
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	4.1
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	4.1
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	4.1
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	4.1
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	3.6

Fractional Components

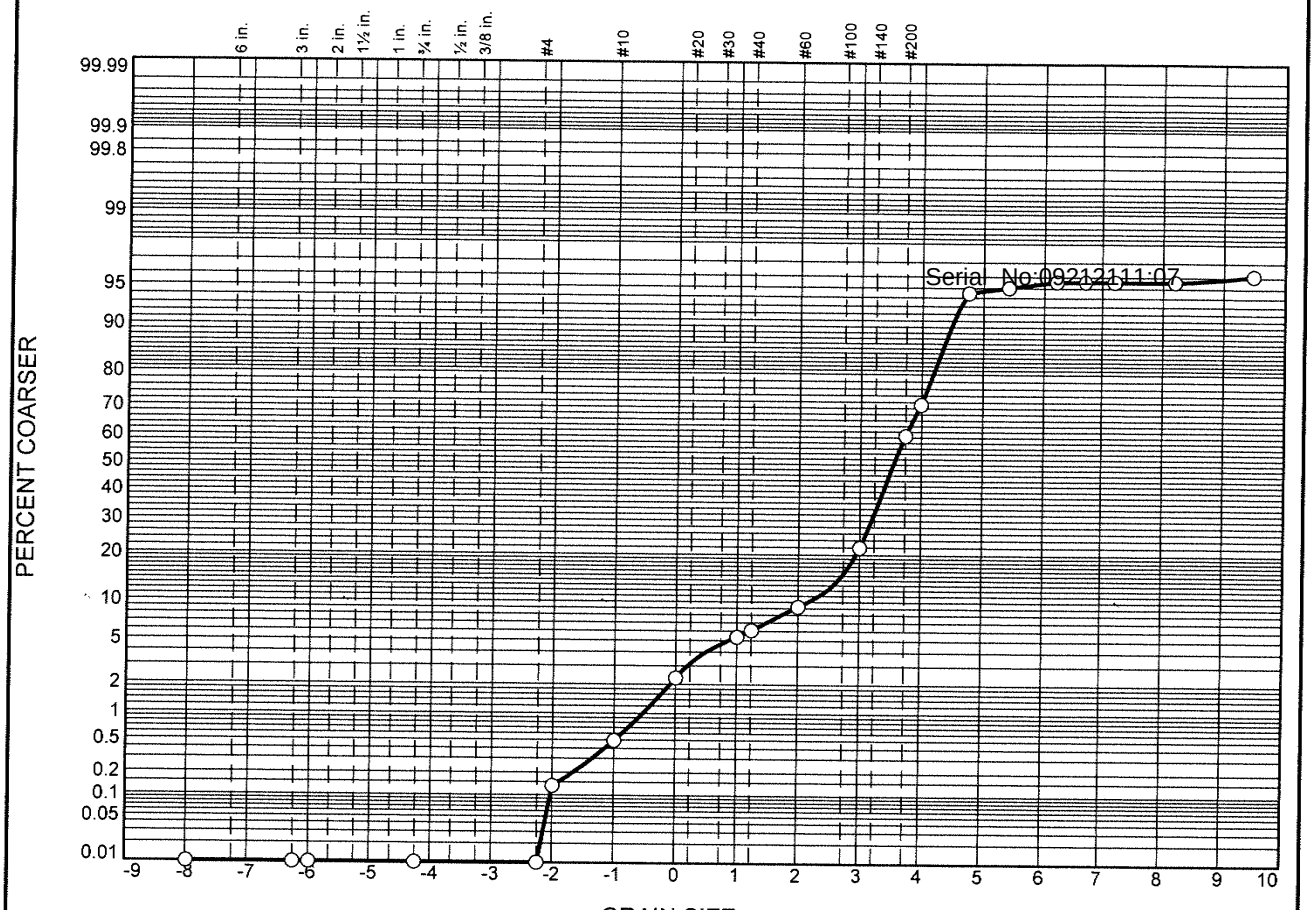
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.9	3.5	8.1	16.1	45.2	73.8	21.3	0.3	0.1	0.0	21.7	4.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0384	0.0461	0.0511	0.0558	0.0709	0.0859	0.0967	0.1080	0.1557	0.2118	0.3007	0.4857

Fineness Modulus	C_u	C_c
0.36	2.35	1.01

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.1	0.4	1.8	3.1	3.8	12.7	49.8	23.0	0.7	0.2	0.0	4.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1520	0.0965	0.0858	0.0642	0.0503	0.0449	0.95	2.15

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|063|SED|01 **Sample No.:** L2143321-33

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|063|SED|01

Sample Number: L2143321-33

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 97.20
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
97.20	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.13	0.00	99.9
		#10	0.35	0.00	99.5
		#18	1.76	0.00	97.7
		#35	2.97	0.00	94.6
		#40	0.69	0.00	93.9
		#60	3.05	0.00	90.8
		#120	12.31	0.00	78.1
		#200	37.49	0.00	39.6
		#230	10.42	0.00	28.8

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 28.8
Weight of hydrometer sample =42.8
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	5.5
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	5.0
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	4.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.4
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.4
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	4.4
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.9

Fractional Components

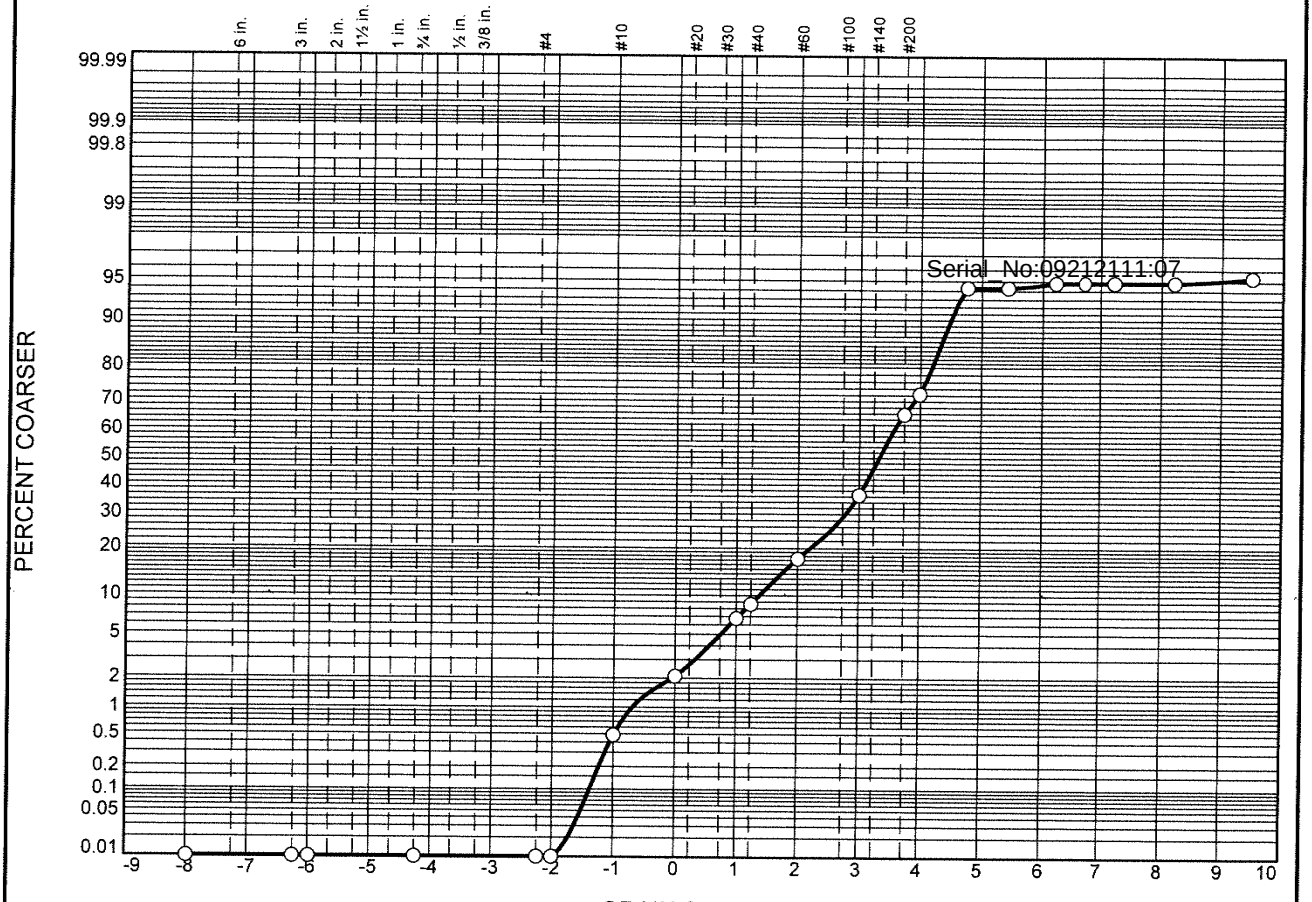
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.1	0.4	1.8	3.1	3.8	12.7	49.8	71.2	23.0	0.7	0.2	0.0	23.9	4.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0241	0.0449	0.0503	0.0549	0.0642	0.0755	0.0858	0.0965	0.1302	0.1520	0.2223	0.5485

Fineness Modulus	C_u	C_c
0.30	2.15	0.95

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	1.6	4.6	10.7	19.0	36.3	21.6	0.4	0.1	0.0	5.2

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2849	0.1170	0.0995	0.0666	0.0498	0.0444	0.86	2.64

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|064|SED|01 **Sample No.:** L2143321-34

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|064|SED|01

Sample Number: L2143321-34

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 79.90
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
79.90	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.39	0.00	99.5
		#18	1.28	0.00	97.9
		#35	3.72	0.00	93.3
		#40	1.51	0.00	91.4
		#60	7.00	0.00	82.6
		#120	15.19	0.00	63.6
		#200	23.38	0.00	34.3
		#230	5.32	0.00	27.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 27.7
Weight of hydrometer sample =43.88
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0368	5.7
5.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0232	5.7
15.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0135	5.2
30.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0095	5.2
60.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0067	5.2
240.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0034	5.2
1440.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0014	4.7

Fractional Components

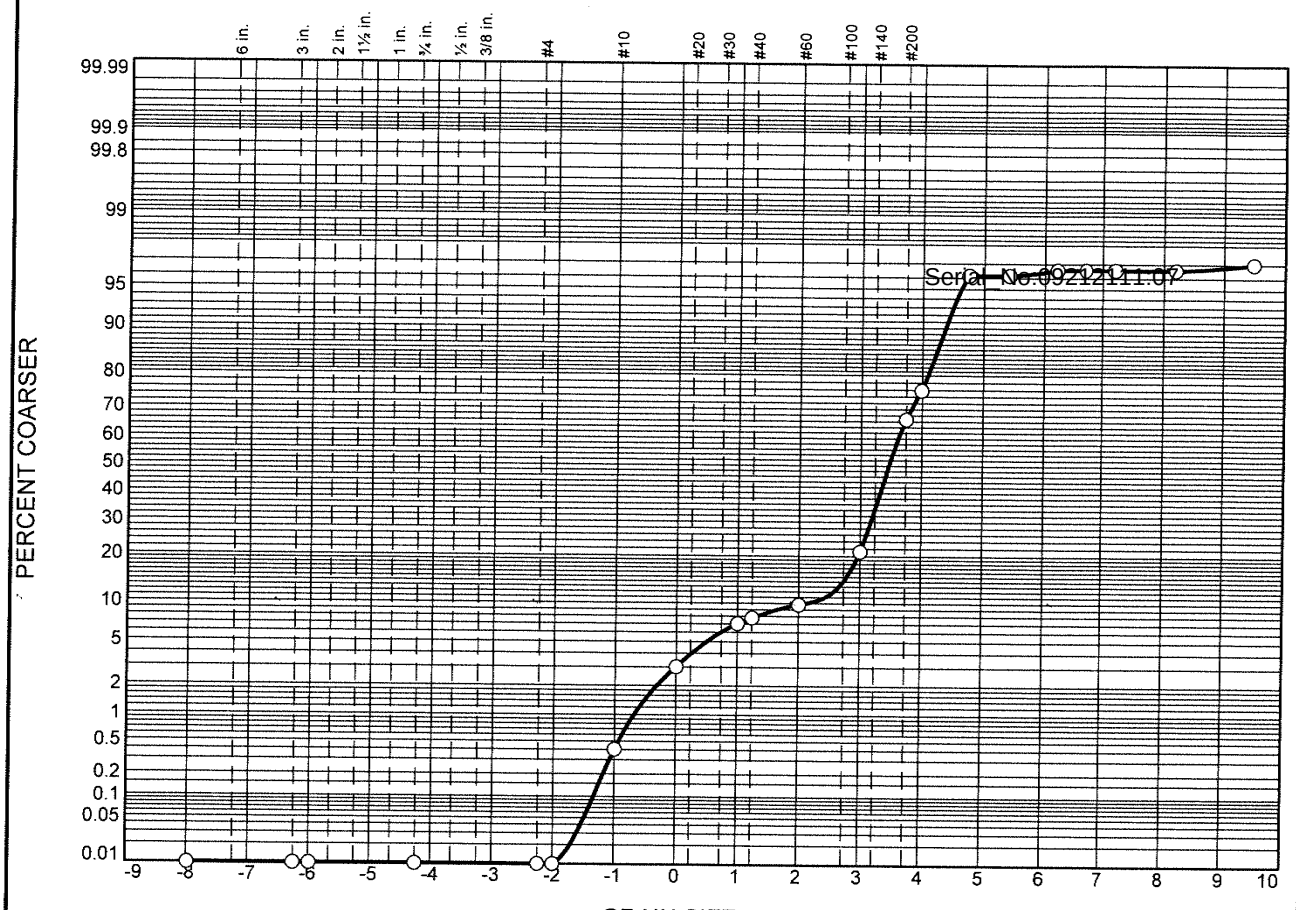
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	1.6	4.6	10.7	19.0	36.3	72.2	21.6	0.4	0.1	0.0	22.1	5.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0023	0.0444	0.0498	0.0546	0.0666	0.0844	0.0995	0.1170	0.2169	0.2849	0.3847	0.5976

Fineness Modulus	C_u	C_c
0.50	2.64	0.86

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	2.6	4.0	2.8	11.4	55.0	20.0	0.3	0.1	0.0	3.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1450	0.0999	0.0908	0.0707	0.0535	0.0482	1.04	2.07

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|069|SED|01 **Sample No.:** L2143321-35

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|069|SED|01

Sample Number: L2143321-35

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 81.86
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
81.86	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.33	0.00	99.6
		#18	2.14	0.00	97.0
		#35	3.28	0.00	93.0
		#40	0.61	0.00	92.2
		#60	1.64	0.00	90.2
		#120	9.36	0.00	78.8
		#200	37.21	0.00	33.3
		#230	7.49	0.00	24.2

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 24.2
Weight of hydrometer sample =46.69
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	3.8
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	3.8
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	3.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	3.4
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	3.4
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	3.4
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.0

Fractional Components

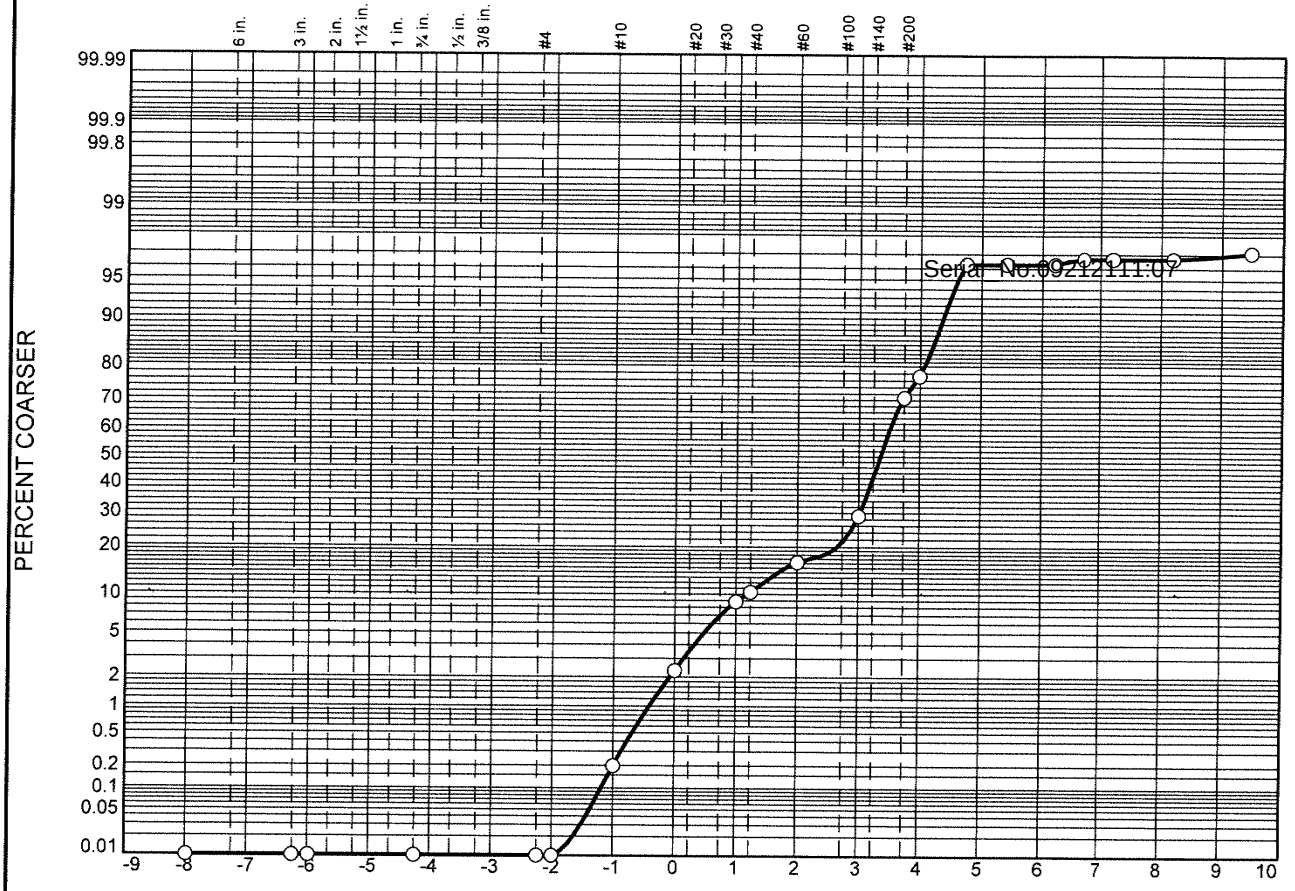
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	2.6	4.0	2.8	11.4	55.0	75.8	20.0	0.3	0.1	0.0	20.4	3.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0406	0.0482	0.0535	0.0585	0.0707	0.0819	0.0908	0.0999	0.1278	0.1450	0.2280	0.7089

Fineness Modulus	C_u	C_c
0.32	2.07	1.04

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	2.1	6.5	7.4	12.8	48.5	18.8	0.0	0.4		3.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.2846	0.1086	0.0978	0.0762	0.0538	0.0483	1.11	2.25

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|070|SED|01 **Sample No.:** L2143321-36

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|070|SED|01

Sample Number: L2143321-36

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 80.76
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
80.76	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.16	0.00	99.8
		#18	1.70	0.00	97.7
		#35	5.24	0.00	91.2
		#40	1.23	0.00	89.7
		#60	4.77	0.00	83.8
		#120	10.34	0.00	71.0
		#200	33.73	0.00	29.2
		#230	5.18	0.00	22.8

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.8
Weight of hydrometer sample =45.56
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	3.7
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	3.7
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	3.7
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	3.3
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	3.3
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	3.3
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	2.9

Fractional Components

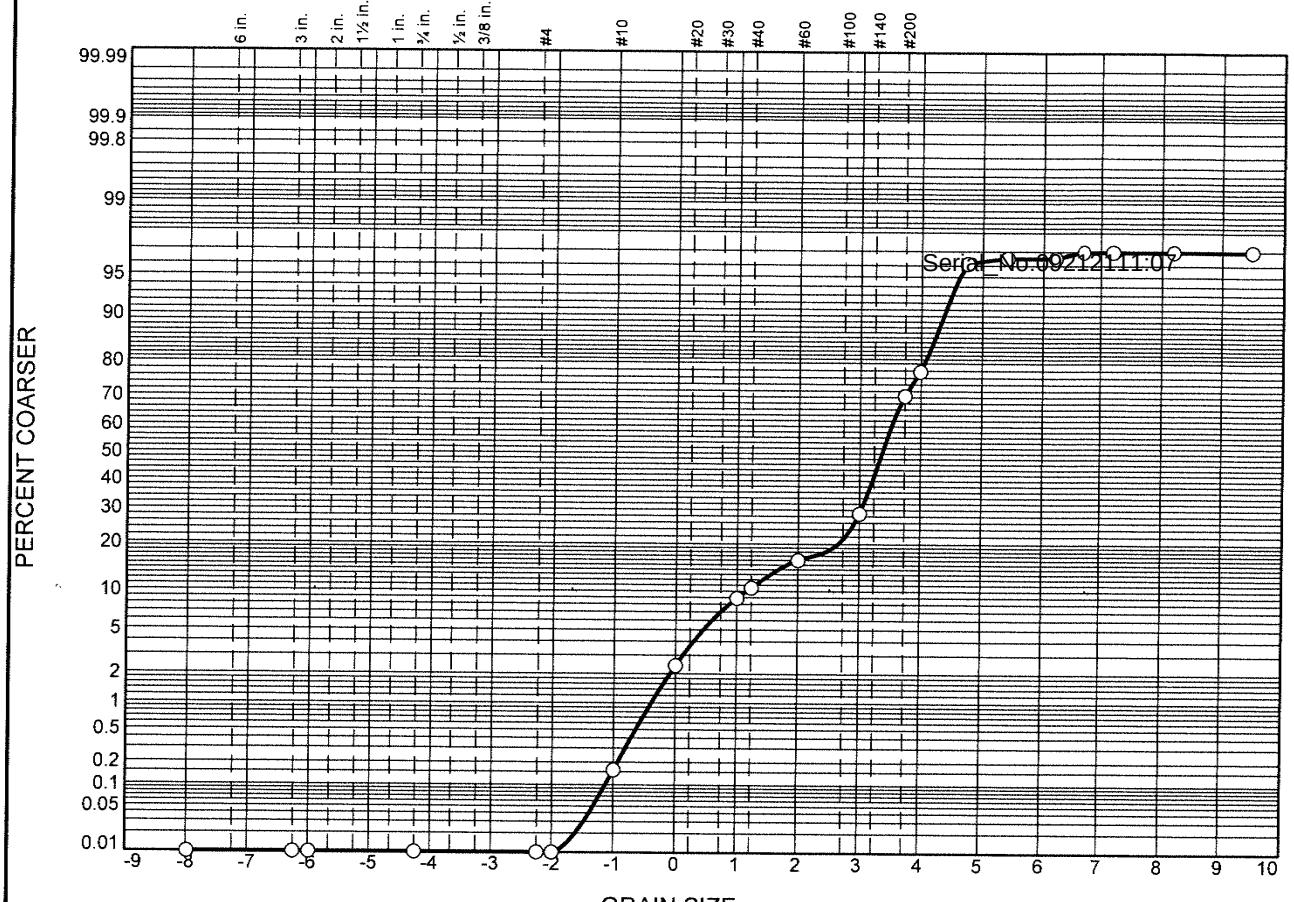
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	2.1	6.5	7.4	12.8	48.5	77.3	18.8	0.0	0.4		19.2	3.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0408	0.0483	0.0538	0.0593	0.0762	0.0879	0.0978	0.1086	0.1591	0.2846	0.4391	0.7184

Fineness Modulus	C_u	C_c
0.44	2.25	1.11

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	2.2	6.5	7.1	12.8	49.2	18.3	0.2	0.5	0.0	3.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.2832	0.1079	0.0971	0.0756	0.0542	0.0484	1.09	2.23

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|070|SED|02 **Sample No.:** L2143321-37

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|070|SED|02

Sample Number: L2143321-37

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 95.04
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
95.04	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.15	0.00	99.8
		#18	2.12	0.00	97.6
		#35	6.16	0.00	91.1
		#40	1.56	0.00	89.5
		#60	5.26	0.00	84.0
		#120	12.13	0.00	71.2
		#200	39.54	0.00	29.6
		#230	6.90	0.00	22.3

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 22.3
Weight of hydrometer sample =42.5
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	3.9
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	3.5
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	3.5
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	3.0
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	3.0
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	3.0
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.0

Fractional Components

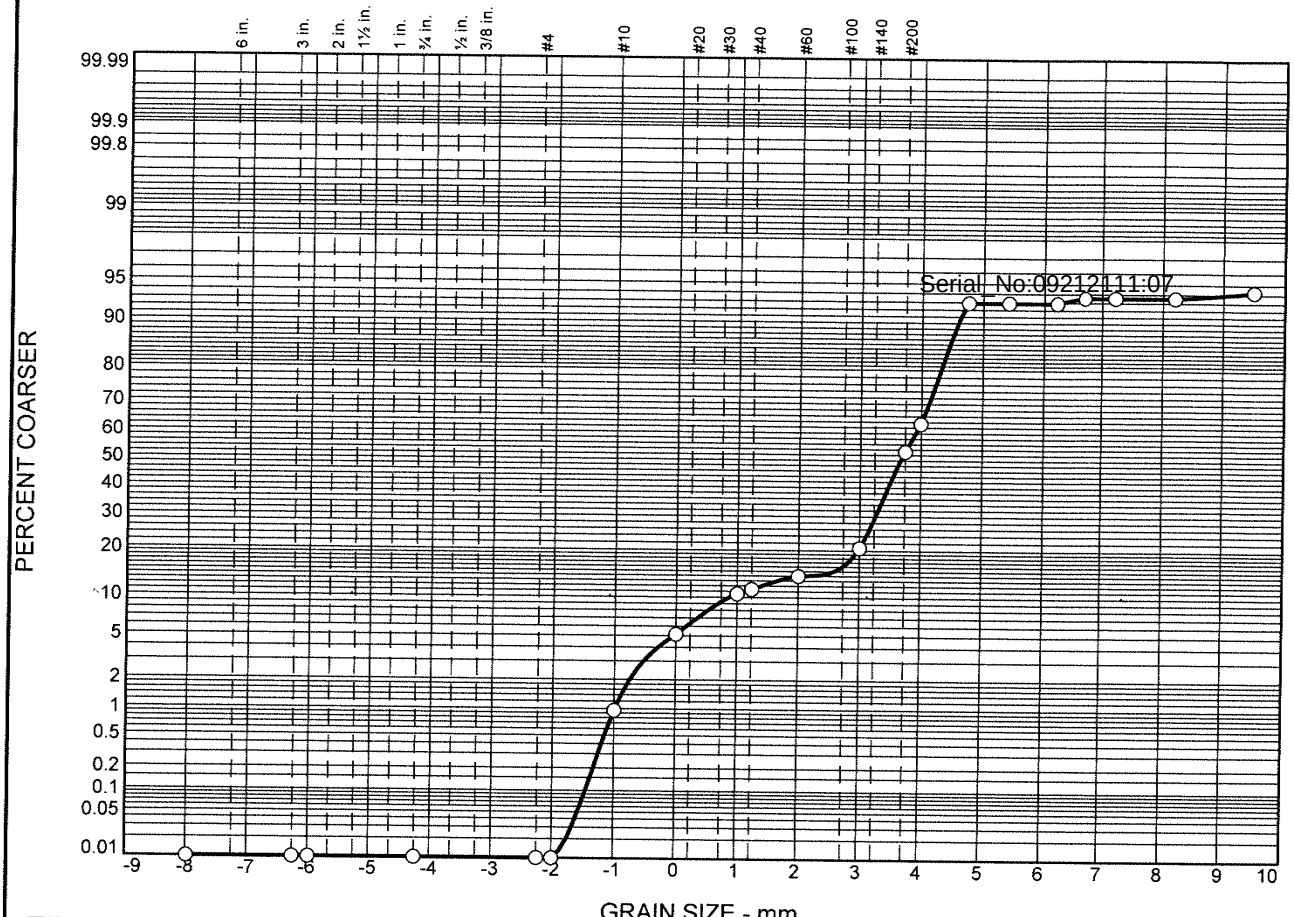
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	2.2	6.5	7.1	12.8	49.2	77.8	18.3	0.2	0.5	0.0	19.0	3.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0404	0.0484	0.0542	0.0599	0.0756	0.0871	0.0971	0.1079	0.1583	0.2832	0.4467	0.7303

Fineness Modulus	C_u	C_c
0.44	2.23	1.09

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.0	4.2	5.4	3.4	6.7	43.1	29.1	0.0	0.7		6.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1654	0.0906	0.0789	0.0574	0.0464	0.0415	0.88	2.19

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|073|SED|01 **Sample No.:** L2143321-38

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|073|SED|01

Sample Number: L2143321-38

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 40.74
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
40.74	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.39	0.00	99.0
		#18	1.71	0.00	94.8
		#35	2.20	0.00	89.4
		#40	0.34	0.00	88.6
		#60	1.05	0.00	86.0
		#120	2.73	0.00	79.3
		#200	13.25	0.00	46.8
		#230	4.09	0.00	36.8

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.8
Weight of hydrometer sample =42.15
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	7.1
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	7.1
15.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0135	7.1
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	6.4
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	6.4
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	6.4
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	5.7

Fractional Components

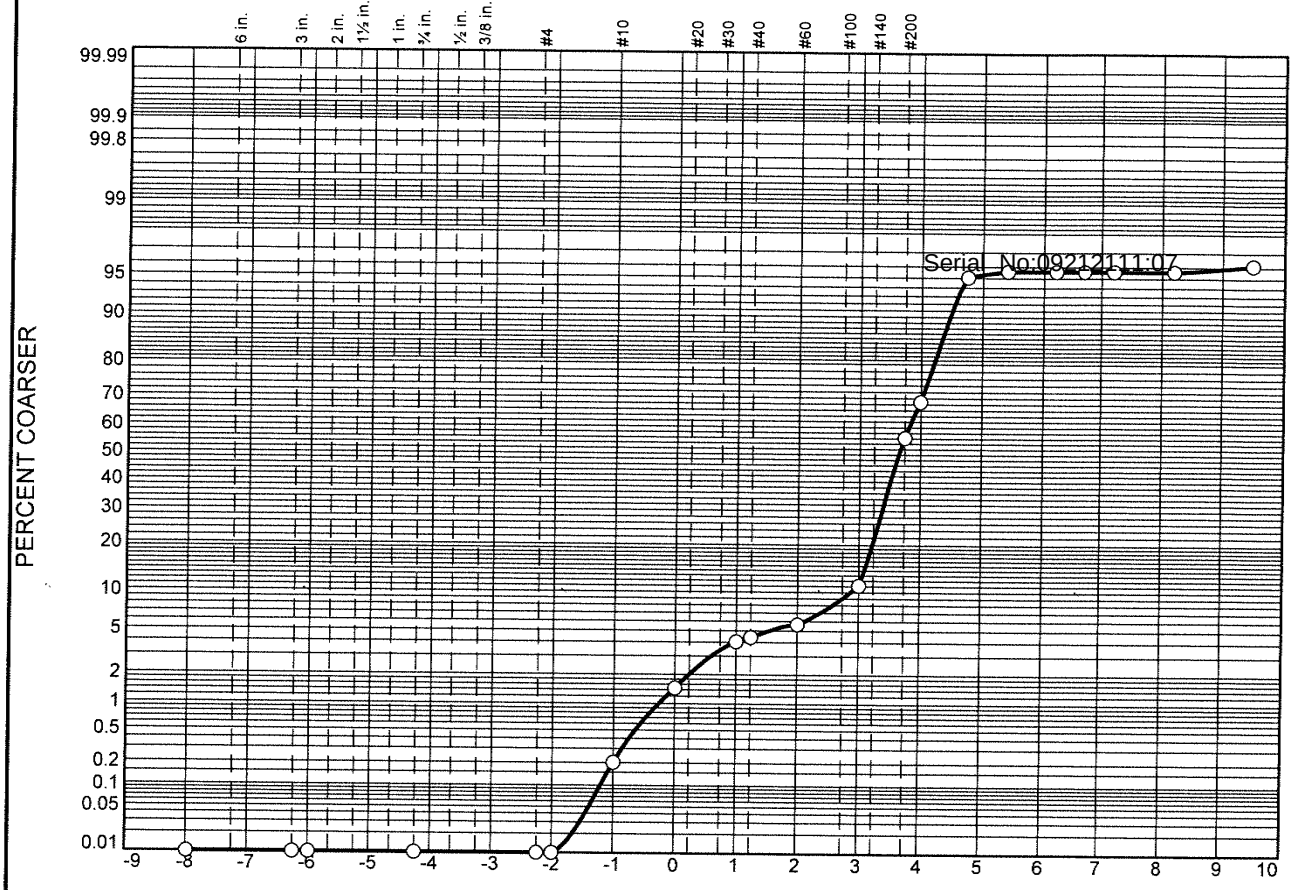
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.0	4.2	5.4	3.4	6.7	43.1	62.8	29.1	0.0	0.7		29.8	6.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0415	0.0464	0.0502	0.0574	0.0664	0.0789	0.0906	0.1274	0.1654	0.5437	1.0250

Fineness Modulus	C_u	C_c
0.43	2.19	0.88

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	1.3	2.5	1.6	5.5	58.3	25.9	0.3	0.0	0.0	4.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1153	0.0879	0.0801	0.0620	0.0500	0.0453	0.96	1.94

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|079|SED|01 **Sample No.:** L2143321-39

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|079|SED|01

Sample Number: L2143321-39

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 74.44
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
74.44	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.15	0.00	99.8
		#18	0.94	0.00	98.5
		#35	1.91	0.00	96.0
		#40	0.28	0.00	95.6
		#60	0.92	0.00	94.4
		#120	4.06	0.00	88.9
		#200	33.59	0.00	43.8
		#230	9.36	0.00	31.2

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 31.2
Weight of hydrometer sample =46.64
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	4.9
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	4.4
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	4.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.4
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.4
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	4.4
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.9

Fractional Components

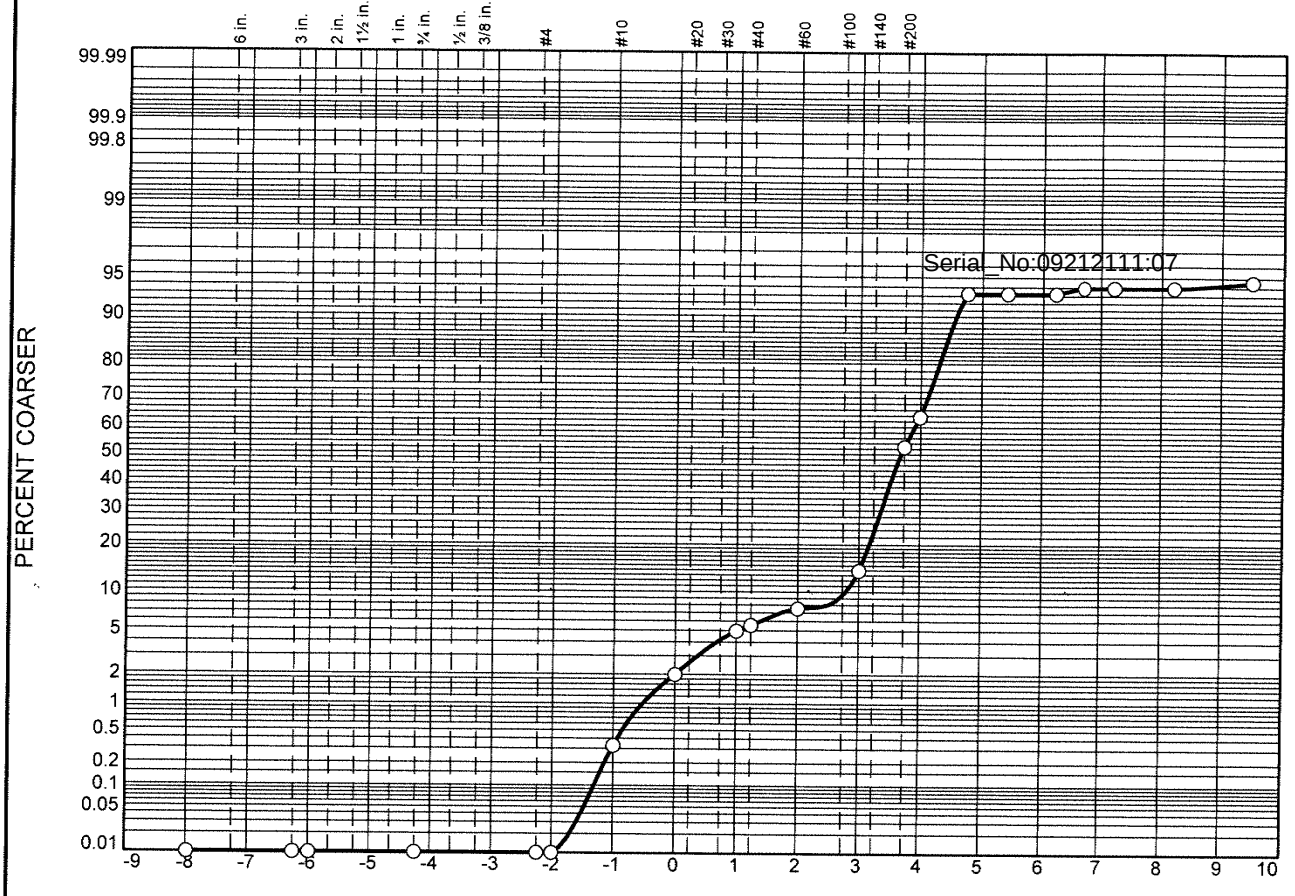
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	1.3	2.5	1.6	5.5	58.3	69.2	25.9	0.3	0.0	0.0	26.2	4.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0373	0.0453	0.0500	0.0541	0.0620	0.0715	0.0801	0.0879	0.1073	0.1153	0.1367	0.3437

Fineness Modulus	C_u	C_c
0.19	1.94	0.96

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	1.7	3.0	2.5	6.4	50.1	29.2	0.0	0.7		6.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1217	0.0872	0.0777	0.0576	0.0467	0.0420	0.91	2.08

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|080|SED|01 **Sample No.:** L2143321-40

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|080|SED|01

Sample Number: L2143321-40

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 64.30
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
64.30	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		0.75	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.7
		#18	1.07	0.00	98.0
		#35	1.91	0.00	95.0
		#40	0.37	0.00	94.5
		#60	1.28	0.00	92.5
		#120	4.10	0.00	86.1
		#200	24.89	0.00	47.4
		#230	6.95	0.00	36.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #230
Percent passing #230 based upon complete sample = 36.6
Weight of hydrometer sample =44.24
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	6.8
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	6.8
15.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0135	6.8
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	6.1
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	6.1
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	6.1
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	5.4

Fractional Components

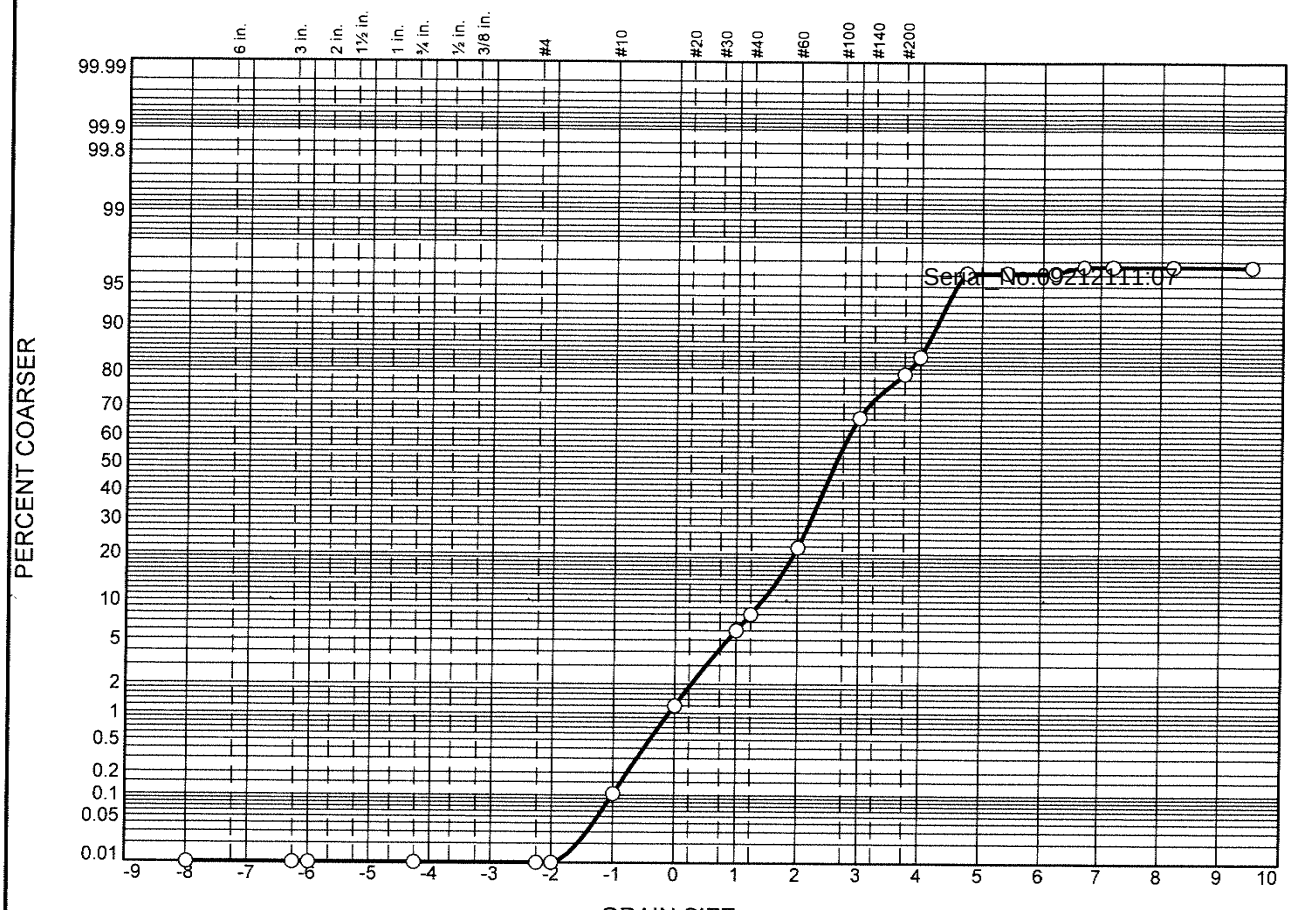
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	1.7	3.0	2.5	6.4	50.1	63.7	29.2	0.0	0.7		29.9	6.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0420	0.0467	0.0505	0.0576	0.0665	0.0777	0.0872	0.1110	0.1217	0.1448	0.4949

Fineness Modulus	C_u	C_c
0.22	2.08	0.91

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	1.1	4.8	15.7	44.7	17.8	12.0	0.0	0.4		3.4

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.2994	0.1867	0.1632	0.1141	0.0609	0.0522	1.34	3.58

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|082|SED|01 **Sample No.:** L2143321-41

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|082|SED|01

Sample Number: L2143321-41

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 38.30
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
38.30	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	99.9
		#18	0.42	0.00	98.8
		#35	1.84	0.00	94.0
		#40	0.77	0.00	92.0
		#60	5.24	0.00	78.3
		#120	17.12	0.00	33.6
		#200	5.08	0.00	20.3
		#230	1.65	0.00	16.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 20.3
Weight of hydrometer sample =35.04
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0372	3.8
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	3.8
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	3.8
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	3.4
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	3.4
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	3.4
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.4

Fractional Components

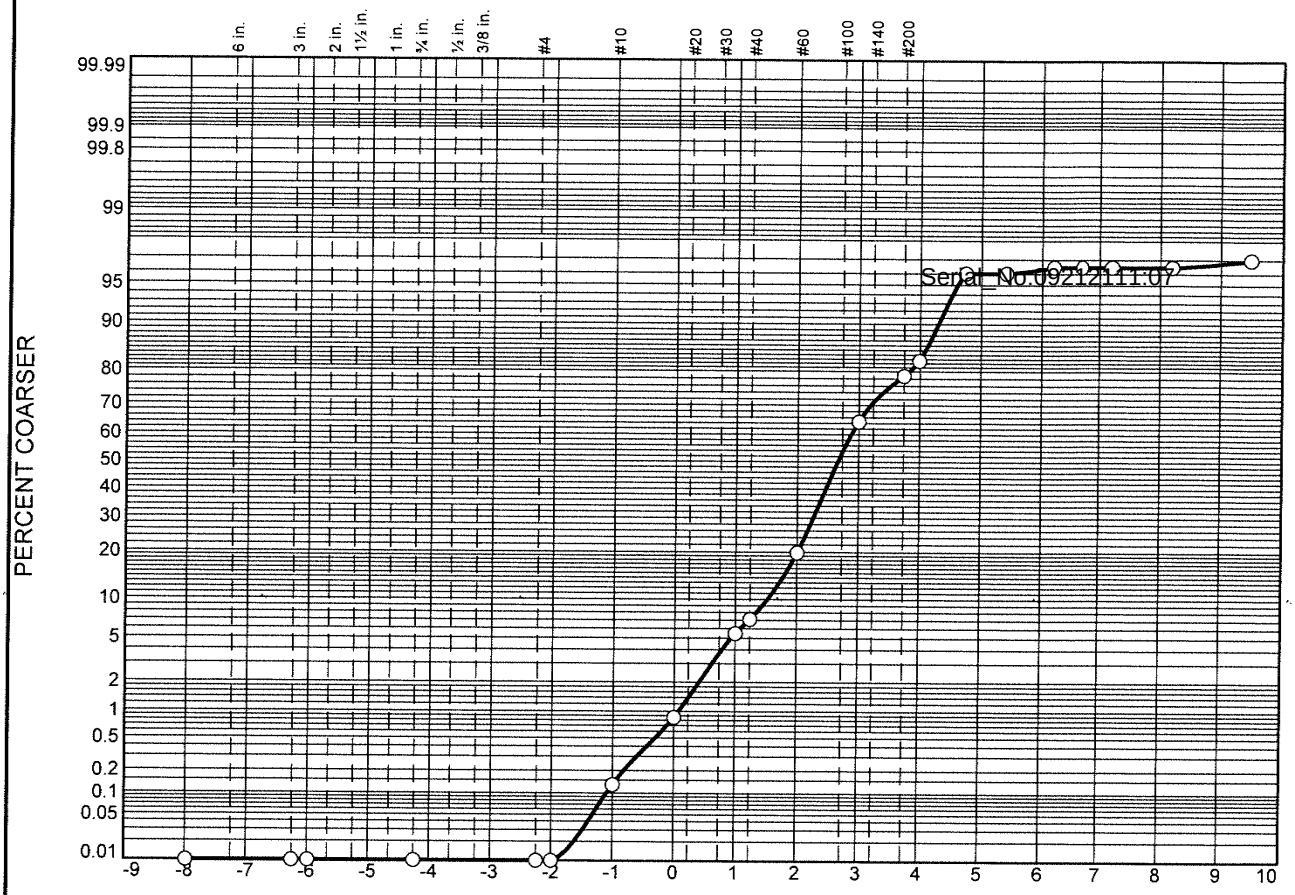
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	1.1	4.8	15.7	44.7	17.8	84.1	12.0	0.0	0.4		12.4	3.4

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0417	0.0522	0.0609	0.0738	0.1141	0.1409	0.1632	0.1867	0.2597	0.2994	0.3739	0.5504

Fineness Modulus	C_u	C_c
0.76	3.58	1.34

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.8	4.6	14.3	44.7	18.3	13.2	0.3	0.2		3.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2835	0.1806	0.1577	0.1092	0.0586	0.0507	1.30	3.56

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|082|SED|01 **Sample No.:** WG1547621-1

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|082|SED|01

Sample Number: WG1547621-1

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 38.40
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
38.40	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.05	0.00	99.9
		#18	0.28	0.00	99.1
		#35	1.77	0.00	94.5
		#40	0.63	0.00	92.9
		#60	4.87	0.00	80.2
		#120	17.16	0.00	35.5
		#200	5.47	0.00	21.3
		#230	1.49	0.00	17.4

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 21.3
Weight of hydrometer sample =35.13
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0372	4.0
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	4.0
15.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0137	3.5
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	3.5
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	3.5
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	3.5
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	3.0

Fractional Components

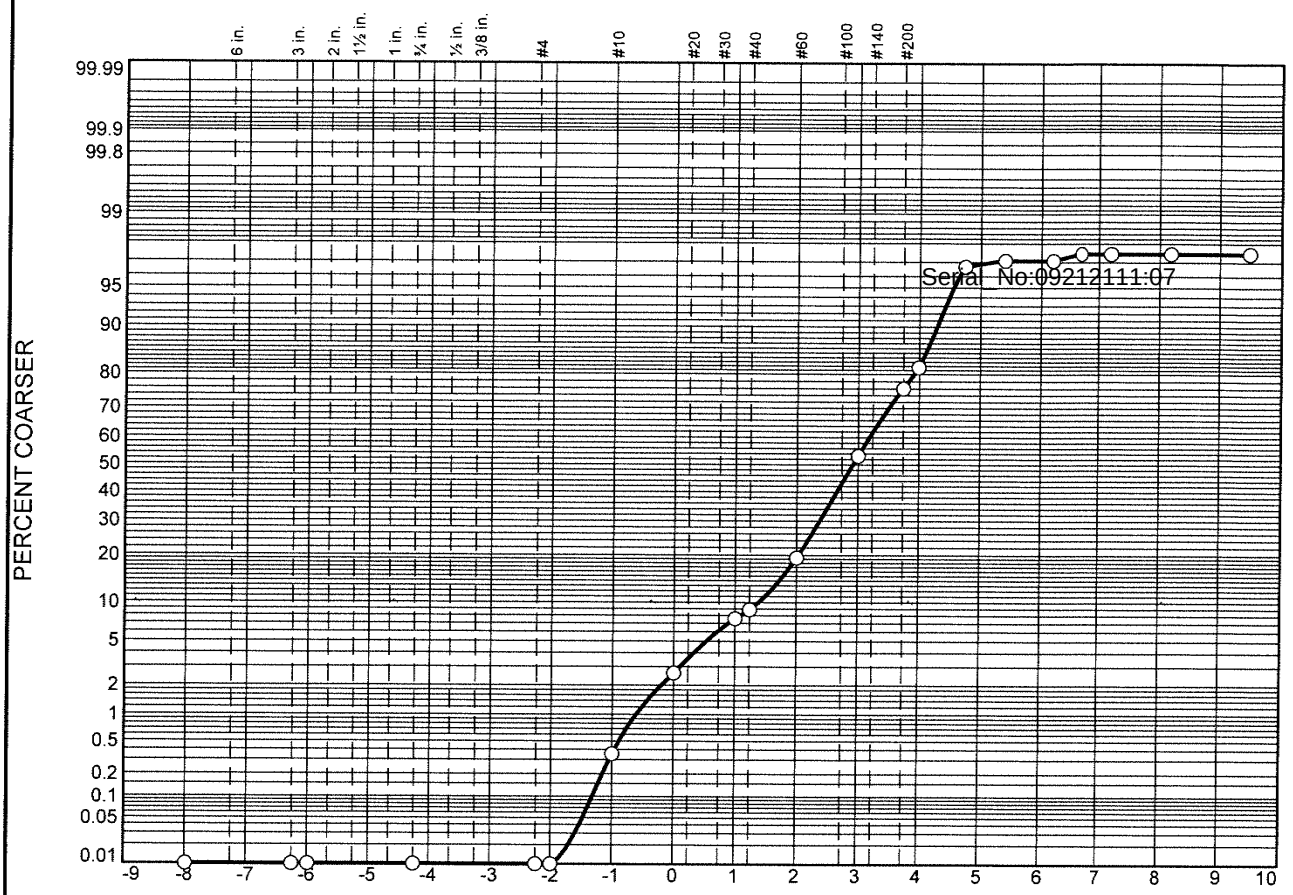
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.8	4.6	14.3	44.7	18.3	82.7	13.2	0.3	0.2		13.7	3.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0409	0.0507	0.0586	0.0701	0.1092	0.1357	0.1577	0.1806	0.2489	0.2835	0.3477	0.5242

Fineness Modulus	C_u	C_c
0.71	3.56	1.30

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	2.2	5.0	11.7	33.9	28.8	14.9	0.2	0.4	0.0	2.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_C	C_U
○			0.2908	0.1586	0.1326	0.0884	0.0581	0.0512	0.96	3.10

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|089|SED|01 **Sample No.:** L2143321-42

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|089|SED|01

Sample Number: L2143321-42

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 87.78
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
87.78	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.31	0.00	99.6
		#18	1.99	0.00	97.4
		#35	4.35	0.00	92.4
		#40	1.13	0.00	91.1
		#60	9.19	0.00	80.7
		#120	29.76	0.00	46.8
		#200	19.96	0.00	24.0
		#230	5.03	0.00	18.3

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 24.0
Weight of hydrometer sample =47.81
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0372	3.3
5.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0237	2.9
15.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0137	2.9
30.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0097	2.5
60.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0069	2.5
240.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0034	2.5
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	2.5

Fractional Components

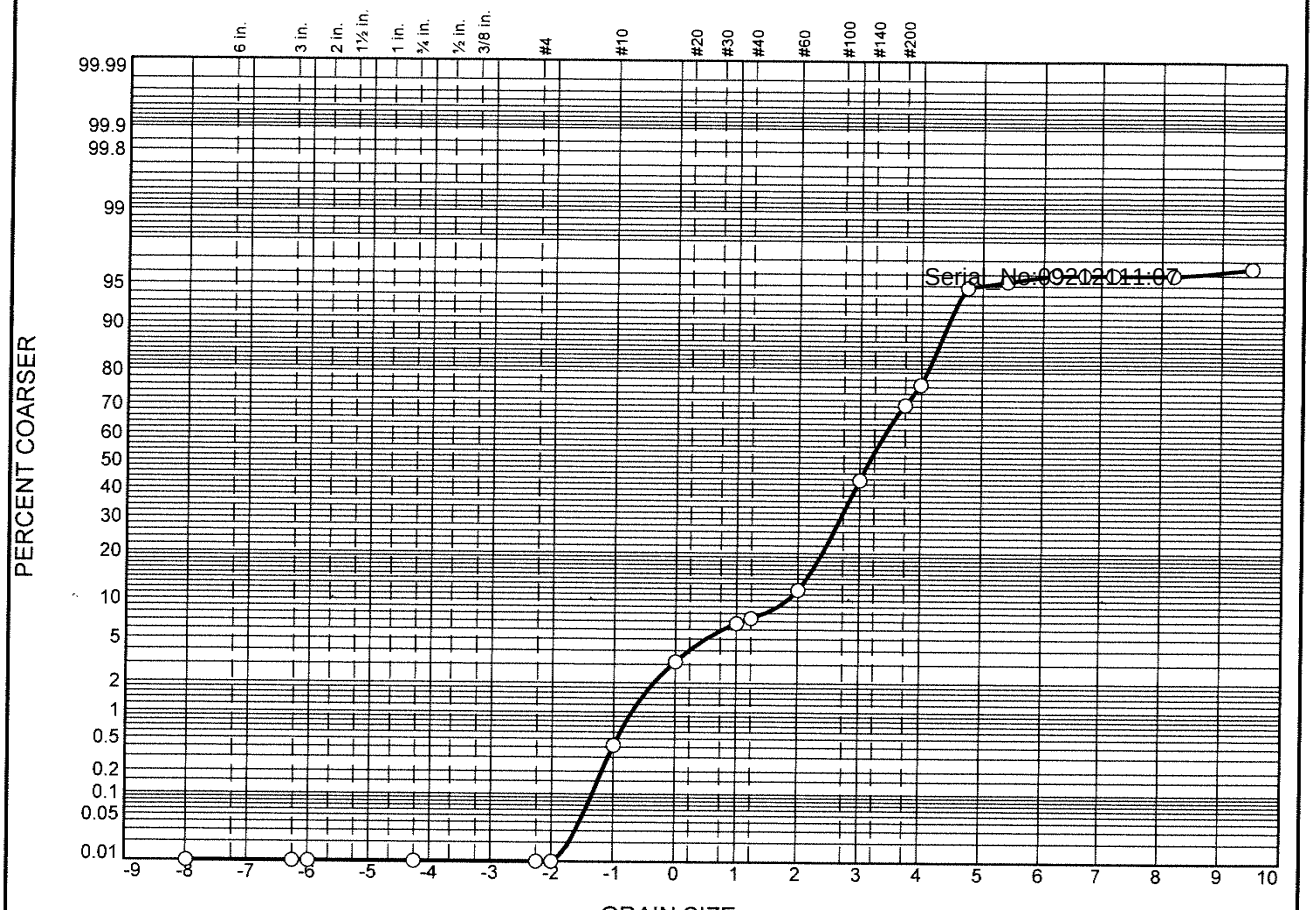
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	2.2	5.0	11.7	33.9	28.8	81.6	14.9	0.2	0.4	0.0	15.5	2.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0426	0.0512	0.0581	0.0661	0.0884	0.1099	0.1326	0.1586	0.2451	0.2908	0.3829	0.6912

Fineness Modulus	C_u	C_c
0.66	3.10	0.96

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	2.8	3.5	5.1	31.7	33.4	18.2	0.7	0.2	0.0	4.0

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2187	0.1320	0.1128	0.0759	0.0525	0.0463	0.94	2.85

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|091|SED|01 **Sample No.:** L2143321-43

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|091|SED|01

Sample Number: L2143321-43

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 100.61
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
100.61	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.42	0.00	99.6
		#18	2.76	0.00	96.8
		#35	3.57	0.00	93.3
		#40	0.67	0.00	92.6
		#60	4.46	0.00	88.2
		#120	31.90	0.00	56.5
		#200	27.07	0.00	29.6
		#230	6.16	0.00	23.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 29.6
Weight of hydrometer sample =42.19
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	5.2
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	4.6
15.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0137	4.0
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	4.0
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	4.0
240.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0034	4.0
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	3.5

Fractional Components

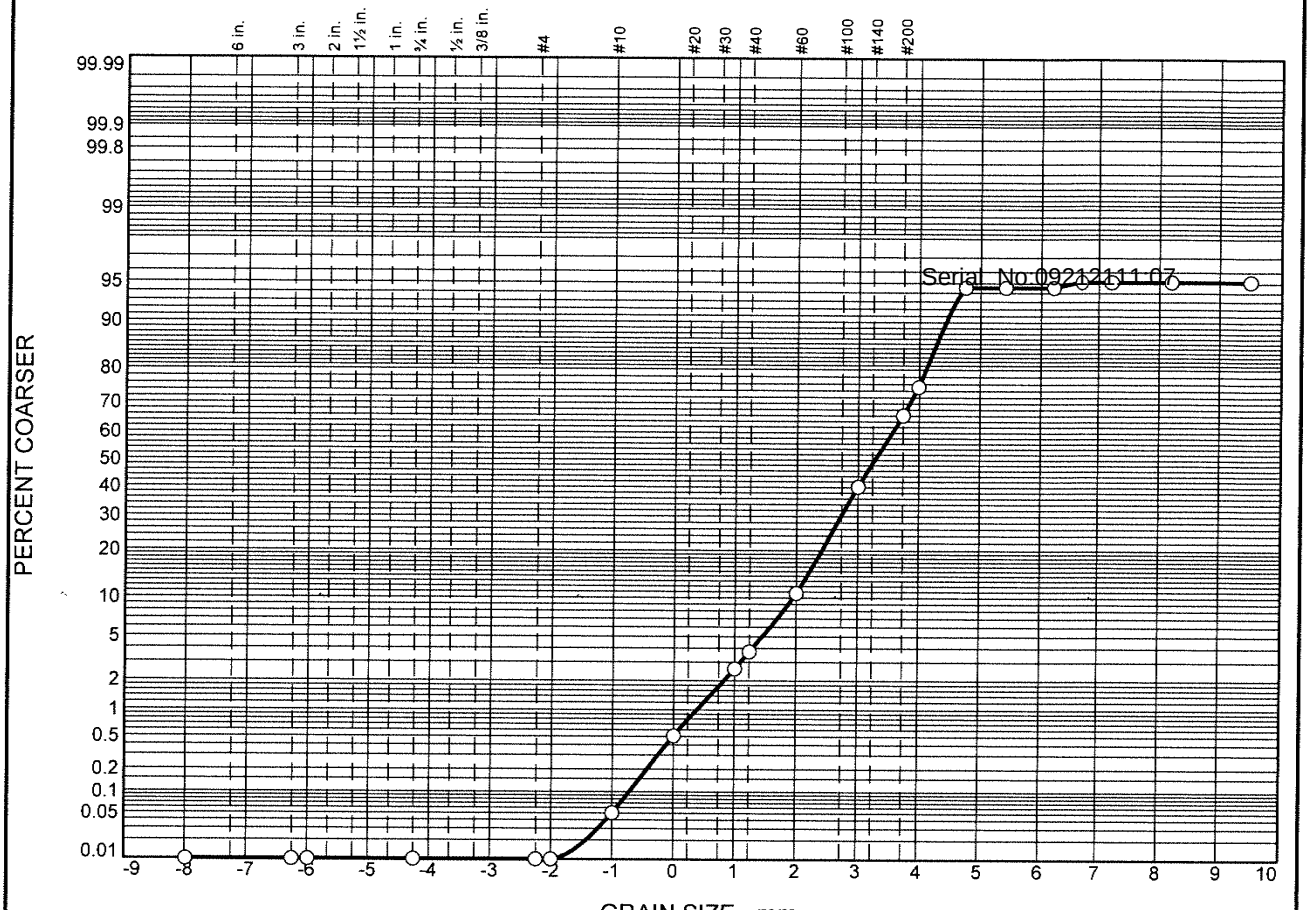
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	2.8	3.5	5.1	31.7	33.4	76.5	18.2	0.7	0.2	0.0	19.1	4.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0325	0.0463	0.0525	0.0583	0.0759	0.0949	0.1128	0.1320	0.1898	0.2187	0.2821	0.7070

Fineness Modulus	C_u	C_c
0.50	2.85	0.94

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.4	2.1	8.2	29.3	35.5	19.0	0.0	0.5	4.9	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2144	0.1253	0.1034	0.0694	0.0524	0.0463	0.83	2.71

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|093|SED|01 **Sample No.:** L2143321-44

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|093|SED|01

Sample Number: L2143321-44

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 78.64
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
78.64	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.04	0.00	99.9
		#18	0.36	0.00	99.5
		#35	1.65	0.00	97.4
		#40	0.87	0.00	96.3
		#60	5.55	0.00	89.2
		#120	23.10	0.00	59.9
		#200	20.40	0.00	33.9
		#230	7.14	0.00	24.8

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 33.9
Weight of hydrometer sample =45.97
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	5.4
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	5.4
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	5.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.9
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.9
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	4.9
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	4.9

Fractional Components

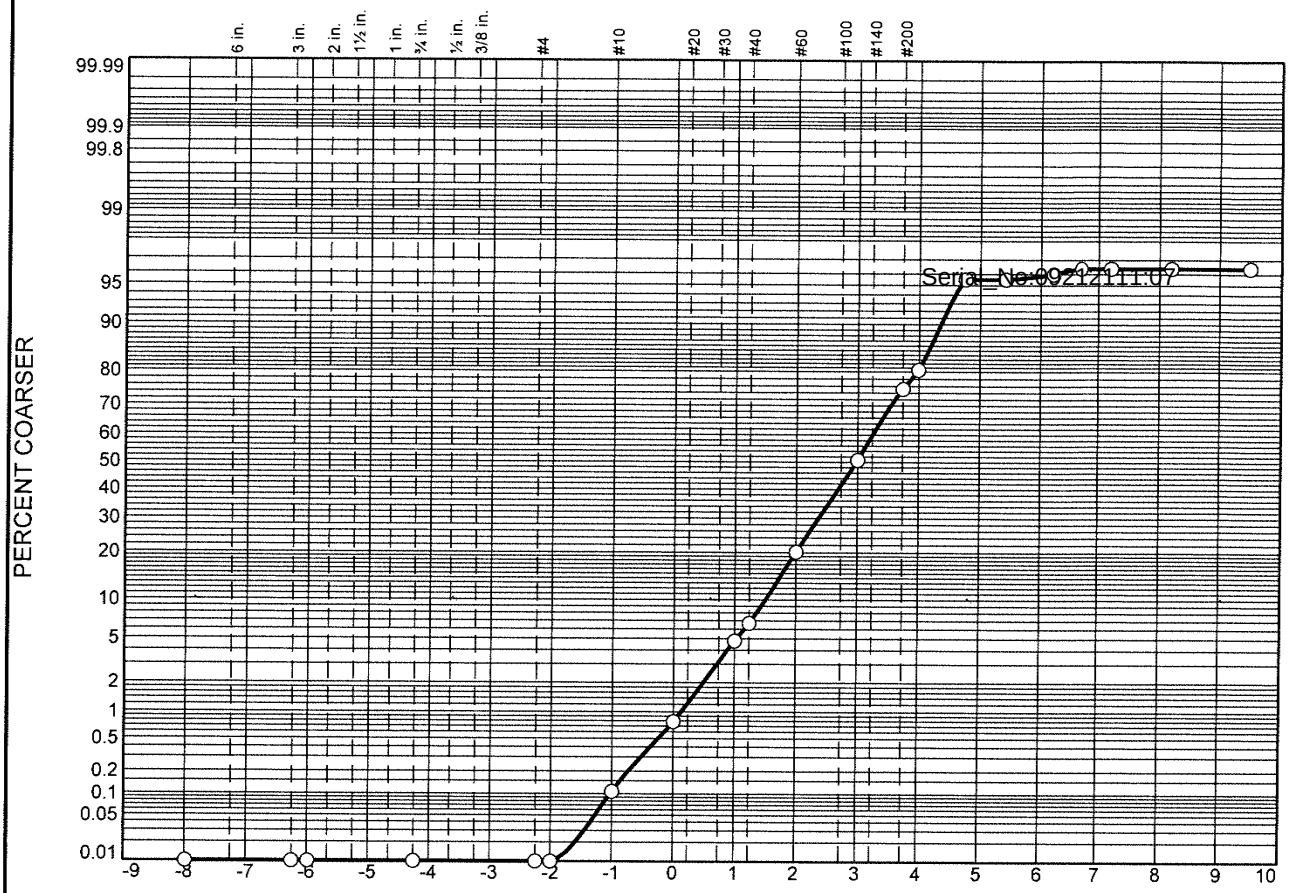
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.4	2.1	8.2	29.3	35.5	75.5	19.0	0.0	0.5		19.5	4.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0108	0.0463	0.0524	0.0577	0.0694	0.0847	0.1034	0.1253	0.1872	0.2144	0.2590	0.3670

Fineness Modulus	C_u	C_c
0.40	2.71	0.83

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.7	4.0	15.4	30.5	30.0	14.8	0.3	0.6		3.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2917	0.1546	0.1267	0.0860	0.0559	0.0488	0.98	3.17

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|099|SED|01 **Sample No.:** L2143321-45

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|099|SED|01

Sample Number: L2143321-45

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 83.27
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
83.27	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.09	0.00	99.9
		#18	0.56	0.00	99.2
		#35	3.34	0.00	95.2
		#40	1.57	0.00	93.3
		#60	11.22	0.00	79.8
		#120	25.47	0.00	49.3
		#200	20.30	0.00	24.9
		#230	4.39	0.00	19.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 24.9
Weight of hydrometer sample =45.64
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	4.5
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	4.5
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	4.0
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	3.6
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	3.6
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	3.6
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	3.6

Fractional Components

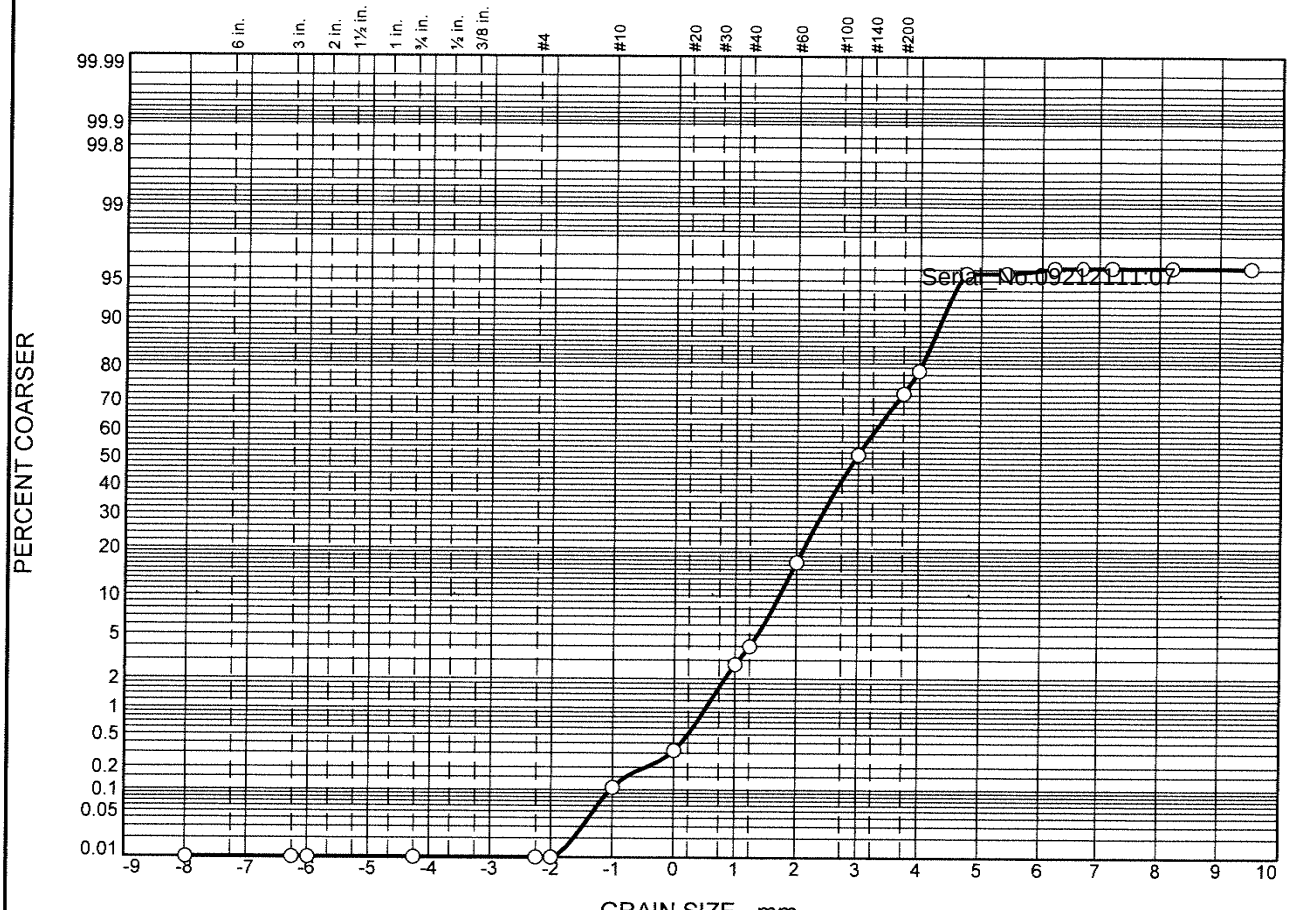
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	4.0	15.4	30.5	30.0	80.6	14.8	0.3	0.6		15.7	3.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0389	0.0488	0.0559	0.0637	0.0860	0.1055	0.1267	0.1546	0.2511	0.2917	0.3525	0.4899

Fineness Modulus	C_u	C_c
0.59	3.17	0.98

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.2	2.4	13.9	34.5	28.3	16.3	0.3	0.1		3.9

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2602	0.1551	0.1279	0.0803	0.0552	0.0488	0.85	3.18

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|100|SED|01 **Sample No.:** L2143321-46

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|100|SED|01

Sample Number: L2143321-46

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 83.58
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
83.58	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.09	0.00	99.9
		#18	0.18	0.00	99.7
		#35	2.01	0.00	97.3
		#40	1.03	0.00	96.0
		#60	10.53	0.00	83.4
		#120	28.89	0.00	48.9
		#200	17.84	0.00	27.5
		#230	5.49	0.00	21.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 27.5
Weight of hydrometer sample =46.9
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	4.3
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	4.3
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	3.9
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	3.9
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	3.9
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	3.9
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	3.9

Fractional Components

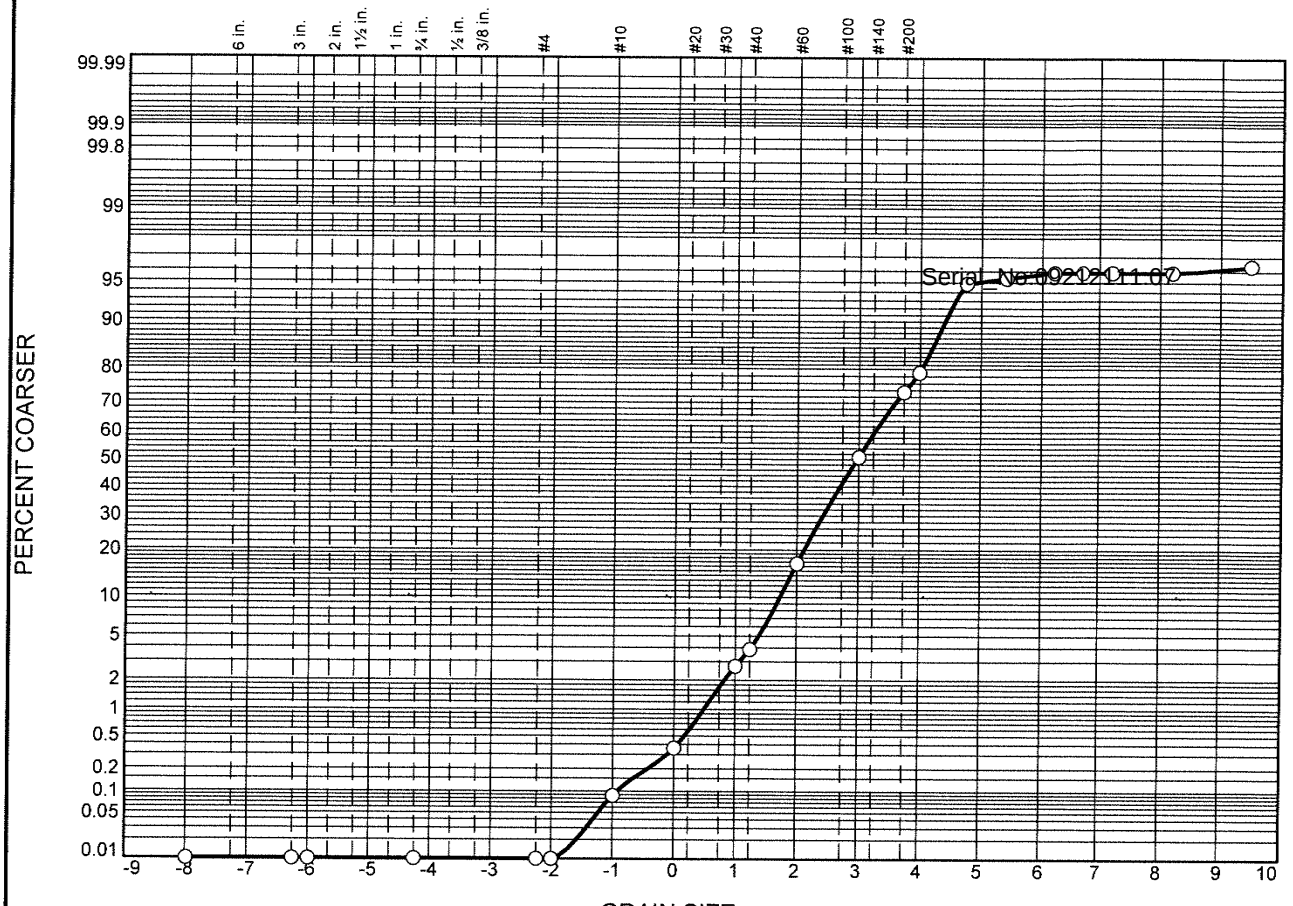
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.2	2.4	13.9	34.5	28.3	79.3	16.3	0.3	0.1		16.7	3.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0395	0.0488	0.0552	0.0616	0.0803	0.1031	0.1279	0.1551	0.2304	0.2602	0.3028	0.3877

Fineness Modulus	C_u	C_c
0.54	3.18	0.85

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.3	2.3	13.9	34.2	28.5	15.8	0.7	0.1		4.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2605	0.1536	0.1270	0.0828	0.0542	0.0472	0.94	3.25

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|100|SED|02 **Sample No.:** L2143321-47

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|100|SED|02

Sample Number: L2143321-47

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare** = 91.45
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
91.45	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	0.25	0.00	99.6
		#35	2.15	0.00	97.3
		#40	1.05	0.00	96.1
		#60	11.66	0.00	83.4
		#120	31.28	0.00	49.2
		#200	20.66	0.00	26.6
		#230	5.08	0.00	21.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 26.6
Weight of hydrometer sample =42.47
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	5.1
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	4.6
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	4.1
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	4.1
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	4.1
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	4.1
1440.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0014	3.6

Fractional Components

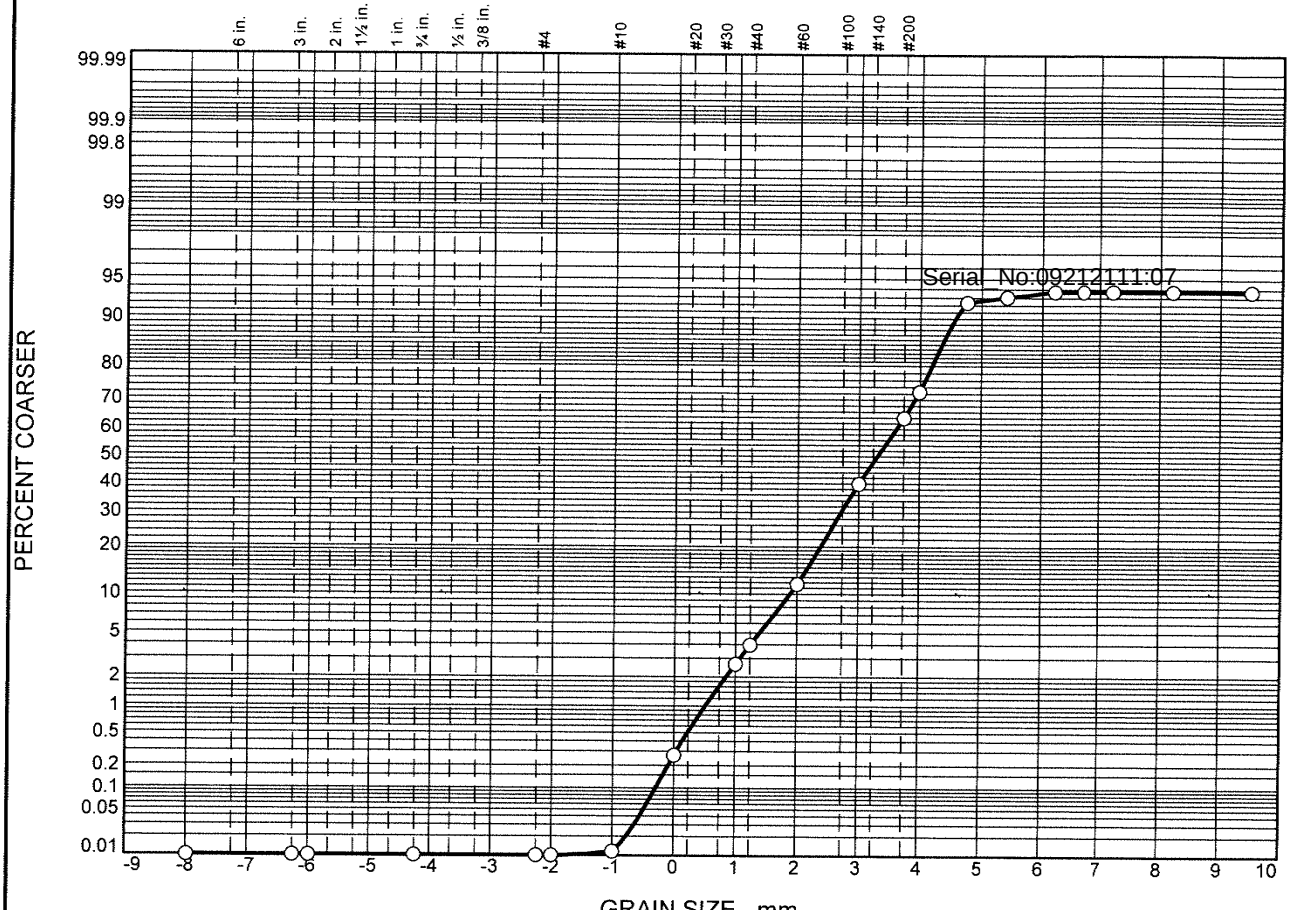
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.3	2.3	13.9	34.2	28.5	79.2	15.8	0.7	0.1		16.6	4.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0333	0.0472	0.0542	0.0613	0.0828	0.1043	0.1270	0.1536	0.2306	0.2605	0.3021	0.3841

Fineness Modulus	C_u	C_c
0.53	3.25	0.94

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.0	0.3	2.3	9.1	28.1	33.1	19.7	1.0	0.1	0.0	6.3

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2212	0.1246	0.1011	0.0661	0.0489	0.0419	0.84	2.97

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|102|SED|01 **Sample No.:** L2143321-48

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|102|SED|01

Sample Number: L2143321-48

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 85.85
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
85.85	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.01	0.00	100.0
		#18	0.22	0.00	99.7
		#35	2.04	0.00	97.4
		#40	1.12	0.00	96.1
		#60	6.65	0.00	88.3
		#120	24.17	0.00	60.2
		#200	20.66	0.00	36.1
		#230	7.34	0.00	27.5

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 36.1
Weight of hydrometer sample =42.44
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0368	7.6
5.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0234	7.0
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	6.3
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	6.3
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	6.3
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	6.3
1440.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0014	6.3

Alpha Analytical

Fractional Components

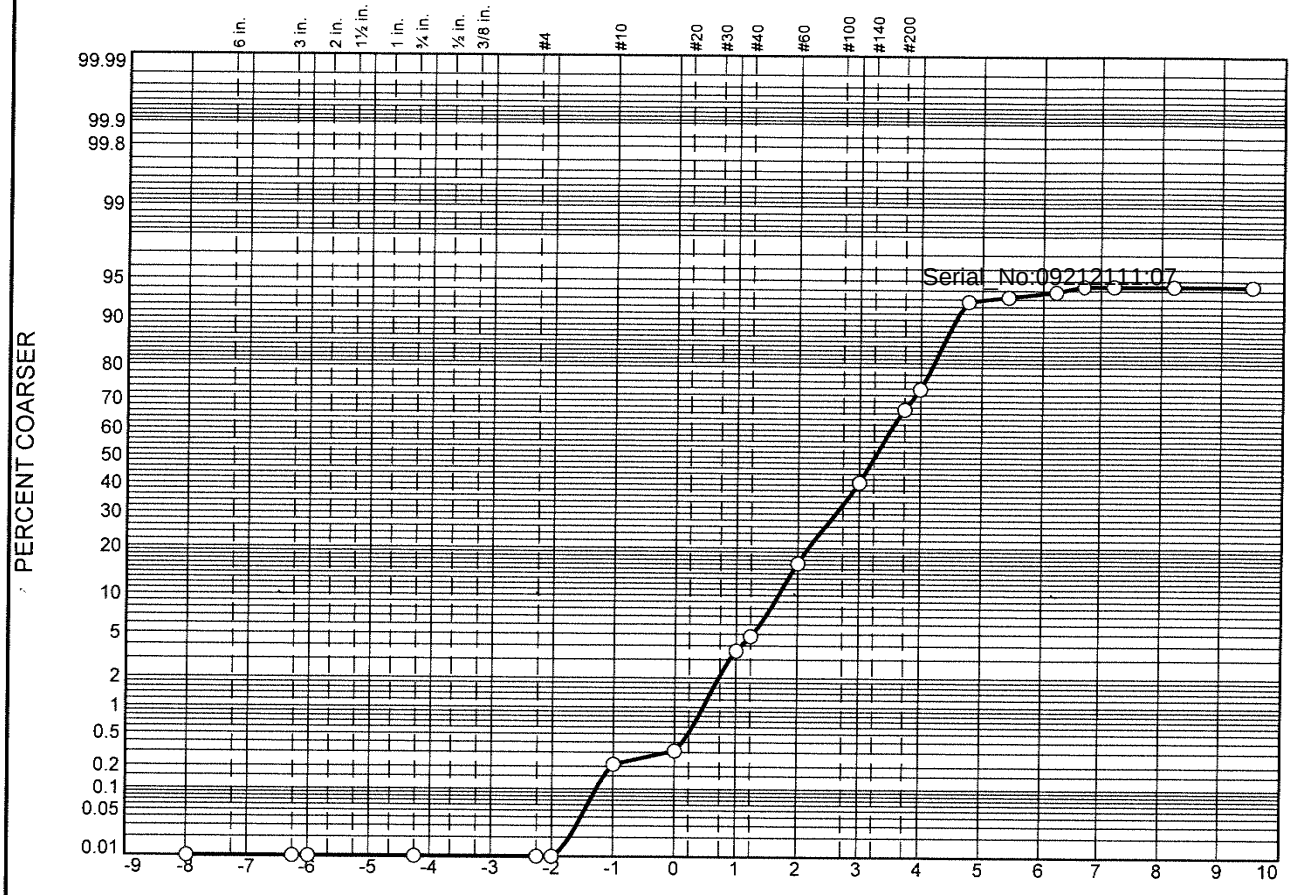
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.0	0.3	2.3	9.1	28.1	33.1	72.9	19.7	1.0	0.1	0.0	20.8	6.3

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0419	0.0489	0.0545	0.0661	0.0815	0.1011	0.1246	0.1915	0.2212	0.2704	0.3820

Fineness Modulus	C_u	C_c
0.41	2.97	0.84

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.2	0.1	3.3	12.6	24.6	33.2	18.9	0.8	0.8	0.0	5.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2601	0.1271	0.1052	0.0695	0.0490	0.0421	0.90	3.02

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|109|SED|01 **Sample No.:** L2143321-49

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|109|SED|01

Sample Number: L2143321-49

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 89.47
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
89.47	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.19	0.00	99.8
		#18	0.09	0.00	99.7
		#35	2.93	0.00	96.4
		#40	1.07	0.00	95.2
		#60	10.25	0.00	83.8
		#120	21.99	0.00	59.2
		#200	23.61	0.00	32.8
		#230	5.82	0.00	26.3

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 32.8
Weight of hydrometer sample =43.67
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0060	1.0061	0.0135	6.0	14.7	0.0366	7.3
5.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0232	6.7
15.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0135	6.1
30.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0096	5.5
60.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0068	5.5
240.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0034	5.5
1440.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0014	5.5

Fractional Components

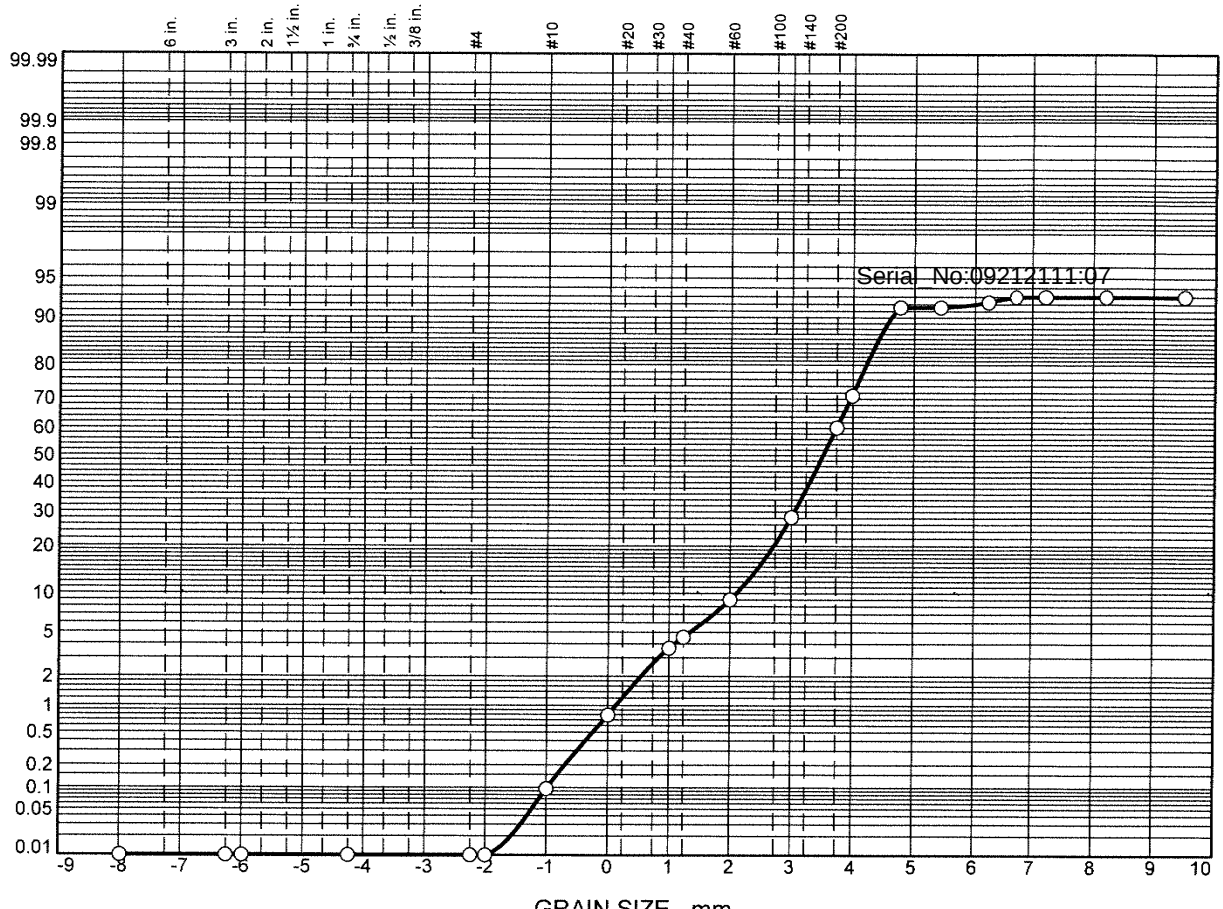
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.2	0.1	3.3	12.6	24.6	33.2	73.8	18.9	0.8	0.8	0.0	20.5	5.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0421	0.0490	0.0548	0.0695	0.0877	0.1052	0.1271	0.2217	0.2601	0.3101	0.4152

Fineness Modulus	C_u	C_c
0.46	3.02	0.90

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.1	0.7	2.9	5.3	19.2	43.3	20.1	0.4	0.9		7.1

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1798	0.1017	0.0874	0.0641	0.0481	0.0405	1.00	2.51

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|110|SED|01 **Sample No.:** L2143321-50

Alpha Analytical

Mansfield, MA

Remarks:

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|110|SED|01

Sample Number: L2143321-50

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 82.59
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
82.59	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.08	0.00	99.9
		#18	0.57	0.00	99.2
		#35	2.37	0.00	96.3
		#40	0.74	0.00	95.4
		#60	3.65	0.00	91.0
		#120	15.90	0.00	71.8
		#200	26.41	0.00	39.8
		#230	8.94	0.00	29.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 39.8
Weight of hydrometer sample =46.15
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0060	1.0061	0.0135	6.0	14.7	0.0366	8.4
5.00	20.9	1.0060	1.0061	0.0135	6.0	14.7	0.0231	8.4
15.00	20.9	1.0055	1.0056	0.0135	5.5	14.8	0.0134	7.7
30.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0095	7.1
60.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0067	7.1
240.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0034	7.1
1440.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0014	7.1

Alpha Analytical

Fractional Components

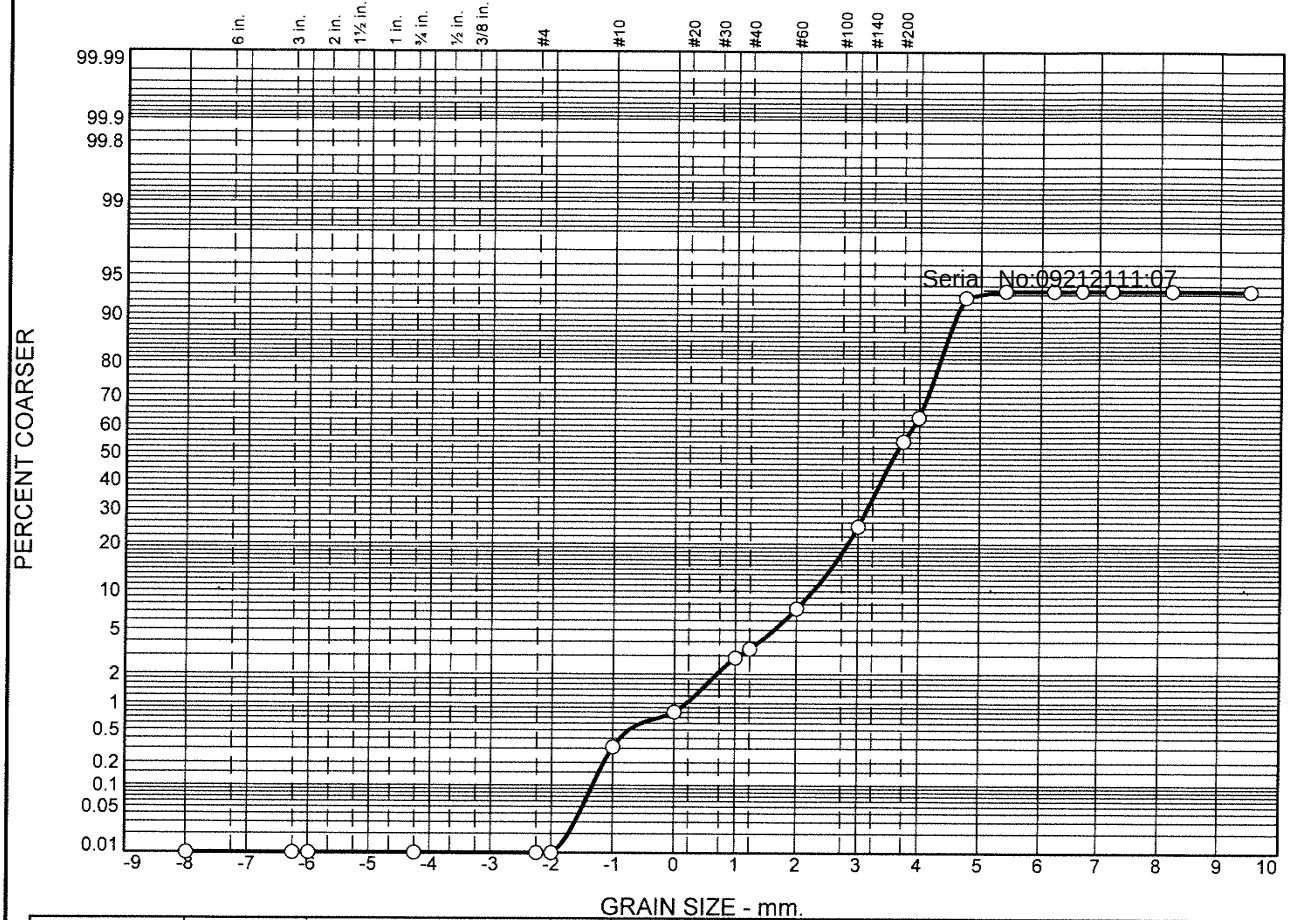
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.1	0.7	2.9	5.3	19.2	43.3	71.4	20.1	0.4	0.9		21.4	7.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0405	0.0481	0.0537	0.0641	0.0752	0.0874	0.1017	0.1521	0.1798	0.2321	0.3941

Fineness Modulus	C_u	C_c
0.31	2.51	1.00

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.3	0.5	2.0	4.6	17.4	38.7	29.5	0.4	0.0		6.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1638	0.0960	0.0815	0.0569	0.0459	0.0410	0.82	2.34

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|110|SED|02 **Sample No.:** L2143321-51

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|110|SED|02

Sample Number: L2143321-51

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 95.82
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
95.82	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.30	0.00	99.7
		#18	0.47	0.00	99.2
		#35	1.96	0.00	97.2
		#40	0.58	0.00	96.5
		#60	3.82	0.00	92.6
		#120	16.62	0.00	75.2
		#200	28.37	0.00	45.6
		#230	8.22	0.00	37.0

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 45.6
Weight of hydrometer sample =45.45
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	7.4
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	6.6
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	6.6
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	6.6
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	6.6
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	6.6
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	6.6

Fractional Components

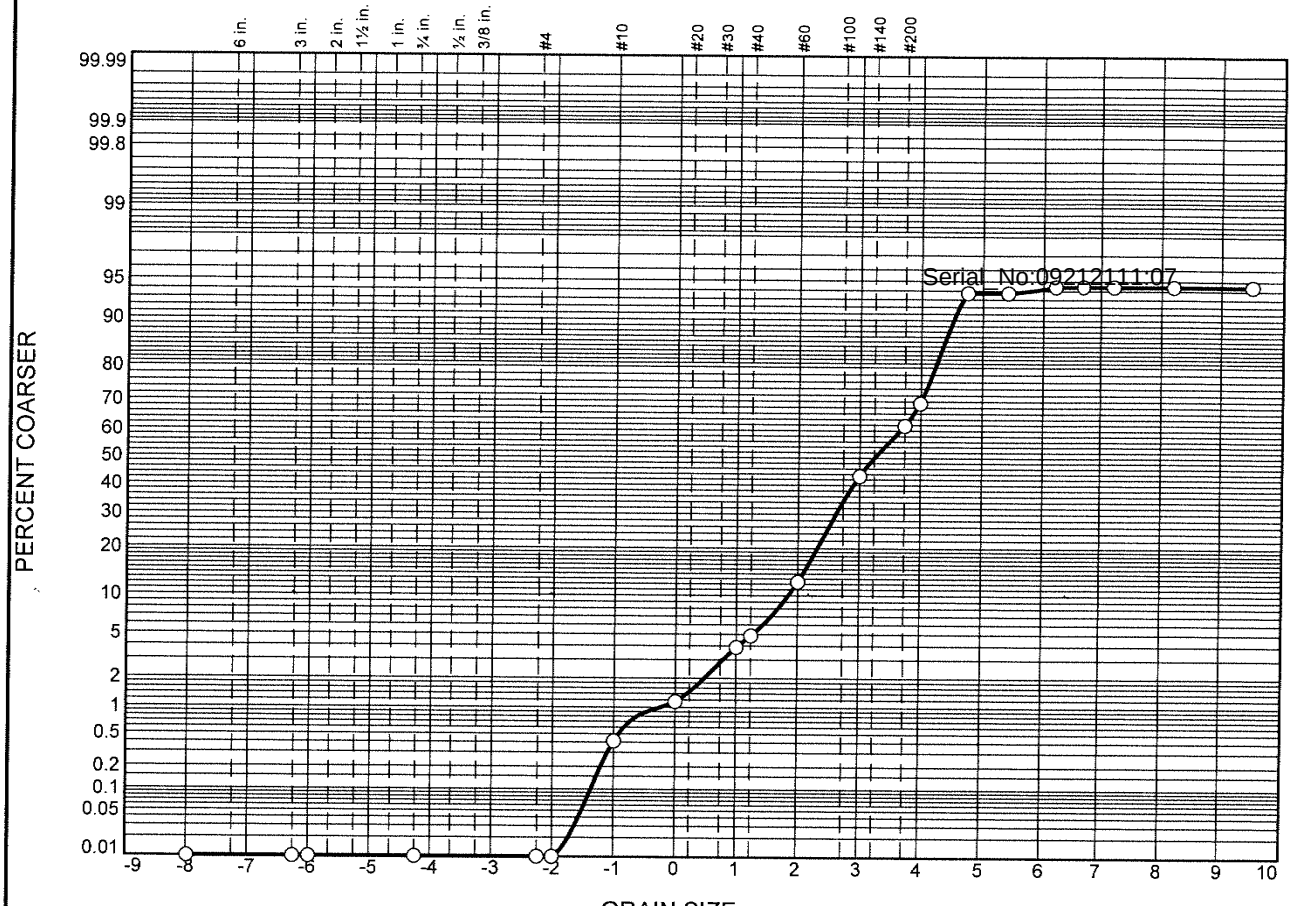
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.3	0.5	2.0	4.6	17.4	38.7	63.2	29.5	0.4	0.0		29.9	6.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0410	0.0459	0.0497	0.0569	0.0665	0.0815	0.0960	0.1399	0.1638	0.2079	0.3231

Fineness Modulus	C_u	C_c
0.26	2.34	0.82

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.4	0.8	2.7	8.5	30.8	26.6	24.0	0.4	0.2	0.0	5.6

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.2290	0.1338	0.1057	0.0623	0.0488	0.0435	0.67	3.07

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|112|SED|01 **Sample No.:** L2143321-52

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|112|SED|01

Sample Number: L2143321-52

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 96.79
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
96.79	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.40	0.00	99.6
		#18	0.72	0.00	98.8
		#35	2.63	0.00	96.1
		#40	0.97	0.00	95.1
		#60	7.30	0.00	87.6
		#120	29.81	0.00	56.8
		#200	17.95	0.00	38.2
		#230	7.38	0.00	30.6

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 38.2
Weight of hydrometer sample =45.25
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	6.2
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	6.2
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	5.6
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	5.6
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	5.6
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	5.6
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	5.6

Fractional Components

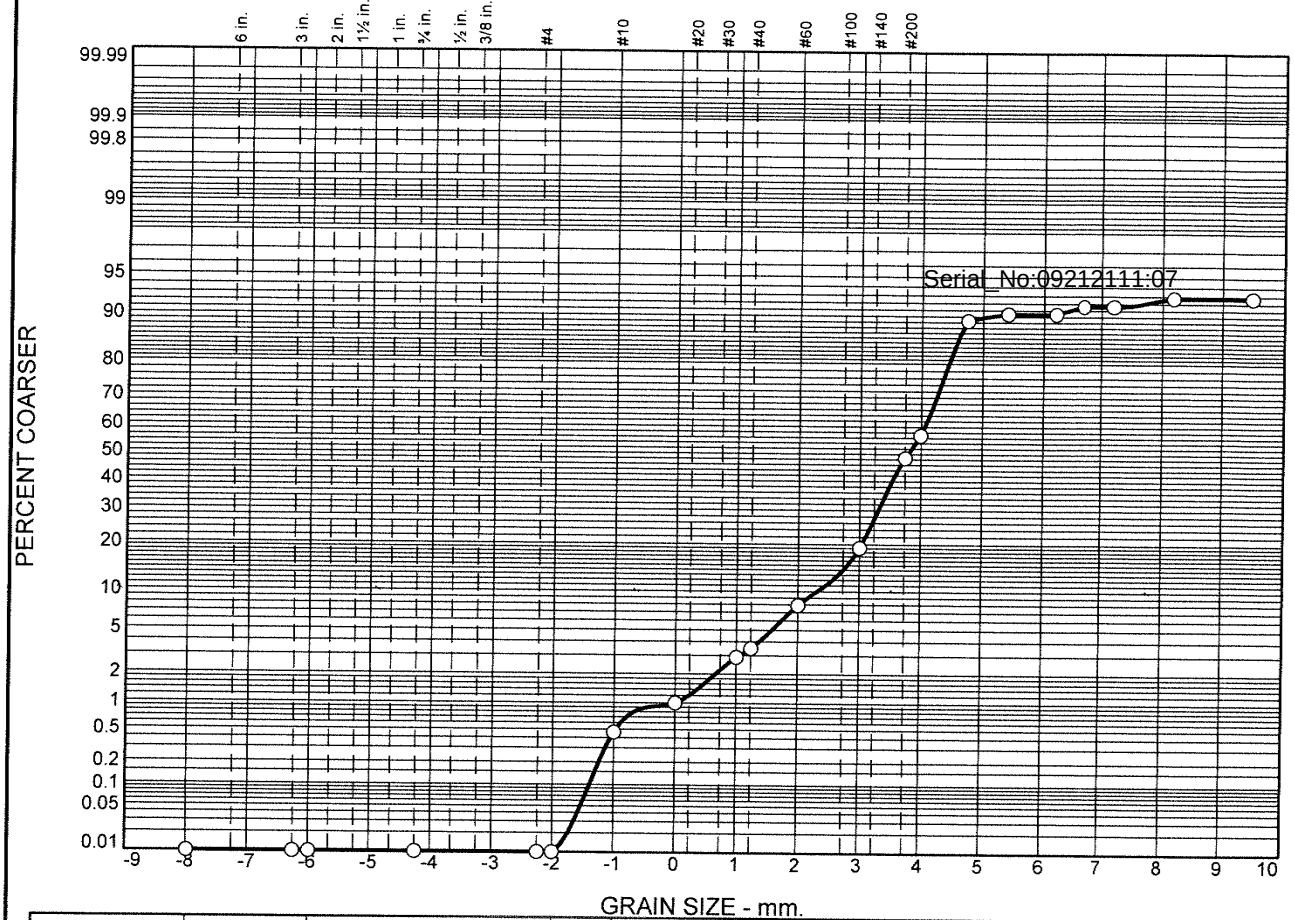
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.4	0.8	2.7	8.5	30.8	26.6	69.4	24.0	0.4	0.2	0.0	24.6	5.6

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0435	0.0488	0.0531	0.0623	0.0788	0.1057	0.1338	0.2004	0.2290	0.2778	0.4176

Fineness Modulus	C_u	C_c
0.47	3.07	0.67

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	0.5	0.5	1.9	5.0	11.2	38.2	32.5	0.6	1.2	0.9	7.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1432	0.0867	0.0726	0.0526	0.0419	0.0291	1.10	2.98

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Source:** 3664|2021|WTG|118|SED|01 **Sample No.:** L2143321-53

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|118|SED|01

Sample Number: L2143321-53

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 45.11
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
45.11	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	0.21	0.00	99.5
		#18	0.24	0.00	99.0
		#35	0.85	0.00	97.1
		#40	0.27	0.00	96.5
		#60	2.00	0.00	92.1
		#120	5.05	0.00	80.9
		#200	13.24	0.00	51.5
		#230	3.77	0.00	43.2

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 51.5
Weight of hydrometer sample =35.3
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0371	10.8
5.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0236	9.6
15.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0136	9.6
30.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0097	8.4
60.00	20.9	1.0035	1.0036	0.0135	3.5	15.4	0.0068	8.4
240.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0034	7.3
1440.00	20.9	1.0030	1.0031	0.0135	3.0	15.5	0.0014	7.3

Fractional Components

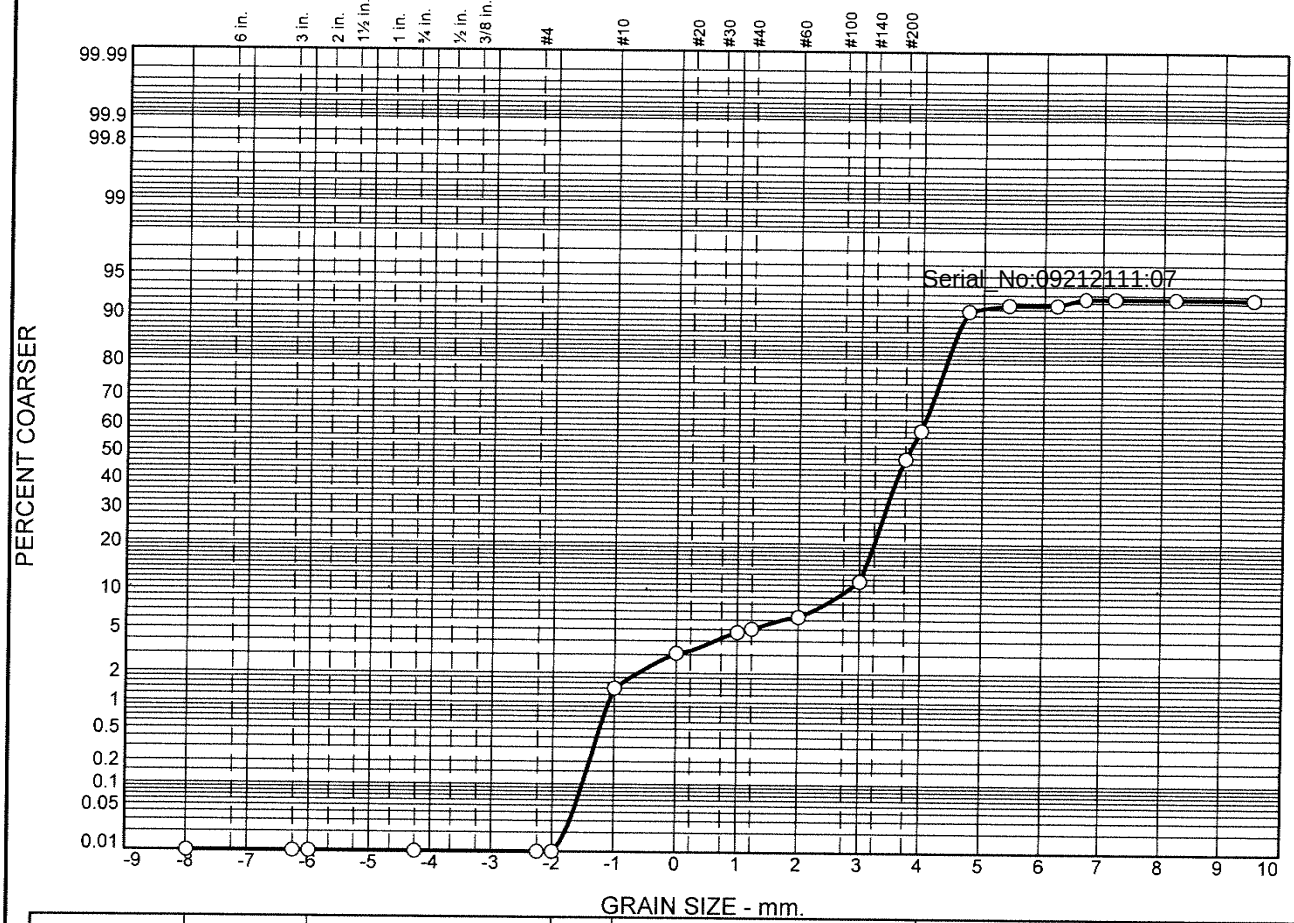
Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	0.5	0.5	1.9	5.0	11.2	38.2	56.8	32.5	0.6	1.2	0.9	35.2	7.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0291	0.0419	0.0459	0.0526	0.0600	0.0726	0.0867	0.1222	0.1432	0.2013	0.3359

Fineness Modulus	C_u	C_c
0.23	2.98	1.10

Serial_No:09212111:07

Particle Size Distribution Report



	% Boulders	% +3"	% Pebbles	% Granules	% Sand					% Silt				% Clay
					V. Crs.	Crs.	Med.	Fine	V. Fine	Crs.	Med.	Fine	V. Fine	
○			0.0	1.4	1.7	1.6	1.6	5.3	47.2	32.4	0.4	0.9	0.0	7.5

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			0.1153	0.0830	0.0725	0.0540	0.0434	0.0381	0.92	2.18

Material Description	USCS	AASHTO
○		

Project No. **Client:**

Project:

○ **Source:** 3664\|2021\|WTG\|080\|SED\|02 **Sample No.:** L2143321-54

Remarks:

Alpha Analytical

Mansfield, MA

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

9/20/2021

Location: 3664|2021|WTG|080|SED|02

Sample Number: L2143321-54

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 94.71
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
94.71	0.00	10"	0.00	0.00	100.0
		3"	0.00	0.00	100.0
		2.5"	0.00	0.00	100.0
		3/4"	0.00	0.00	100.0
		#4	0.00	0.00	100.0
		#5	0.00	0.00	100.0
		#10	1.33	0.00	98.6
		#18	1.59	0.00	96.9
		#35	1.57	0.00	95.3
		#40	0.31	0.00	94.9
		#60	1.21	0.00	93.7
		#120	4.99	0.00	88.4
		#200	34.33	0.00	52.1
		#230	9.84	0.00	41.7

Serial_No:09212111:07

Hydrometer Test Data

Hydrometer test uses material passing #200
Percent passing #200 based upon complete sample = 52.1
Weight of hydrometer sample =45.83
Automatic temperature correction
Composite correction (fluid density and meniscus height) at 20 deg. C = 0
Meniscus correction only = 0.0
Specific gravity of solids = 2.65
Hydrometer type = 151H
Hydrometer effective depth equation: L = 16.294964 - 0.2645 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	20.9	1.0050	1.0051	0.0135	5.0	15.0	0.0369	9.3
5.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0235	8.4
15.00	20.9	1.0045	1.0046	0.0135	4.5	15.1	0.0135	8.4
30.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0096	7.5
60.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0068	7.5
240.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0034	7.5
1440.00	20.9	1.0040	1.0041	0.0135	4.0	15.2	0.0014	7.5

Fractional Components

Boulders	Cobbles	Pebbles	Granules	Sand						Silt					Clay
				V. Crs.	Crs.	Med.	Fine	V. Fine	Total	Crs.	Med.	Fine	V. Fine	Total	
		0.0	1.4	1.7	1.6	1.6	5.3	47.2	57.4	32.4	0.4	0.9	0.0	33.7	7.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.0381	0.0434	0.0473	0.0540	0.0614	0.0725	0.0830	0.1059	0.1153	0.1446	0.4394

Fineness Modulus	C_u	C_c
0.23	2.18	0.92

Serial_No:09212111:07

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L2143321

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind

CLIENT: MMT\Equinor

DATE: 12 August 2021

	Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
-01	3664|2021|WTG|007|Sed|TOC|01	8/2/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-02	3664|2021|WTG|009|Sed|TOC|01	8/2/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-03	3664|2021|WTG|009|Sed|TOC|02	8/2/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1 ; QC duplicate
-04	3664|2021|WTG|010|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-05	3664|2021|WTG|010|Sed|TOC|02	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-06	3664|2021|WTG|012|Sed|TOC|01	8/2/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-07	3664|2021|WTG|013|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-08	3664|2021|WTG|014|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-09	3664|2021|WTG|016|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-10	3664|2021|WTG|018|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-11	3664|2021|WTG|019|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-12	3664|2021|WTG|022|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-13	3664|2021|WTG|023|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-14	3664|2021|WTG|024|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-15	3664|2021|WTG|026|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-16	3664|2021|WTG|028|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-17	3664|2021|WTG|030|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-18	3664|2021|WTG|031|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-19	3664|2021|WTG|035|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1

Shipper: FEDEX UPS USPS DHL
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature: ____

RELINQUISHED BY: [signature] DATE/TIME: 8/12/21 - 9 AM RECEIVED BY: [signature] DATE/TIME: 8-12-21 1015

RELINQUISHED BY: [signature] DATE/TIME: 8-12-21 1055 RECEIVED BY: [signature] DATE/TIME: 8/12/21 1056

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

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L2143321

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 12 August 2021

	Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
-20	3664|2021|WTG|038|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-21	3664|2021|WTG|041|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-22	3664|2021|WTG|043|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-23	3664|2021|WTG|044|Sed|TOC|01	8/1/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-24	3664|2021|WTG|046|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-25	3664|2021|WTG|050|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-26	3664|2021|WTG|050|Sed|TOC|02	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-27	3664|2021|WTG|052|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-28	3664|2021|WTG|055|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-29	3664|2021|WTG|057|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-30	3664|2021|WTG|060|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-31	3664|2021|WTG|060|Sed|TOC|02	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-32	3664|2021|WTG|062|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-33	3664|2021|WTG|063|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-34	3664|2021|WTG|064|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-35	3664|2021|WTG|069|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-36	3664|2021|WTG|070|Sed|TOC|01	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-37	3664|2021|WTG|070|Sed|TOC|02	7/31/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-38	3664|2021|WTG|073|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1

Shipper: FEDEX UPS USPS DHL

RELINQUISHED BY: _____ DATE/TIME: 8/12/21 - 9am RECEIVED BY: _____ DATE/TIME: 8/12/21 1015

RELINQUISHED BY: _____ DATE/TIME: 8/12/21 1055 RECEIVED BY: _____ DATE/TIME: 8/12/21 1055

Custody Seal: Intact Broken None **Sample Condition:** Intact Broken Leaking **Container Temperature:** _____

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

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L2143321

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 12 August 2021

	Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
-39	3664|2021|WTG|079|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-40	3664|2021|WTG|080|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-54	3664|2021|WTG|080|Sed|TOC|02	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-41	3664|2021|WTG|082|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-42	3664|2021|WTG|089|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-43	3664|2021|WTG|091|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-44	3664|2021|WTG|093|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-45	3664|2021|WTG|099|Sed|TOC|01	7/29/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-46	3664|2021|WTG|100|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-47	3664|2021|WTG|100|Sed|TOC|02	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-48	3664|2021|WTG|102|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-49	3664|2021|WTG|109|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-50	3664|2021|WTG|110|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-51	3664|2021|WTG|110|Sed|TOC|02	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1; QC duplicate
-52	3664|2021|WTG|112|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1
-53	3664|2021|WTG|118|Sed|TOC|01	7/28/2021	SmithMac	125-mL glass	freeze	total organic carbon	Tier 3; Cooler #1

Shipper: FEDEX UPS USPS DHL
RELINQUISHED BY: _____ DATE/TIME: 8/12/21 - 9Am
RELINQUISHED BY: _____ DATE/TIME: 8/12/21 1055

Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature: _____
RECEIVED BY: _____ DATE/TIME: 8/12/21 1017
RECEIVED BY: _____ DATE/TIME: 8/12/21 1055

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

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L2143321

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 12 August 2021

	Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
-01	3664|2021|WTG|007|Sed|GS|01	8/2/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-02	3664|2021|WTG|009|Sed|GS|01	8/2/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-03	3664|2021|WTG|009|Sed|GS|02	8/2/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-04	3664|2021|WTG|010|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-05	3664|2021|WTG|010|Sed|GS|02	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-06	3664|2021|WTG|012|Sed|GS|01	8/2/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-07	3664|2021|WTG|013|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-08	3664|2021|WTG|014|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-09	3664|2021|WTG|016|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-10	3664|2021|WTG|018|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-11	3664|2021|WTG|019|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-12	3664|2021|WTG|022|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-13	3664|2021|WTG|023|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-14	3664|2021|WTG|024|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-15	3664|2021|WTG|026|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-16	3664|2021|WTG|028|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-17	3664|2021|WTG|030|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-18	3664|2021|WTG|031|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-19	3664|2021|WTG|035|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2

Shipper: FEDEX UPS USPS DHL
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY:
DATE/TIME: 8/12/21 - 9AM
RECEIVED BY:
DATE/TIME: 8/12/21 1015

RELINQUISHED BY:
DATE/TIME: 8-12-21 1055
RECEIVED BY:
DATE/TIME: 8/13/21 1055

CSA CONTACT NAME: Jason Clermont
TELEPHONE NUMBER: 252-258-1626

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L2143321

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 12 August 2021

	Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
-30	3664|2021|WTG|038|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-31	3664|2021|WTG|041|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-32	3664|2021|WTG|043|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-33	3664|2021|WTG|044|Sed|GS|01	8/1/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-34	3664|2021|WTG|046|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-35	3664|2021|WTG|050|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-36	3664|2021|WTG|050|Sed|GS|02	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-37	3664|2021|WTG|052|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-38	3664|2021|WTG|055|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-39	3664|2021|WTG|057|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-40	3664|2021|WTG|060|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-41	3664|2021|WTG|060|Sed|GS|02	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-42	3664|2021|WTG|062|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-43	3664|2021|WTG|063|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-44	3664|2021|WTG|064|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-45	3664|2021|WTG|069|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-46	3664|2021|WTG|070|Sed|GS|01	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-47	3664|2021|WTG|070|Sed|GS|02	7/31/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-48	3664|2021|WTG|073|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2

Shipper: FEDEX UPS USPS Other
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature:

RELINQUISHED BY: _____ DATE/TIME: 8/12/21 9AM RECEIVED BY: _____ DATE/TIME: 8/12/21 1015
RELINQUISHED BY: _____ DATE/TIME: 8/12/21 1055 RECEIVED BY: _____ DATE/TIME: 8/12/21 1055

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

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L2143321

Chain of Custody Record

DESIGNATED LABORATORY: Alpha Lab
JOB #: 3664
SURVEY/CRUISE: Beacon Wind
CLIENT: MMT\Equinor
DATE: 12 August 2021

	Sample I.D.	Date Collected (mm/dd/yy)	Collection Method	Container Type	Sample Type/ Preservative	Analysis/Instructions	Cooler No. / Notes
-39	3664|2021|WTG|079|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-40	3664|2021|WTG|080|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-54	3664|2021|WTG|080|Sed|GS|02	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-41	3664|2021|WTG|082|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-42	3664|2021|WTG|089|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-43	3664|2021|WTG|091|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-44	3664|2021|WTG|093|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-45	3664|2021|WTG|099|Sed|GS|01	7/29/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-46	3664|2021|WTG|100|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-47	3664|2021|WTG|100|Sed|GS|02	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-48	3664|2021|WTG|102|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-49	3664|2021|WTG|109|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-50	3664|2021|WTG|110|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-51	3664|2021|WTG|110|Sed|GS|02	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2; QC duplicate
-52	3664|2021|WTG|112|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2
-53	3664|2021|WTG|118|Sed|GS|01	7/28/2021	SmithMac	250-mL plastic	freeze	grain size	Tier 3; Cooler #2

Shipper: FEDEX UPS USPS ORL
Custody Seal: Intact Broken None
Sample Condition: Intact Broken Leaking
Container Temperature

RELINQUISHED BY: _____ DATE/TIME: 8/12/21 - 9am RECEIVED BY: _____ DATE/TIME: 8/12/21 1015
RELINQUISHED BY: _____ DATE/TIME: 8/12/21 1054 RECEIVED BY: _____ DATE/TIME: 8/13/21 1055

CSA CONTACT NAME: Jason Clermont TELEPHONE NUMBER: 252-258-1626

This chain-of-custody form is a legal document signifying that the samples listed have been under the continuous custody of the signatories. Custodians must ensure that documents are admissible and have weight as evidence in future litigation. Continuous custody means the samples have been in their sight or under lock and key for which they have control. The sample custodian or his/her representative shall sign, date, and record the time on all accompanying forms, when applicable, at the time of sample receipt. Note: Initials are not acceptable.

ATTACHMENT C| BENTHIC INFAUNA ANALYSIS RESULTS - LABORATORY REPORTS

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-002	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	2
WTG-002	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	2
WTG-002	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	3
WTG-002	Annelida	Polychaeta	Orbiniida	Orbiniidae	Leitoscoloplos (LPIL)	1
WTG-002	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glycera americana	8
WTG-002	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea wassi	2
WTG-002	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-002	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	3
WTG-002	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Byblis serrata	1
WTG-002	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-002	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	3
WTG-002	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-002	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-002	Arthropoda	Malacostrac	Decapoda	Crangonidae	Crangon septemspinosa	1
WTG-002	Echinodermata	Echinoidea	Clypeasteroida	Clypeasteridae	Clypeaster (LPIL)	109
WTG-002	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-002	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	1
WTG-002	Mollusca	Bivalvia			Bivalvia (LPIL)	1
WTG-002	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-002	Nemertea				Nemertea (LPIL)	6
WTG-003	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	12
WTG-003	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	6
WTG-003	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	38
WTG-003	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	1
WTG-003	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-003	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	2
WTG-003	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-003	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	2
WTG-003	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	2
WTG-003	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-003	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	7
WTG-003	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	2
WTG-003	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	2
WTG-003	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	15
WTG-003	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	9
WTG-003	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	164
WTG-003	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	2
WTG-003	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	5
WTG-003	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-003	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	3
WTG-003	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	36
WTG-003	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	12
WTG-003	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	1
WTG-003	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	12
WTG-003	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	1
WTG-003	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	1
WTG-003	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	1
WTG-003	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-003	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	3
WTG-003	Echinodermata	Echinoidea	Clypeasteroida	Clypeasteridae	Clypeaster (LPIL)	4
WTG-003	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	3
WTG-003	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	393
WTG-003	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	9
WTG-003	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-003	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	7
WTG-003	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-003	Mollusca	Gastropoda	Cephalaspidea	Haminoeidae	Haminoea solitaria	1
WTG-003	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	3
WTG-005	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	5
WTG-005	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	13
WTG-005	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	4
WTG-005	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-005	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-005	Annelida	Polychaeta	Orbiniida	Orbiniidae	Orbiniidae (LPIL)	2
WTG-005	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	4
WTG-005	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	5
WTG-005	Annelida	Polychaeta	Phyllodocida	Sigalionidae	Sigalionidae (LPIL)	2
WTG-005	Annelida	Polychaeta	Phyllodocida	Sigalionidae	Sthenelais (LPIL)	2
WTG-005	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	4
WTG-005	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	2
WTG-005	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	2
WTG-005	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea wassi	6
WTG-005	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	26
WTG-005	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-005	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-005	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	12
WTG-005	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	2
WTG-005	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-005	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	4
WTG-005	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	1
WTG-005	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Rhepoxynius hudsoni	8
WTG-005	Arthropoda	Malacostrac	Amphipoda	Podoceridae	Dyopedos porrectus	1
WTG-005	Arthropoda	Malacostrac	Cumacea	Bodotriidae	Pseudoleptocuma minus	1
WTG-005	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-005	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	6
WTG-005	Echinodermata	Echinoidea	Clypeasteroida	Clypeasteridae	Clypeaster (LPIL)	2
WTG-005	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	30
WTG-005	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-005	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-005	Mollusca	Bivalvia	Veneroida	Astartidae	Astarte undata	1
WTG-005	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	1
WTG-005	Mollusca	Bivalvia	Veneroida	Tellinidae	Tellinidae (LPIL)	1
WTG-008	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	4
WTG-008	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	6
WTG-008	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	3
WTG-008	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	31
WTG-008	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	1
WTG-008	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-008	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	2
WTG-008	Annelida	Polychaeta	Orbiniida	Orbiniidae	Leitoscoloplos (LPIL)	1
WTG-008	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	5
WTG-008	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	5
WTG-008	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	3
WTG-008	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Eumida sanguinea	1
WTG-008	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	2
WTG-008	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	3
WTG-008	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	46
WTG-008	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-008	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	8
WTG-008	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	2
WTG-008	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	58
WTG-008	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-008	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	12
WTG-008	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-008	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	3
WTG-008	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	3
WTG-008	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-008	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	126
WTG-008	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Byblis serrata	1
WTG-008	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	6
WTG-008	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	15
WTG-008	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-008	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	17
WTG-008	Arthropoda	Malacostrac	Amphipoda	Corophiidae	Monocorophium (LPIL)	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-008	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1
WTG-008	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	19
WTG-008	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	5
WTG-008	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	3
WTG-008	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	5
WTG-008	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	19
WTG-008	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-008	Arthropoda	Malacostrac	Decapoda	Crangonidae	Crangon septemspinosa	11
WTG-008	Arthropoda	Malacostrac	Isopoda	Chaetiliidae	Chiridotea tuftsii	1
WTG-008	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-008	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	4
WTG-008	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	16
WTG-008	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	14
WTG-008	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	2
WTG-008	Mollusca	Bivalvia	Veneroida	Cardiidae	Parvicardium pinnulatum	2
WTG-008	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	4
WTG-011	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	57
WTG-011	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	3
WTG-011	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	4
WTG-011	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	7
WTG-011	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-011	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	1
WTG-011	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-011	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-011	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	1
WTG-011	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	9
WTG-011	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys (LPIL)	1
WTG-011	Annelida	Polychaeta	Phyllodocida	Polynoidae	Harmothoe imbricata	2
WTG-011	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	3
WTG-011	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-011	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	3
WTG-011	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	1
WTG-011	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	4
WTG-011	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus californiensis	3
WTG-011	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	3
WTG-011	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	1
WTG-011	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	3
WTG-011	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea catherinae	1
WTG-011	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	25
WTG-011	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	12
WTG-011	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-011	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-011	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	5
WTG-011	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	75
WTG-011	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Byblis serrata	1
WTG-011	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	51
WTG-011	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	6
WTG-011	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-011	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	1
WTG-011	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	3
WTG-011	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	4
WTG-011	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	2
WTG-011	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	2
WTG-011	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	1
WTG-011	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	2
WTG-011	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	8
WTG-011	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	5
WTG-011	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	6
WTG-011	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	2
WTG-011	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	14
WTG-011	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-011	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	2

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-011	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	4
WTG-011	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-020	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	2
WTG-020	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	1
WTG-020	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	5
WTG-020	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	6
WTG-020	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-020	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	3
WTG-020	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-020	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	1
WTG-020	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	4
WTG-020	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	3
WTG-020	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	10
WTG-020	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-020	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	2
WTG-020	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	9
WTG-020	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	2
WTG-020	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	21
WTG-020	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-020	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-020	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	3
WTG-020	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	2
WTG-020	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	5
WTG-020	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-020	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	1
WTG-020	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	187
WTG-020	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	1
WTG-020	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	33
WTG-020	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	5
WTG-020	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	9
WTG-020	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	1
WTG-020	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	8
WTG-020	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	4
WTG-020	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-020	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	9
WTG-020	Cnidaria	Anthozoa	Actiniaria		Actiniaria (LPIL)	3
WTG-020	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	76
WTG-020	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	10
WTG-020	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	2
WTG-020	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	7
WTG-020	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-020	Mollusca	Gastropoda	Neotaenioglossa	Naticidae	Euspira triseriata	1
WTG-020	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-021	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	6
WTG-021	Annelida	Pollychaeta	Phyllodocida	Polynoidae	Harmothoe extenuata	1
WTG-021	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	18
WTG-021	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	4
WTG-021	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	1
WTG-021	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	2
WTG-021	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-021	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	2
WTG-021	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	1
WTG-021	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-021	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	13
WTG-021	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	8
WTG-021	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-021	Annelida	Polychaeta	Phyllodocida	Sigalionidae	Sigalionidae (LPIL)	1
WTG-021	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	1
WTG-021	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-021	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	6
WTG-021	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-021	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	2

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-021	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	21
WTG-021	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-021	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	41
WTG-021	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-021	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-021	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-021	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-021	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-021	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-021	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	2
WTG-021	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	249
WTG-021	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	3
WTG-021	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	38
WTG-021	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-021	Arthropoda	Malacostrac	Amphipoda	Corophiidae	Monocorophium (LPIL)	2
WTG-021	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Microprotopus raneyi	1
WTG-021	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	3
WTG-021	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	70
WTG-021	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	1
WTG-021	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	2
WTG-021	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	17
WTG-021	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	7
WTG-021	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	3
WTG-021	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	3
WTG-021	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	9
WTG-021	Chordata	Ascidiacea			Ascidiacea (LPIL)	3
WTG-021	Mollusca	Bivalvia	Mytiloida	Mytilidae	Musculus lateralis	2
WTG-021	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	3
WTG-021	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	41
WTG-021	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	13
WTG-021	Mollusca	Bivalvia	Veneroida	Astartidae	Astarte undata	1
WTG-021	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	5
WTG-021	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-025	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	8
WTG-025	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	1
WTG-025	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	1
WTG-025	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineris acicularum	1
WTG-025	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	20
WTG-025	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	9
WTG-025	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	5
WTG-025	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-025	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	2
WTG-025	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-025	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	7
WTG-025	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	1
WTG-025	Annelida	Polychaeta	Phyllodocida	Pholoidae	Taylorpholoe hirsuta	1
WTG-025	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	3
WTG-025	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-025	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	22
WTG-025	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-025	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	18
WTG-025	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	34
WTG-025	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	2
WTG-025	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	36
WTG-025	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-025	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-025	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	8
WTG-025	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	7
WTG-025	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	4
WTG-025	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	147
WTG-025	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	16
WTG-025	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	12

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-025	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	3
WTG-025	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-025	Arthropoda	Malacostrac	Amphipoda	Corophiidae	Monocorophium (LPIL)	7
WTG-025	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1
WTG-025	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	54
WTG-025	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	1
WTG-025	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	15
WTG-025	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	6
WTG-025	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-025	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	33
WTG-025	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-025	Mollusca	Bivalvia	Mytiloida	Mytilidae	Musculus lateralis	2
WTG-025	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-025	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	31
WTG-025	Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	Lyonsia hyalina	2
WTG-025	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	7
WTG-025	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-025	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	16
WTG-025	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-025	Mollusca	Gastropoda	Neogastropoda	Nassariidae	Tritia trivittata	1
WTG-025	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	4
WTG-027	Annelida	Pollychaeta	Phyllodocida	Polynoidae	Harmothoe extenuata	1
WTG-027	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	2
WTG-027	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	30
WTG-027	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	41
WTG-027	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-027	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	2
WTG-027	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-027	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	1
WTG-027	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	2
WTG-027	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	2
WTG-027	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	6
WTG-027	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	4
WTG-027	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	3
WTG-027	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	31
WTG-027	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-027	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-027	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-027	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	18
WTG-027	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-027	Annelida	Polychaeta	Terebellida	Cirratulidae	Tharyx acutus	3
WTG-027	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	53
WTG-027	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	24
WTG-027	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	109
WTG-027	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1
WTG-027	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	1
WTG-027	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	8
WTG-027	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	2
WTG-027	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-027	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	14
WTG-027	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	3
WTG-027	Cnidaria	Anthozoa	Actiniaria		Actiniaria (LPIL)	4
WTG-027	Mollusca	Bivalvia	Mytiloida	Mytilidae	Musculus lateralis	1
WTG-027	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	16
WTG-027	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	1126
WTG-027	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	8
WTG-027	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-027	Mollusca	Bivalvia	Veneroida	Astartidae	Astarte undata	1
WTG-027	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	1
WTG-033	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	20
WTG-033	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	1
WTG-033	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	21

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-033	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	1
WTG-033	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	2
WTG-033	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-033	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	1
WTG-033	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	11
WTG-033	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	4
WTG-033	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	1
WTG-033	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	4
WTG-033	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	14
WTG-033	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	10
WTG-033	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	31
WTG-033	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-033	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	2
WTG-033	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-033	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-033	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	5
WTG-033	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	190
WTG-033	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	6
WTG-033	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	21
WTG-033	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	4
WTG-033	Arthropoda	Malacostrac	Amphipoda	Corophiidae	Monocorophium (LPIL)	2
WTG-033	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-033	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	103
WTG-033	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	5
WTG-033	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	2
WTG-033	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	7
WTG-033	Arthropoda	Malacostrac	Decapoda	Axiidae	Axius serratus	1
WTG-033	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-033	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-033	Mollusca	Bivalvia	Mytiloida	Mytilidae	Musculus lateralis	2
WTG-033	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-033	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	31
WTG-033	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	8
WTG-033	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	3
WTG-033	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	4
WTG-034	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	13
WTG-034	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	2
WTG-034	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	8
WTG-034	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-034	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-034	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-034	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	4
WTG-034	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	2
WTG-034	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-034	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	4
WTG-034	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys (LPIL)	1
WTG-034	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	8
WTG-034	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-034	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	3
WTG-034	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	11
WTG-034	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	21
WTG-034	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	5
WTG-034	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	4
WTG-034	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	81
WTG-034	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	2
WTG-034	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-034	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	4
WTG-034	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-034	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	6
WTG-034	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-034	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	154
WTG-034	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	25

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-034	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	6
WTG-034	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	4
WTG-034	Arthropoda	Malacostrac	Amphipoda	Corophiidae	Monocorophium (LPIL)	4
WTG-034	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-034	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	45
WTG-034	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	1
WTG-034	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	1
WTG-034	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	7
WTG-034	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	1
WTG-034	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	4
WTG-034	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	17
WTG-034	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-034	Arthropoda	Malacostrac	Decapoda	Crangonidae	Crangon septemspinosa	1
WTG-034	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	22
WTG-034	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-034	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	5
WTG-034	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-040	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	19
WTG-040	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	2
WTG-040	Annelida	Polychaeta	Eunicida	Dorvilleidae	Dorvilleidae (LPIL)	1
WTG-040	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	6
WTG-040	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	30
WTG-040	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-040	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	3
WTG-040	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	1
WTG-040	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	1
WTG-040	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	30
WTG-040	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-040	Annelida	Polychaeta	Phyllodocida	Polynoidae	Harmothoe imbricata	1
WTG-040	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	1
WTG-040	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-040	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	8
WTG-040	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	1
WTG-040	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-040	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	102
WTG-040	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	2
WTG-040	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-040	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	29
WTG-040	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	162
WTG-040	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	10
WTG-040	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	14
WTG-040	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	56
WTG-040	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-040	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	4
WTG-040	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	45
WTG-040	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	2
WTG-040	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	1
WTG-040	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	2
WTG-040	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	1
WTG-040	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-040	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	14
WTG-040	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-040	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-040	Cnidaria	Anthozoa	Actiniaria		Actiniaria (LPIL)	1
WTG-040	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-040	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	148
WTG-040	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	14
WTG-040	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	3
WTG-040	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	3
WTG-040	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-047	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	26
WTG-047	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	12

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-047	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	1
WTG-047	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-047	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-047	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-047	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-047	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	6
WTG-047	Annelida	Polychaeta	Phyllodocida	Pholoidae	Taylorpholoe hirsuta	1
WTG-047	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	3
WTG-047	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	1
WTG-047	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	2
WTG-047	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	4
WTG-047	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	94
WTG-047	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-047	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-047	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	14
WTG-047	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	104
WTG-047	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	3
WTG-047	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	6
WTG-047	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-047	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	1
WTG-047	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-047	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	2
WTG-047	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	1
WTG-047	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-047	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	4
WTG-047	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2
WTG-047	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	60
WTG-047	Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	Lyonsia floridana	1
WTG-047	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-047	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	6
WTG-048	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	20
WTG-048	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	3
WTG-048	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	2
WTG-048	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	1
WTG-048	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-048	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-048	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	9
WTG-048	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-048	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	1
WTG-048	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	4
WTG-048	Annelida	Polychaeta	Phyllodocida	Pholoidae	Taylorpholoe hirsuta	1
WTG-048	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	3
WTG-048	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	3
WTG-048	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	4
WTG-048	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	52
WTG-048	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	6
WTG-048	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	3
WTG-048	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-048	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	1
WTG-048	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	142
WTG-048	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	2
WTG-048	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	11
WTG-048	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-048	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	4
WTG-048	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	10
WTG-048	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-048	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	10
WTG-048	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	3
WTG-048	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	12
WTG-048	Chordata	Ascidiacea			Ascidiacea (LPIL)	20
WTG-048	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	1
WTG-048	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-048	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	24
WTG-048	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-049	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	17
WTG-049	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	3
WTG-049	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	6
WTG-049	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-049	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-049	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	2
WTG-049	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-049	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-049	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	13
WTG-049	Annelida	Polychaeta	Phyllodocida	Polynoidae	Harmothoe imbricata	2
WTG-049	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-049	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	2
WTG-049	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	14
WTG-049	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-049	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	7
WTG-049	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-049	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	48
WTG-049	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-049	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-049	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-049	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	4
WTG-049	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	36
WTG-049	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	166
WTG-049	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	8
WTG-049	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	1
WTG-049	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	3
WTG-049	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	31
WTG-049	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	6
WTG-049	Arthropoda	Malacostrac	Amphipoda		Amphipoda (LPIL)	1
WTG-049	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	4
WTG-049	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-049	Mollusca	Aplacophora			Aplacophora (LPIL)	1
WTG-049	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	1
WTG-049	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-049	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	19
WTG-049	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	7
WTG-049	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	3
WTG-049	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	1
WTG-049	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	3
WTG-049	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-049	Nemertea				Nemertea (LPIL)	1
WTG-049	Sipuncula				Sipuncula (LPIL)	1
WTG-053	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	8
WTG-053	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	11
WTG-053	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	17
WTG-053	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-053	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	2
WTG-053	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	6
WTG-053	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-053	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	12
WTG-053	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	3
WTG-053	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-053	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	1
WTG-053	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-053	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	1
WTG-053	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	28
WTG-053	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea catherinae	1
WTG-053	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	68
WTG-053	Annelida	Polychaeta	Scolecida	Paraonidae	Paraonidae (LPIL)	2
WTG-053	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-053	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	2
WTG-053	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	314
WTG-053	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	1
WTG-053	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	16
WTG-053	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	3
WTG-053	Arthropoda	Malacostrac	Amphipoda	Corophiidae	Monocorophium (LPIL)	1
WTG-053	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	50
WTG-053	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	2
WTG-053	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	20
WTG-053	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	4
WTG-053	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-053	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	5
WTG-053	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	16
WTG-053	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	2
WTG-053	Arthropoda	Malacostrac	Decapoda	Crangonidae	Crangon septemspinosa	1
WTG-053	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-053	Chordata	Ascidiacea			Ascidiacea (LPIL)	2
WTG-053	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-053	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	63
WTG-053	Mollusca	Bivalvia	Pectinida	Pectinidae	Delectopecten (LPIL)	1
WTG-053	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	11
WTG-053	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	17
WTG-053	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	3
WTG-053	Mollusca	Gastropoda	Neogastropoda	Nassariidae	Tritia trivittata	1
WTG-054	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	27
WTG-054	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	1
WTG-054	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-054	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-054	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-054	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	3
WTG-054	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	3
WTG-054	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	3
WTG-054	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	13
WTG-054	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	1
WTG-054	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-054	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	50
WTG-054	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-054	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	2
WTG-054	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	71
WTG-054	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	1
WTG-054	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	4
WTG-054	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-054	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	2
WTG-054	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	12
WTG-054	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	5
WTG-054	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	2
WTG-054	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	1
WTG-054	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-054	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	11
WTG-054	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-054	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	1
WTG-054	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	4
WTG-054	Mollusca	Bivalvia			Bivalvia (LPIL)	1
WTG-054	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-058	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	15
WTG-058	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	5
WTG-058	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	2
WTG-058	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	5
WTG-058	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-058	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-058	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-058	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	3

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-058	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	5
WTG-058	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	2
WTG-058	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	1
WTG-058	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	42
WTG-058	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-058	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-058	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-058	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	2
WTG-058	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	40
WTG-058	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	1
WTG-058	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	9
WTG-058	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-058	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	6
WTG-058	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-058	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	8
WTG-058	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-058	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	1
WTG-058	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	11
WTG-058	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-058	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-058	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-058	Mollusca	Bivalvia			Bivalvia (LPIL)	1
WTG-066	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	43
WTG-066	Annelida	Pollychaeta	Phyllodocida	Polynoidae	Harmothoe extenuata	2
WTG-066	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	14
WTG-066	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	5
WTG-066	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	12
WTG-066	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-066	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-066	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	3
WTG-066	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-066	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	1
WTG-066	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-066	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	2
WTG-066	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	17
WTG-066	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	2
WTG-066	Annelida	Polychaeta	Phyllodocida	Pholoidae	Taylorpholoe hirsuta	1
WTG-066	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	3
WTG-066	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	3
WTG-066	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	17
WTG-066	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-066	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	11
WTG-066	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	13
WTG-066	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	7
WTG-066	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	77
WTG-066	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-066	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	1
WTG-066	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	6
WTG-066	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-066	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-066	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-066	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	47
WTG-066	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	238
WTG-066	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	3
WTG-066	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	28
WTG-066	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	1
WTG-066	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	7
WTG-066	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Cerapus (LPIL)	1
WTG-066	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	37
WTG-066	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	2
WTG-066	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	6
WTG-066	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-066	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	2
WTG-066	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-066	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	5
WTG-066	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	1
WTG-066	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	4
WTG-066	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	17
WTG-066	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	15
WTG-066	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	4
WTG-066	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	2
WTG-066	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	10
WTG-066	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	4
WTG-066	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	1
WTG-067	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	51
WTG-067	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	387
WTG-067	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	1
WTG-067	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	3
WTG-067	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	1
WTG-067	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	2
WTG-067	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	1
WTG-067	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	12
WTG-067	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-067	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	10
WTG-067	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	14
WTG-067	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	4
WTG-067	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	2
WTG-067	Annelida	Polychaeta	Phyllodocida	Sigalionidae	Sigalionidae (LPIL)	2
WTG-067	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	3
WTG-067	Annelida	Polychaeta	Phyllodocida	Syllidae	Sphaerosyllis (LPIL)	2
WTG-067	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-067	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	1
WTG-067	Annelida	Polychaeta	Scolecida	Capitellidae	Capitellidae (LPIL)	2
WTG-067	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	20
WTG-067	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	3
WTG-067	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	4
WTG-067	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	15
WTG-067	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-067	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	9
WTG-067	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-067	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	9
WTG-067	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Byblis serrata	23
WTG-067	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	1
WTG-067	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	9
WTG-067	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-067	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	15
WTG-067	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-067	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	2
WTG-067	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	6
WTG-067	Arthropoda	Malacostrac	Cumacea	Bodotriidae	Pseudoleptocuma minus	1
WTG-067	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	5
WTG-067	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	4
WTG-067	Arthropoda	Malacostrac	Isopoda	Cirolanidae	Cirolanidae (LPIL)	1
WTG-067	Mollusca	Bivalvia	Veneroida	Solenidae	Ensis directus	2
WTG-067	Nemertea				Nemertea (LPIL)	1
WTG-068	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	18
WTG-068	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrinerides acuta	5
WTG-068	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineris acicularum	1
WTG-068	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	1
WTG-068	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-068	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	47
WTG-068	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	4
WTG-068	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	1
WTG-068	Annelida	Polychaeta	Phyllodocida	Syllidae	Exogone hebes	3

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-068	Annelida	Polychaeta	Scolecida	Paraonidae	Paraonidae (LPIL)	1
WTG-068	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-068	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-068	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	1
WTG-068	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Byblis serrata	6
WTG-068	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	2
WTG-068	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	2
WTG-068	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-068	Arthropoda	Malacostrac	Cumacea	Bodotriidae	Pseudoleptocuma minus	1
WTG-068	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	10
WTG-068	Arthropoda	Malacostrac	Tanaidacea	Nototanaidae	Pseudonototanais (LPIL)	1
WTG-068	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	3
WTG-068	Mollusca	Bivalvia	Veneroida	Solenidae	Ensis directus	1
WTG-068	Mollusca	Gastropoda			Gastropoda (LPIL)	2
WTG-068	Nemertea				Nemertea (LPIL)	4
WTG-074	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	1
WTG-074	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	3
WTG-074	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrinerides acuta	1
WTG-074	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	1
WTG-074	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-074	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	19
WTG-074	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	2
WTG-074	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	2
WTG-074	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	4
WTG-074	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	2
WTG-074	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	21
WTG-074	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	1
WTG-074	Arthropoda	Malacostrac	Amphipoda		Amphipoda (LPIL)	1
WTG-074	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-074	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-074	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	1
WTG-074	Chordata	Ascidiacea			Ascidiacea (LPIL)	13
WTG-074	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2
WTG-074	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	14
WTG-074	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-074	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-074	Mollusca	Gastropoda	Neogastropoda	Nassariidae	Tritia trivittata	1
WTG-076	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	16
WTG-076	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	1
WTG-076	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	1
WTG-076	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	14
WTG-076	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	9
WTG-076	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-076	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	3
WTG-076	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	1
WTG-076	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	3
WTG-076	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-076	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	19
WTG-076	Annelida	Polychaeta	Phyllodocida	Sphaerodoridae	Sphaerodoridae (LPIL)	1
WTG-076	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	1
WTG-076	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	8
WTG-076	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	19
WTG-076	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	14
WTG-076	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	8
WTG-076	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	4
WTG-076	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea philbinae	1
WTG-076	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	54
WTG-076	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-076	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	9
WTG-076	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	2
WTG-076	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	2
WTG-076	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	43

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-076	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	71
WTG-076	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	3
WTG-076	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	17
WTG-076	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	3
WTG-076	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	52
WTG-076	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	1
WTG-076	Arthropoda	Malacostrac	Amphipoda	Melitidae	Melitidae (LIPL)	1
WTG-076	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	3
WTG-076	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	3
WTG-076	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	6
WTG-076	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-076	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	6
WTG-076	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-076	Arthropoda	Malacostrac	Isopoda	Anthuridae	Ptilanthura tenuis	1
WTG-076	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	2
WTG-076	Chordata	Ascidiacea			Ascidiacea (LPIL)	2
WTG-076	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2
WTG-076	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	34
WTG-076	Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	Lyonsia hyalina	1
WTG-076	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	6
WTG-076	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	7
WTG-076	Mollusca	Bivalvia	Veneroida	Astartidae	Astarte undata	2
WTG-076	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	4
WTG-076	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-076	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-076	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	1
WTG-077	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	3
WTG-077	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	127
WTG-077	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	20
WTG-077	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrinerides (LPIL)	25
WTG-077	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	3
WTG-077	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	9
WTG-077	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-077	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	140
WTG-077	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniadidae (LPIL)	20
WTG-077	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	16
WTG-077	Annelida	Polychaeta	Phyllodocida	Polynoidae	Harmothoe imbricata	1
WTG-077	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	3
WTG-077	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	3
WTG-077	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-077	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	5
WTG-077	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	8
WTG-077	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Byblis serrata	4
WTG-077	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	4
WTG-077	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-077	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	7
WTG-077	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-077	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	5
WTG-077	Arthropoda	Malacostrac	Decapoda	Crangonidae	Crangon septemspinosa	1
WTG-077	Chordata	Ascidiacea			Ascidiacea (LPIL)	2
WTG-077	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	6
WTG-077	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-077	Mollusca	Bivalvia	Veneroida	Solenidae	Ensis directus	1
WTG-077	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	1
WTG-078	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	35
WTG-078	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	2
WTG-078	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	2
WTG-078	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-078	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	3
WTG-078	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	3
WTG-078	Annelida	Polychaeta	Opheliida	Opheliidae	Opheliidae (LPIL)	1
WTG-078	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-078	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	3
WTG-078	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	17
WTG-078	Annelida	Polychaeta	Phyllodocida	Sigalionidae	Sigalionidae (LPIL)	1
WTG-078	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	1
WTG-078	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	1
WTG-078	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	26
WTG-078	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	4
WTG-078	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	2
WTG-078	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-078	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	28
WTG-078	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	191
WTG-078	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	7
WTG-078	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	11
WTG-078	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	3
WTG-078	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	85
WTG-078	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-078	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Orchomenella minuta	4
WTG-078	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	7
WTG-078	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	1
WTG-078	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-078	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	8
WTG-078	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	3
WTG-078	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	19
WTG-078	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-078	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-078	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2
WTG-078	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	79
WTG-078	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-078	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-078	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	6
WTG-078	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	4
WTG-081	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	72
WTG-081	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	1
WTG-081	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	7
WTG-081	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	3
WTG-081	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-081	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	1
WTG-081	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	2
WTG-081	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-081	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniadidae (LPIL)	1
WTG-081	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	13
WTG-081	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-081	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	1
WTG-081	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	1
WTG-081	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	6
WTG-081	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	8
WTG-081	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	52
WTG-081	Annelida	Polychaeta	Spionida	Spionidae	Dipolydora socialis	1
WTG-081	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-081	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-081	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	3
WTG-081	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	29
WTG-081	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	206
WTG-081	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	17
WTG-081	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1
WTG-081	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	11
WTG-081	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	1
WTG-081	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Hippomedon (LPIL)	5
WTG-081	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	5
WTG-081	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	2
WTG-081	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	2
WTG-081	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	3

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-081	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-081	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	2
WTG-081	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-081	Chordata	Ascidiacea			Ascidiacea (LPIL)	3
WTG-081	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	1
WTG-081	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	1
WTG-081	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-081	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	122
WTG-081	Mollusca	Bivalvia	Pectinida	Pectinidae	Delectopecten (LPIL)	1
WTG-081	Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	Lyonsia hyalina	2
WTG-081	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	9
WTG-081	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	6
WTG-081	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	1
WTG-081	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	7
WTG-081	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	7
WTG-081	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	1
WTG-083	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	12
WTG-083	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	5
WTG-083	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	4
WTG-083	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	15
WTG-083	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	7
WTG-083	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-083	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-083	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	6
WTG-083	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glycera americana	1
WTG-083	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-083	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	4
WTG-083	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	5
WTG-083	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Eteone longa	1
WTG-083	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	3
WTG-083	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	16
WTG-083	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	1
WTG-083	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	12
WTG-083	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	12
WTG-083	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	7
WTG-083	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	56
WTG-083	Annelida	Polychaeta	Spionida	Spionidae	Dipolydora socialis	1
WTG-083	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	3
WTG-083	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	2
WTG-083	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-083	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-083	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	3
WTG-083	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	22
WTG-083	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	91
WTG-083	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	8
WTG-083	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	32
WTG-083	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-083	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	1
WTG-083	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	3
WTG-083	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	27
WTG-083	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	5
WTG-083	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	2
WTG-083	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	13
WTG-083	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	1
WTG-083	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-083	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	14
WTG-083	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-083	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	2
WTG-083	Chordata	Ascidiacea			Ascidiacea (LPIL)	7
WTG-083	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	1
WTG-083	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	4
WTG-083	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	3

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-083	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	54
WTG-083	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	14
WTG-083	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	13
WTG-083	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	6
WTG-083	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	4
WTG-083	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	10
WTG-083	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-084	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	8
WTG-084	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	11
WTG-084	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	15
WTG-084	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	5
WTG-084	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-084	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	1
WTG-084	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-084	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	5
WTG-084	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-084	Annelida	Polychaeta	Oweniida	Oweniidae	Owenia fusiformis	1
WTG-084	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-084	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	23
WTG-084	Annelida	Polychaeta	Phyllodocida	Nereididae	Nereididae (LPIL)	1
WTG-084	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-084	Annelida	Polychaeta	Phyllodocida	Polynoidae	Polynoidae (LPIL)	1
WTG-084	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	1
WTG-084	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	8
WTG-084	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	9
WTG-084	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	2
WTG-084	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	14
WTG-084	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	5
WTG-084	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	50
WTG-084	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-084	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	1
WTG-084	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	4
WTG-084	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-084	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	18
WTG-084	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	70
WTG-084	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	6
WTG-084	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	18
WTG-084	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-084	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-084	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	47
WTG-084	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Hippomedon (LPIL)	1
WTG-084	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	5
WTG-084	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	5
WTG-084	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-084	Chordata	Ascidiacea			Ascidiacea (LPIL)	11
WTG-084	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	2
WTG-084	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	3
WTG-084	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	35
WTG-084	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	8
WTG-084	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	8
WTG-084	Mollusca	Bivalvia	Veneroida	Arcticidae	Arctica islandica	1
WTG-084	Mollusca	Bivalvia	Veneroida	Astartidae	Astarte undata	1
WTG-084	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	9
WTG-084	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-085	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	5
WTG-085	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	10
WTG-085	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	16
WTG-085	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	10
WTG-085	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	4
WTG-085	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	2
WTG-085	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-085	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	5

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-085	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-085	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	1
WTG-085	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	9
WTG-085	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	2
WTG-085	Annelida	Polychaeta	Phyllodocida	Sigalionidae	Sigalionidae (LPIL)	2
WTG-085	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	4
WTG-085	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	36
WTG-085	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	4
WTG-085	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-085	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	27
WTG-085	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	11
WTG-085	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	11
WTG-085	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	18
WTG-085	Annelida	Polychaeta	Scolecida	Paraonidae	Paraonidae (LPIL)	1
WTG-085	Annelida	Polychaeta	Spionida	Spionidae	Marenzelleria viridis	1
WTG-085	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes bombyx	2
WTG-085	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	6
WTG-085	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-085	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	4
WTG-085	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	8
WTG-085	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	56
WTG-085	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	96
WTG-085	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	5
WTG-085	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	6
WTG-085	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-085	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	7
WTG-085	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	24
WTG-085	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	3
WTG-085	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	2
WTG-085	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-085	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	4
WTG-085	Arthropoda	Malacostrac	Cumacea	Nannastacidae	Campylaspis (LPIL)	1
WTG-085	Arthropoda	Malacostrac	Isopoda	Anthuridae	Ptilanthura tenuis	1
WTG-085	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-085	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	2
WTG-085	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	5
WTG-085	Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	Lyonsia floridana	1
WTG-085	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	12
WTG-085	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	4
WTG-085	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	2
WTG-085	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-085	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	2
WTG-085	Nemertea				Nemertea (LPIL)	4
WTG-087	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	9
WTG-087	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	30
WTG-087	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	2
WTG-087	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	20
WTG-087	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	12
WTG-087	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-087	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-087	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-087	Annelida	Polychaeta	Oweniida	Oweniidae	Galathowenia oculata	2
WTG-087	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	4
WTG-087	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	30
WTG-087	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	1
WTG-087	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodoce mucosa	2
WTG-087	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	18
WTG-087	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	10
WTG-087	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	5
WTG-087	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	9
WTG-087	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-087	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	61

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-087	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-087	Annelida	Polychaeta	Terebellida	Ampharetidae	Anobothrus gracilis	1
WTG-087	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-087	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	3
WTG-087	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	30
WTG-087	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	106
WTG-087	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	3
WTG-087	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	2
WTG-087	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	12
WTG-087	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	7
WTG-087	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-087	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	3
WTG-087	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	2
WTG-087	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	7
WTG-087	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-087	Arthropoda	Malacostrac	Decapoda	Crangonidae	Crangon septemspinosa	1
WTG-087	Chordata	Ascidiacea			Ascidiacea (LPIL)	7
WTG-087	Cnidaria	Anthozoa	Actiniaria		Actiniaria (LPIL)	1
WTG-087	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	1
WTG-087	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	4
WTG-087	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	4
WTG-087	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	26
WTG-087	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	15
WTG-087	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	18
WTG-087	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	2
WTG-087	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-087	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	2
WTG-087	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	2
WTG-087	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	2
WTG-090	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	4
WTG-090	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	1
WTG-090	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	1
WTG-090	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-090	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-090	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	3
WTG-090	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	2
WTG-090	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-090	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	4
WTG-090	Annelida	Polychaeta	Phyllodocida	Polynoidae	Polynoidae (LPIL)	1
WTG-090	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	1
WTG-090	Annelida	Polychaeta	Scolecida	Capitellidae	Capitellidae (LPIL)	1
WTG-090	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	14
WTG-090	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	34
WTG-090	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-090	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	14
WTG-090	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	153
WTG-090	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	5
WTG-090	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	5
WTG-090	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1
WTG-090	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	39
WTG-090	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-090	Arthropoda	Malacostrac	Amphipoda	Melitidae	Melitidae (LIPL)	2
WTG-090	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	1
WTG-090	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	2
WTG-090	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-090	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	3
WTG-090	Arthropoda	Malacostrac	Decapoda	Axiidae	Axius serratus	1
WTG-090	Arthropoda	Malacostrac	Isopoda	Anthuridae	Ptilanthura tenuis	2
WTG-090	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-090	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	2
WTG-090	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	61
WTG-090	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	5

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-090	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	6
WTG-090	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	4
WTG-090	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	4
WTG-090	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	1
WTG-095	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	10
WTG-095	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	5
WTG-095	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	2
WTG-095	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-095	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	5
WTG-095	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-095	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-095	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-095	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-095	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	21
WTG-095	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	2
WTG-095	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	1
WTG-095	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	7
WTG-095	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	2
WTG-095	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	8
WTG-095	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	13
WTG-095	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	3
WTG-095	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	61
WTG-095	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharete finmarchica	2
WTG-095	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	4
WTG-095	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-095	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	9
WTG-095	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	45
WTG-095	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	3
WTG-095	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	1
WTG-095	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-095	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	1
WTG-095	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	3
WTG-095	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	4
WTG-095	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	3
WTG-095	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	2
WTG-095	Arthropoda	Malacostrac	Decapoda	Palaemonidae	Palaemonidae (LPIL)	1
WTG-095	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	1
WTG-095	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2
WTG-095	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	43
WTG-095	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	7
WTG-095	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	7
WTG-095	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	4
WTG-095	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	2
WTG-095	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	2
WTG-097	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	40
WTG-097	Annelida	Polychaeta	Archiannelida	Polygordiidae	Polygordius (LPIL)	1
WTG-097	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	4
WTG-097	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	10
WTG-097	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	8
WTG-097	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-097	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	1
WTG-097	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	3
WTG-097	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	5
WTG-097	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-097	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	12
WTG-097	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys picta	1
WTG-097	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-097	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	5
WTG-097	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	3
WTG-097	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	16
WTG-097	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	15
WTG-097	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	24

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-097	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	4
WTG-097	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	3
WTG-097	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	34
WTG-097	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	19
WTG-097	Arthropoda	Malacostrac	Amphipoda	Cheirocratidae	Casco bigelowi	1
WTG-097	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	6
WTG-097	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	97
WTG-097	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	3
WTG-097	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-097	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-097	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	2
WTG-097	Arthropoda	Malacostrac	Decapoda	Axiidae	Axius serratus	1
WTG-097	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-097	Arthropoda	Malacostrac	Isopoda	Cirolanidae	Cirolanidae (LPIL)	1
WTG-097	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	2
WTG-097	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	3
WTG-097	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	3
WTG-097	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	21
WTG-097	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	6
WTG-097	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	4
WTG-097	Mollusca	Bivalvia	Veneroida	Astartidae	Astarte undata	1
WTG-097	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	1
WTG-097	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	2
WTG-097	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	10
WTG-097	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-097	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	1
WTG-097	Platyhelminthes				Platyhelminthes (LPIL)	1
WTG-098	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	24
WTG-098	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-098	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	4
WTG-098	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-098	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	1
WTG-098	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	1
WTG-098	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	5
WTG-098	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodoce mucosa	1
WTG-098	Annelida	Polychaeta	Phyllodocida	Polynoidae	Polynoidae (LPIL)	1
WTG-098	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	1
WTG-098	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	3
WTG-098	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	47
WTG-098	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-098	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-098	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-098	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	54
WTG-098	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	335
WTG-098	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	4
WTG-098	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	21
WTG-098	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	1
WTG-098	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-098	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	76
WTG-098	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Anonyx lilljeborgi	3
WTG-098	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-098	Arthropoda	Malacostrac	Amphipoda	Melitidae	Melitidae (LIPL)	1
WTG-098	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	11
WTG-098	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Phoxocephalus holbolli	1
WTG-098	Arthropoda	Malacostrac	Cumacea	Bodotriidae	Pseudoleptocuma minus	1
WTG-098	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	3
WTG-098	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-098	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	23
WTG-098	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-098	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-098	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	1
WTG-098	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-098	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	55
WTG-098	Mollusca	Bivalvia	Pholadomyoida	Lyonsiidae	Lyonsia hyalina	1
WTG-098	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	4
WTG-098	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	7
WTG-098	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	5
WTG-098	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-098	Mollusca	Gastropoda	Neogastropoda	Turridae	Turridae (LPIL)	1
WTG-098	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	5
WTG-101	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	12
WTG-101	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	2
WTG-101	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	2
WTG-101	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	4
WTG-101	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-101	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-101	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	21
WTG-101	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	3
WTG-101	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	7
WTG-101	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	8
WTG-101	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	16
WTG-101	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	40
WTG-101	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-101	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-101	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	17
WTG-101	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	62
WTG-101	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	7
WTG-101	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1
WTG-101	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	4
WTG-101	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	5
WTG-101	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	3
WTG-101	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-101	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	1
WTG-101	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	5
WTG-101	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	9
WTG-101	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	6
WTG-101	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	6
WTG-101	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	3
WTG-101	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	6
WTG-101	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	1
WTG-104	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	12
WTG-104	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	5
WTG-104	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	15
WTG-104	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-104	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-104	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	1
WTG-104	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	1
WTG-104	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	24
WTG-104	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys picta	1
WTG-104	Annelida	Polychaeta	Phyllodocida	Phyllodocidae	Phyllodocidae (LPIL)	1
WTG-104	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	2
WTG-104	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	5
WTG-104	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	2
WTG-104	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	6
WTG-104	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	3
WTG-104	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	47
WTG-104	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-104	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-104	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	1
WTG-104	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	11
WTG-104	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	33
WTG-104	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	5
WTG-104	Arthropoda	Malacostrac	Amphipoda	Argissidae	Argissa hamatipes	1
WTG-104	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-104	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	5
WTG-104	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	1
WTG-104	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-104	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-104	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	1
WTG-104	Arthropoda	Malacostrac	Decapoda	Palaemonidae	Palaemonidae (LPIL)	1
WTG-104	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-104	Mollusca	Bivalvia	Mytiloida	Mytilidae	Crenella decussata	4
WTG-104	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	4
WTG-104	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	18
WTG-104	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	8
WTG-104	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	14
WTG-104	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	3
WTG-104	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	8
WTG-104	Mollusca	Gastropoda	Cephalaspidea	Cylichnidae	Cylichnidae (LPIL)	1
WTG-104	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	2
WTG-107	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	2
WTG-107	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	3
WTG-107	Annelida	Polychaeta	Eunicida	Dorvilleidae	Dorvilleidae (LPIL)	2
WTG-107	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	11
WTG-107	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	4
WTG-107	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-107	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	18
WTG-107	Annelida	Polychaeta	Phyllodocida	Pholoidae	Pholoidae (LPIL)	1
WTG-107	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	5
WTG-107	Annelida	Polychaeta	Scolecida	Capitellidae	Capitellidae (LPIL)	1
WTG-107	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	1
WTG-107	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	1
WTG-107	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-107	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	23
WTG-107	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-107	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	1
WTG-107	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	48
WTG-107	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	2
WTG-107	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	3
WTG-107	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	1
WTG-107	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-107	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	25
WTG-107	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	4
WTG-107	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	10
WTG-107	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	2
WTG-107	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	2
WTG-107	Mollusca	Bivalvia			Bivalvia (LPIL)	1
WTG-107	Mollusca	Gastropoda	Cephalaspidea	Haminoeidae	Haminoea solitaria	2
WTG-107	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	3
WTG-107	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	2
WTG-122	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	11
WTG-122	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	6
WTG-122	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	9
WTG-122	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	2
WTG-122	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-122	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-122	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	3
WTG-122	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	6
WTG-122	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	19
WTG-122	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	1
WTG-122	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-122	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	1
WTG-122	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	61
WTG-122	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	2
WTG-122	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	9
WTG-122	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	127

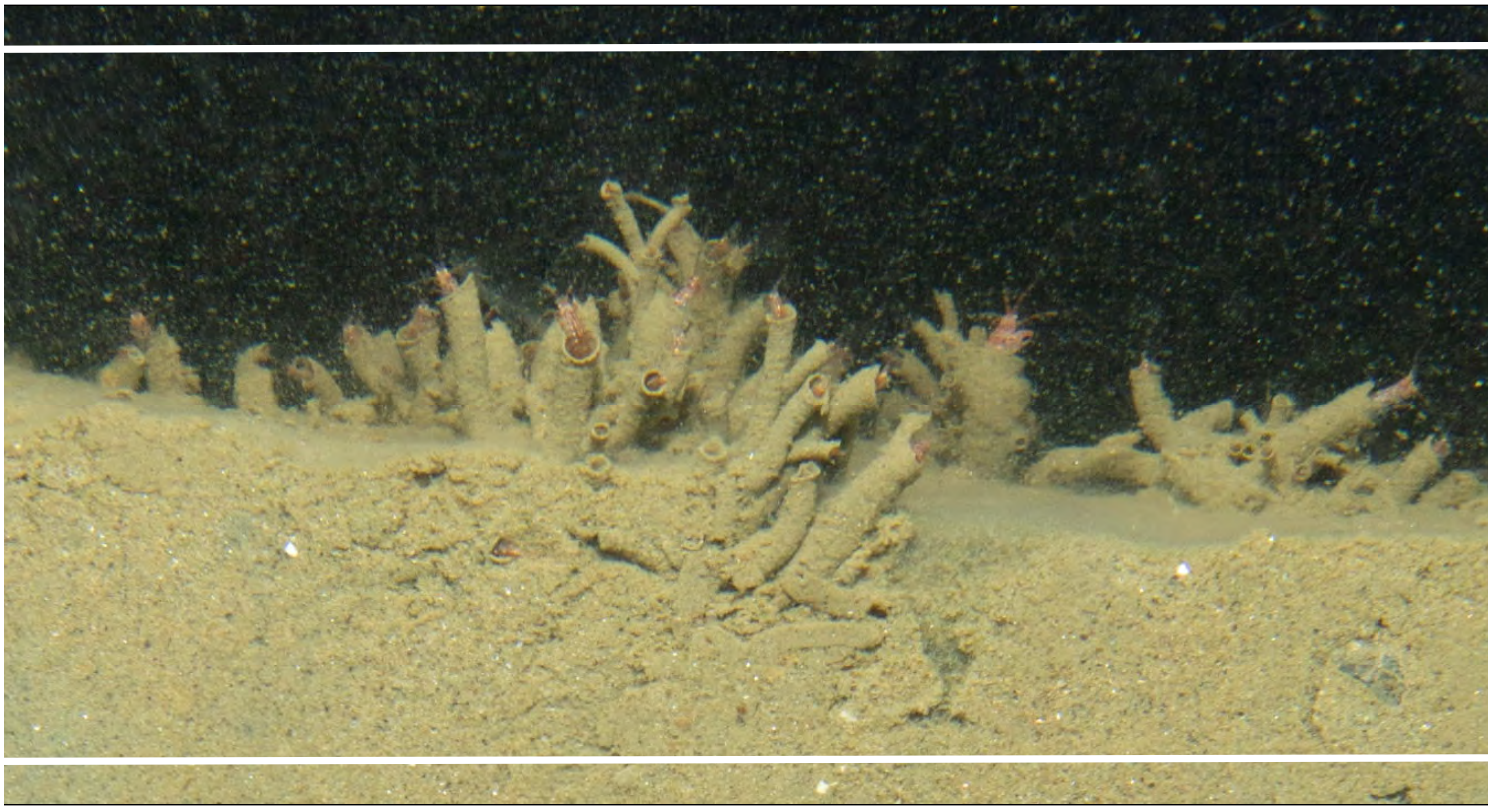
Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-122	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	2
WTG-122	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	39
WTG-122	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	1
WTG-122	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	4
WTG-122	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-122	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	4
WTG-122	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	9
WTG-122	Arthropoda	Malacostrac	Isopoda	Anthuridae	Ptilanthura tenuis	2
WTG-122	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	1
WTG-122	Cnidaria	Anthozoa	Actiniaria		Actiniaria (LPIL)	1
WTG-122	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	3
WTG-122	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	65
WTG-122	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	10
WTG-122	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	11
WTG-122	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	1
WTG-122	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	5
WTG-122	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-122	Mollusca	Gastropoda	Cephalaspidea	Cylichnidae	Cylichnidae (LPIL)	4
WTG-122	Mollusca	Gastropoda	Pyramidelloida	Pyramidellidae	Pyramidellidae (LPIL)	5
WTG-122	Nemertea				Nemertea (LPIL)	1
WTG-123	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	6
WTG-123	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	13
WTG-123	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	1
WTG-123	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	2
WTG-123	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	2
WTG-123	Echinodermata				Echinodermata (LPIL)	1
WTG-123	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	5
WTG-123	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	1
WTG-123	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	1
WTG-128	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	30
WTG-128	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	9
WTG-128	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	4
WTG-128	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	6
WTG-128	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	2
WTG-128	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-128	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	56
WTG-128	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys picta	1
WTG-128	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	1
WTG-128	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	2
WTG-128	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	1
WTG-128	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	3
WTG-128	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	74
WTG-128	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	4
WTG-128	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-128	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-128	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	27
WTG-128	Arthropoda	Arachnida	Acari		Acari (LPIL)	1
WTG-128	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	216
WTG-128	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	2
WTG-128	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	19
WTG-128	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	20
WTG-128	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	4
WTG-128	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	218
WTG-128	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	3
WTG-128	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	15
WTG-128	Arthropoda	Malacostrac	Amphipoda	Pleustidae	Stenopleustes inermis	1
WTG-128	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	1
WTG-128	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	3
WTG-128	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	1
WTG-128	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	11
WTG-128	Arthropoda	Malacostrac	Cumacea	Nannastacidae	Campylaspis (LPIL)	1
WTG-128	Arthropoda	Malacostrac	Isopoda	Anthuridae	Ptilanthura tenuis	2

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-128	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-128	Mollusca	Aplacophora			Aplacophora (LPIL)	1
WTG-128	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	5
WTG-128	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	63
WTG-128	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	12
WTG-128	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	19
WTG-128	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	7
WTG-128	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	9
WTG-128	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	1
WTG-128	Nemertea				Nemertea (LPIL)	3
WTG-134	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	28
WTG-134	Annelida	Pollychaeta	Phyllodocida	Polynoidae	Harmothoe extenuata	2
WTG-134	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	24
WTG-134	Annelida	Polychaeta	Eunicida	Dorvilleidae	Dorvilleidae (LPIL)	4
WTG-134	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	10
WTG-134	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	9
WTG-134	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	3
WTG-134	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	1
WTG-134	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	1
WTG-134	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-134	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae (LPIL)	2
WTG-134	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	13
WTG-134	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	14
WTG-134	Annelida	Polychaeta	Phyllodocida	Nereididae	Nereididae (LPIL)	1
WTG-134	Annelida	Polychaeta	Phyllodocida	Nereididae	Nereis succinea	1
WTG-134	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllidae (LPIL)	2
WTG-134	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	9
WTG-134	Annelida	Polychaeta	Scolecida	Capitellidae	Mediomastus (LPIL)	1
WTG-134	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	3
WTG-134	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	16
WTG-134	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	4
WTG-134	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	44
WTG-134	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-134	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-134	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	12
WTG-134	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	162
WTG-134	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	1
WTG-134	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	12
WTG-134	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	28
WTG-134	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	8
WTG-134	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-134	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	10
WTG-134	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	3
WTG-134	Arthropoda	Malacostrac	Isopoda	Anthuridae	Ptilanthura tenuis	2
WTG-134	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	6
WTG-134	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	3
WTG-134	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	12
WTG-134	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-134	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	1
WTG-134	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	7
WTG-134	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	6
WTG-134	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	3
WTG-137	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	2
WTG-137	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	7
WTG-137	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae (LPIL)	6
WTG-137	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	7
WTG-137	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-137	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Flabelligeridae (LPIL)	1
WTG-137	Annelida	Polychaeta	Flabelligerida	Flabelligeridae	Pherusa affinis	2
WTG-137	Annelida	Polychaeta	Opheliida	Opheliidae	Ophelina cf. acuminata	5
WTG-137	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	25
WTG-137	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-137	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	1
WTG-137	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	2
WTG-137	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	75
WTG-137	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	2
WTG-137	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	17
WTG-137	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	226
WTG-137	Arthropoda	Malacostrac	Amphipoda	Aoridae	Leptocheirus pinguis	7
WTG-137	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	15
WTG-137	Arthropoda	Malacostrac	Amphipoda	Caprellidae	Aeginina longicornis	2
WTG-137	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	11
WTG-137	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	118
WTG-137	Arthropoda	Malacostrac	Amphipoda	Lysianassidae	Lysianassidae (LPIL)	1
WTG-137	Arthropoda	Malacostrac	Amphipoda	Oedicerotidae	Monoculodes (LPIL)	1
WTG-137	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	11
WTG-137	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis polita	6
WTG-137	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	2
WTG-137	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	8
WTG-137	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	11
WTG-137	Arthropoda	Malacostrac	Cumacea	Nannastacidae	Cumella (LPIL)	1
WTG-137	Arthropoda	Malacostrac	Decapoda	Cancridae	Cancer (LPIL)	1
WTG-137	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	1
WTG-137	Mollusca	Aplacophora			Aplacophora (LPIL)	1
WTG-137	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	53
WTG-137	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	11
WTG-137	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	24
WTG-137	Mollusca	Bivalvia	Veneroida	Cardiidae	Cerastoderma pinnulatum	1
WTG-137	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	2
WTG-137	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	1
WTG-137	Mollusca	Gastropoda	Cephalaspidea	Cylichnidae	Cylichnidae (LPIL)	1
WTG-150	Annelida	Oligochaeta	Tubificida	Naididae	Naididae (LPIL)	4
WTG-150	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	5
WTG-150	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	10
WTG-150	Annelida	Polychaeta	Eunicida	Lumbrineridae	Scoletoma verrilli	8
WTG-150	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	1
WTG-150	Annelida	Polychaeta	Opheliida	Opheliidae	Armandia agilis	3
WTG-150	Annelida	Polychaeta	Opheliida	Opheliidae	Opheliidae (LPIL)	1
WTG-150	Annelida	Polychaeta	Opheliida	Scalibregmatidae	Scalibregma inflatum	1
WTG-150	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniada maculata	1
WTG-150	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	13
WTG-150	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtys incisa	9
WTG-150	Annelida	Polychaeta	Phyllodocida	Pholoidae	Pholoe minuta	1
WTG-150	Annelida	Polychaeta	Sabellida	Sabellidae	Chone (LPIL)	8
WTG-150	Annelida	Polychaeta	Scolecida	Maldanidae	Clymenella torquata	4
WTG-150	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	20
WTG-150	Annelida	Polychaeta	Scolecida	Paraonidae	Aricidea (LPIL)	1
WTG-150	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	53
WTG-150	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-150	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	1
WTG-150	Annelida	Polychaeta	Terebellida	Cirratulidae	Kirkegaardia dorsobranchi	1
WTG-150	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	21
WTG-150	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	166
WTG-150	Arthropoda	Malacostrac	Amphipoda	Aoridae	Unciola irrorata	2
WTG-150	Arthropoda	Malacostrac	Amphipoda	Isaeidae	Photis (LPIL)	7
WTG-150	Arthropoda	Malacostrac	Amphipoda	Ischyroceridae	Ericthonius brasiliensis	16
WTG-150	Arthropoda	Malacostrac	Amphipoda	Phoxocephalidae	Harpinia propinqua	4
WTG-150	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-150	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	4
WTG-150	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	2
WTG-150	Chordata	Ascidiacea			Ascidiacea (LPIL)	2
WTG-150	Echinodermata				Echinodermata (LPIL)	1
WTG-150	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	2
WTG-150	Mollusca	Bivalvia	Nuculida	Nuculidae	Nucula proxima	1

Station Name	Phylum	Class	Order	Family	Taxa	No.
WTG-150	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	14
WTG-150	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	7
WTG-150	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	11
WTG-157	Annelida	Polychaeta	Canalipalpata	Sternaspidae	Sternaspis scutata	1
WTG-157	Annelida	Polychaeta	Cossurida	Cossuridae	Cossura soyeri	85
WTG-157	Annelida	Polychaeta	Eunicida	Lumbrineridae	Ninoe nigripes	14
WTG-157	Annelida	Polychaeta	Eunicida	Oenonidae	Drilonereis longa	2
WTG-157	Annelida	Polychaeta	Orbiniida	Orbiniidae	Leitoscoloplos (LPIL)	1
WTG-157	Annelida	Polychaeta	Oweniida	Oweniidae	Galathowenia oculata	220
WTG-157	Annelida	Polychaeta	Phyllodocida	Hesionidae	Podarkeopsis levifuscina	2
WTG-157	Annelida	Polychaeta	Phyllodocida	Nephtyidae	Nephtyidae (LPIL)	20
WTG-157	Annelida	Polychaeta	Phyllodocida	Polynoidae	Harmothoe imbricata	1
WTG-157	Annelida	Polychaeta	Phyllodocida	Sphaerodoridae	Sphaerodoridium minutum	4
WTG-157	Annelida	Polychaeta	Phyllodocida	Syllidae	Syllis alternata	1
WTG-157	Annelida	Polychaeta	Sabellida	Sabellidae	Euchone (LPIL)	137
WTG-157	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae (LPIL)	5
WTG-157	Annelida	Polychaeta	Scolecida	Maldanidae	Maldanidae (LPIL)	105
WTG-157	Annelida	Polychaeta	Scolecida	Paraonidae	Levinsenia gracilis	91
WTG-157	Annelida	Polychaeta	Spionida	Spionidae	Spio setosa	4
WTG-157	Annelida	Polychaeta	Spionida	Spionidae	Spionidae (LPIL)	1
WTG-157	Annelida	Polychaeta	Spionida	Spionidae	Spiophanes wigleyi	11
WTG-157	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae (LPIL)	1
WTG-157	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae (LPIL)	52
WTG-157	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae (LPIL)	5
WTG-157	Annelida	Polychaeta	Terebellida	Trichobranchidae	Terebellides stroemi	45
WTG-157	Arthropoda	Malacostrac	Amphipoda	Ampeliscidae	Ampelisca vadorum	62
WTG-157	Arthropoda	Malacostrac	Cumacea	Diastylidae	Diastylis quadrispinosa	1
WTG-157	Arthropoda	Malacostrac	Cumacea	Diastylidae	Leptostylis longimana	3
WTG-157	Arthropoda	Malacostrac	Cumacea	Leuconidae	Eudorella pusilla	2
WTG-157	Arthropoda	Malacostrac	Isopoda	Idoteidae	Edotia triloba	4
WTG-157	Chordata	Ascidiacea			Ascidiacea (LPIL)	1
WTG-157	Cnidaria	Anthozoa	Actiniaria		Actiniaria (LPIL)	1
WTG-157	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	Amphiuridae (LPIL)	6
WTG-157	Echinodermata				Echinodermata (LPIL)	11
WTG-157	Mollusca	Bivalvia	Nuculanida	Yoldiidae	Yoldia limatula	1
WTG-157	Mollusca	Bivalvia	Pholadomyoida	Periplomatidae	Periploma papyratium	3
WTG-157	Mollusca	Bivalvia	Venerida	Veneridae	Veneridae (LPIL)	1
WTG-157	Mollusca	Bivalvia	Veneroida	Lucinidae	Lucinoma filosa	1
WTG-157	Mollusca	Bivalvia	Veneroida	Thyasiridae	Thyasira trisinuata	6
WTG-157	Mollusca	Gastropoda			Gastropoda (LPIL)	2
WTG-157	Nemertea	Anopla	Heteronemertea	Lineidae	Lineidae (LPIL)	7
WTG-157	Nemertea	Anopla	Paleonemertea	Tubulanidae	Tubulanus sp. A	1
WTG-157	Nemertea				Nemertea (LPIL)	1

ATTACHMENT D| SPI/PV ANALYSIS AND REPORT



Attachment D
Beacon Wind Lease Area Sediment Profile Imaging Survey 2021

Prepared for CSA Ocean Sciences Inc.
and MMT US Inc.

For submittal to:
Equinor Wind US, LLC and
Beacon Wind, LLC

February, 2022

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Cover Photograph: Image taken with the SPI camera in the Lease Area at station WTG-078 showing a cluster of tube-building amphipods, most likely *Ampelisca vadorum,* identified as the most abundant species in the Lease Area from the taxonomic data analysis.

ACRONYMS AND ABBREVIATIONS

aRPD	apparent redox potential discontinuity
BOEM	Bureau of Ocean Energy Management
CMECS	Coastal and Marine Ecological Classification Standard
COP	Construction and Operations Plan
DSLR	digital single-lens reflex
EFH	essential fish habitat
EST	eastern standard time
GIS	geographic information system
IAC	interarray cable
NEMESIS	National Exotic Marine and Estuarine Species Information System
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NYS	New York State
OIS	Ocean Imaging Systems
OSI	Organism-Sediment Index
PV	plan view imaging
PVS	potentially vulnerable species
SAV	submerged aquatic vegetation
SOD	sediment oxygen demand
SPI	sediment profile imaging
SWI	sediment water interface
TOC	total organic carbon
UTC	Coordinated Universal Time
WTG	wind turbine generator

EXECUTIVE SUMMARY

The results and reporting of this sediment profile imaging (SPI) and plan view (PV) survey of Equinor Wind US, LLC's (Equinor) Beacon Wind, LLC (Beacon Wind) Lease Area (OCS-A 0520) is intended to provide data for the submittal of a Renewable Energy Construction and Operations Plan (COP) to the Bureau of Ocean Energy Management (BOEM).

A SPI and PV imaging survey was conducted at the Lease Area in support of a benthic assessment to document seafloor habitat and contribute toward understanding of the benthic environment and Essential Fish Habitat (EFH) per the BOEM (2019) and the National Marine Fisheries Service (NOAA Fisheries 2021) guidelines and recommendations. This baseline SPI/PV seafloor survey, in conjunction with the collection of sediment grain size, sediment total organic carbon (TOC) and benthic biota taxonomic analyses presented in the Benthic Report for Lease Area OCS-A 0520 (Beacon Wind), characterizes the benthic habitat within the Lease Area that may be affected by the proposed construction and operations of the Beacon Wind project.

High-resolution SPI images were collected using an Ocean Imaging Systems (OIS) model 3731 digital sediment-profile camera and the high-resolution PV images were captured using a downward-facing underwater Chimaera MKII camera with external flash, manufactured by SubC Control, Newfoundland, Canada. At every sampling location, the SPI/PV camera system was dropped three times and the two best SPI and PV images were selected for analysis. After each drop, the camera system was raised 30 ft (10 m) from the sea-floor and the next drop was placed within 30 to 49 ft (10 to 15 m) from the previous drop. Three drops were performed within the 66 ft (20 m) diameter target area.

Since the interarray cable and foundation stations were located within the Lease Area, and the interarray cable stations were located in between the foundation stations, all stations were treated as a single dataset for the SPI/PV image analysis. That is, no distinction was made between interarray cable and foundation station locations except for their geographical locations on tables and maps. The findings of this SPI and PV imaging survey at a total of 157 foundation stations and 218 interarray cable stations were as follows:

SPI Results

- The grain size major mode of surface sediments was silt and clay (≥4 phi) with increasing sands to the northeast in the Lease Area. The distribution of Coastal and Marine Ecological Classification Standard (CMECS) substrate group and subgroup classifications followed a similar pattern, with a dominant substrate group in the Lease Area of sandy mud followed by muddy sand. The general distribution was sandy mud in the southwest, trending to muddy sand to the northeast.

- SPI camera prism penetration, a proxy for sediment water content and shear stress, was deep throughout the lease area averaging 5.6 in ± 0.5 in (14.3 cm ± 1.3 cm; n = 750). Lower prism penetration was observed where surface sediments consisted of medium or coarse sand (average of 3.3 in ± 1.6 in [8.5 cm ± 4.1 cm; n=42]).
- Mean small-scale boundary roughness, or surface relief, ranged from 0 to 2.5 in (0 to 6.3 cm) with a mean of 0.4 in (1.0 cm) for the Lease area. The highest mean boundary roughness values were measured at stations in the northeast portion of the Lease Area, due to physical roughness (surface ripples).
- The apparent redox potential discontinuity (aRPD) depths showed an increasing trend to the northeast in the Lease Area. The deeper aRPD depths were generally correlated with the presence of very fine and fine sands.
- Deeper SPI prism penetration was observed in the deeper areas to the south of the lease area, but also in the region to the north with very fine and fine sand.
- Stage III, the highest infaunal successional stage was observed in 90 percent of SPI replicates in the Lease Area sediments. Stage III is the advanced successional stage where larger head-down deposit feeding organisms are present, which create feeding voids. Several SPI images showed Stage I and Stage II communities coexisting with Stage III communities.
- Non-native taxa were not identified in SPI images at any location in the Lease Area.
- Evidence of high sediment oxygen demand (SOD) was not observed in any surface sediments within the Lease Area.
- The Organism-Sediment Index (OSI), a general measure of benthic habitat quality, ranged from +4 to +11. OSI values showed a general increasing trend toward the northeast. The vast majority (99 percent) of OSI values in the Lease Area were +6 or higher representing relatively undisturbed ambient conditions. OSI values of +4 to +5 were measured in small clusters (4 stations each) in the northeast, central northern perimeter, and the central southern portion of the Lease Area. Those specific clusters of locations where OSI was less than +6 showed the presence of medium or coarse sand, which is a habitat type that can remain in an earlier infaunal successional stage.

PV Results

- Sediment bedforms (small and large ripples) were identified in 45 percent of PV images in the Lease Area.
- This survey recorded the identification of taxa, in particular long-lived and habitat-forming species that are particularly vulnerable to project impacts (e.g., sponges, anemones, bryozoans, hydrozoans, corals, tunicates, and bivalves) as

described by NOAA/NMFS Updated Recommendations for Mapping Fish Habitat (2021). Species vulnerable to project impacts, were categorized as Potentially Vulnerable Species (PVS) for image analysis.

- Single squid egg mops were observed at four stations out of 357 stations and accounted for one percent of the total number of stations.
- A single scallop specimen was observed on the northwest portion of the Lease Area, accounting for 0.3 percent of total stations
- Other PVS observed accounted for 8.0 percent of total number of stations sampled (30 out of 375 stations) and included bivalves, sponges, and scallops and described as follows.
    - Ceriantharia was found in 27 stations (7.0 percent of all stations), mostly in the southwest portion of the Lease Area.
    - Bivalves were observed in 25 stations (6.6 percent of all stations), mostly in the central and northeast portion of the Lease Area.
    - Three single sponge colonies, were observed on the northwest portion of the Lease Area, accounting for 0.8 percent of total stations.
- Emergent fauna in the form of clusters of tube-dwelling amphipods (possibly *Ampelisca vadorum*) were the dominant organism observed in the Lease Area, with documented presence at 85 percent of the foundation and interarray cable stations. The organism itself is not classified as a species potentially vulnerable to project impacts. Tube-dwelling amphipods were absent in areas of fine and very fine sand located at the northwest portion of the Lease Area. However, they were also absent from the southwest area with no correlation with grain size.
- Other infaunal organisms observed in PV images in the Lease Area were dominated by bivalves (estimate of 3,300 siphons counted), followed by 157 sand dollars (*Echinarachnius parma*) and 69 Ceriantharia (tube-dwelling anemones). Sand dollars were present as both infauna and mobile epifauna. The dominant mobile epifauna was the sand dollar (*E. parma*) (quantity 5,480), followed by 1,100 shrimp and 225 hermit crabs (Paguroidea). The most common fish observed included 30 right eye flounders (Pleuronectidae), 20 unidentified fish, and 12 sea robin (Triglidae).
- Non-native taxa were not identified in PV images at any location in the Lease Area.
- No submerged aquatic vegetation (e.g., eelgrass beds or marine macrophytes) was observed in the Lease Area.
- The CMECS Biotic Subclasses determined from PV images were either Soft Sediment Fauna or Inferred Fauna (i.e., fauna inferred from the presence of tracks/trails, mounds, or other features related to faunal movement or bioturbation) (CMECS 2012), and both subclasses were evenly distributed

throughout the Lease Area. Soft Sediment Fauna was the dominant Biotic Subclass, present in 70 percent of PV images in the Lease Area. Free-swimming organisms such as fishes, squids, or marine mammals that can actively move through the water column were not used to define either biotic setting (CMECS 2012).

1.0 Introduction

The results and reporting of this sediment profile imaging (SPI) and plan view (PV) survey of Equinor Wind US, LLC's (Equinor) Beacon Wind, LLC (Beacon Wind) Lease Area (OCS-A 0520) are intended to provide data for the submittal of a Renewable Energy Construction and Operations Plan (COP) to the Bureau of Ocean Energy Management (BOEM).

1.1 Description of Proposed Action

The following describes the main site conditions that encompass this project.

1.1.1 Lease Area – Site Conditions

Beacon Wind proposes to construct and operate an offshore wind facility located in the designated Renewable Energy Lease Area OCS-A 0520 (Lease Area). The Lease Area covers approximately 128,811 acres (ac; 52,128 hectares [ha]) and is located approximately 20 statute miles (mi) (17 nautical miles [nm], 32 kilometers [km]) south of Nantucket, Massachusetts and 60 mi (52 nm, 97 km) east of Montauk, New York (Figure 1). This report presents the results of a SPI and PV imaging survey conducted at the Lease Area in support of the benthic assessment described in Section 1.2. A description of the site-specific survey plan, SPI and PV methods, and image analysis parameters are provided in Section 2.0. The site-specific SPI and PV results are presented in Section 3.0. Section 4.0 provides a summary of SPI and PV survey results, and references are listed in Section 5.0.

1.2 Benthic Assessment Background

A benthic assessment was conducted to document seafloor habitat and contribute toward understanding the benthic environment and essential fish habitat (EFH) within the proposed development area per the BOEM (2019), the National Oceanic and Atmospheric Administration and the National Marine Fisheries Service recommendations (NOAA Fisheries 2021). This report is an Attachment D to the Benthic Report for Lease Area OCS-A 0520 (Beacon Wind).

Data were collected during the baseline survey to incorporate multiple lines of evidence including: 1) review of existing literature on marine biological communities in the region (provided under separate cover); and 2) the collection of field data [i.e., sediment grab samples for analysis of physical parameters such as grain size and total organic carbon (TOC); benthic infaunal community analysis; and SPI and PV imagery analyses].

Consistent with the 2019 BOEM guidance and the 2021 NOAA Fisheries recommendations, the objectives of this benthic habitat survey are to:

- Identify and confirm dominant benthic macrofaunal and macrofloral communities and substrate in the Lease Area.
- Establish a pre-construction baseline that may be used to assess whether detectable changes occurred in post-construction benthic habitat associated with proposed operations
- Collect information aimed at supporting spatial planning, routing, and siting decisions.

- Collect information aimed at reducing uncertainty associated with existing conditions and/or to inform the interpretation of survey results.
- Obtain information to determine and develop an approach to identify quantifiable changes on existing benthic community conditions that may be affected by the development of the Project
- Determine the presence of sensitive benthic habitats, which include areas where information suggests the presence of exposed hard bottoms of high, moderate, or low relief; hard bottoms covered by thin, ephemeral sand layers; seagrass patches; or kelp and other algal beds, as well as the presence of species that are vulnerable to project impacts.
- Provide data to inform the EFH assessment.

2.0 Site-Specific SPI/PV Survey Plan and Implementation

A record of sampling stations (Figure 1) surveyed with the SPI/PV camera were kept field notebooks and transcribed into field forms (Addendum A). Actual sample coordinates were obtained from MMT US Inc. navigational team and incorporated into the field forms for reporting (Addendum B). A catalogue of SPI and PV images are found in Addendum E for 157 foundation stations (station names are designated as WTG-###) and Addendum F for 218 interarray cable stations (station names are designated as IAC-###).

2.1 Location of Stations and Navigation

The actual location of stations sampled during this survey within the Beacon Wind Lease Area are located in the Field Forms provided in Addendum B.

2.1.1 Coordinate Reference System

The following are the specifications used for navigation and obtaining the actual sample coordinates during the survey. MMT was in charge of navigation and recording of actual sample sampling locations on board the M/V Deep Helder operated by the Dutch company Seamar (Den Helder, The Netherlands).

Horizontal Control

Datum / Spheroid
CRS: NAD83(2011) (EPOCH 2010.0)
EPSG ID: 6318
Ellipsoid: GRS80
EPSG ID: 7019
Semi-Major Axis: 6378137.0000m
Inverse flattening: 298.257222101

Projection
Conversion: *Universal Transverse Mercator Zone 19N*
Type of Projection: Transverse Mercator
Latitude of Origin: 0° North
Longitude of Origin: 75°West
Northing of Origin: 0 m
Easting of Origin: 500 000m
Scale at Origin: 0.99960

Projected CRS
Name: NAD83(2011) / UTM zone 19N
EPSG ID: 6347

Coordinated Universal Time (UTC) was used for times records. However, SPI and PV locations were reported in local date and local time - Eastern Standard Time (EST).

Vertical Control

Vertical Datum (NOAA 2018)
North American Vertical Datum of 1988 (NAVD 88)
EPSG ID: 5703
Geoid model: NAVD 88
Depths are presented in MLLW using NOAA VDATUM.

Subsea Positioning

Raw USBL positioning was stable throughout the whole water column with occasional single dropouts. The ROVINS inertial system was used to further improve subsea navigation. The difference between both systems remained within required specification.

2.2 Sediment Profile and Plan View Image Collection

SPI and PV imaging are useful reconnaissance tools that provide a holistic assessment of benthic habitat and sediment condition (e.g., anoxic, oxidized, or infaunal successional stage) and allows for a determination of the overall health of the benthic habitat (Germano et al. 2011, Rhoads and Germano 1982). A description of the instrumentation and image collection methods are provided below. The SPI and PV image analysis parameters are described in Section 2.3.

2.2.1 Sediment Profile Imaging

High-resolution SPI was collected within the Lease Area using an Ocean Imaging Systems (OIS) model 3731 digital sediment-profile camera (Figure 2). The sediment-profile camera consisted of a wedge-shaped prism with a Plexiglas face plate and a back mirror mounted at a 45-degree angle. Light was provided by an internal strobe. The mirror reflected the image of the profile of the sediment-water interface up to a Nikon® D7100 digital single-lens reflex (DSLR) camera with an internal strobe light was mounted horizontally on top of the prism. The camera obtained images of up to 8 in (20 cm) of the upper sediment column in profile.

The camera prism was mounted on an assembly that was moved up and down within a stainless-steel frame by allowing tension or slack on the winch wire. As the camera was lowered, tension on the winch wire kept the prism in the up position. Once the camera frame touched the bottom, slack on the winch wire allowed the prism to vertically intersect the seafloor. The rate of fall of the prism of 2.4 in/second (6 cm/second) was controlled by an adjustable passive hydraulic piston, which minimized the disturbance of the sediment-water interface.

Upon impact with the seafloor, the SPI trigger was tripped activating a 15 second time-delay on the camera shutter release allowing the prism to obtain maximum penetration before an image was collected. After an image was collected, the camera was raised 10 m from the bottom, a wiper blade automatically cleaned off any sediment adhering to the prism faceplate, and the strobes were recharged. The camera was then moved to the next replicate location within 33 to 49 ft (10 to 15 m) from each other but within the 66 ft (20 m) diameter boundary area. Once at the new location, the SPI camera was then lowered to the sea-floor to collect another replicate

image. The SPI camera was lifted and dropped at each sampling location a minimum of three times to provide a minimum of two acceptable SPI images per location. Once the camera was brought to the surface, a portable laptop computer was connected to the camera via a USB port and the images were downloaded.

Two weight racks, each capable of holding 125 lb (57 kg) of lead [in 25 lb (11 kg) increments] can be loaded to increase penetration (Figure 2). If penetration was too great, adjustable stops, which controlled the distance the prism can descend, could be lowered, or "mud" doors could be attached to each side of the frame to increase the bearing surface of the entire unit and prevent over penetration of the SPI prism into the sediment.

Date and time of image acquisition, water depth, frame stop-collar position, and the number of weights used were recorded in the field logs for each replicate image (Addendum A).

The internal clock in the digital SPI system was synchronized with the vessel's navigation system using the local date and U.S. EST. Each image was assigned a unique time stamp in the digital file attributes by the camera's data logger and cross-checked with the time stamp in the navigational system's computer data file. Digital image files were renamed with the appropriate station names prior to image analysis.

2.2.2 Plan View Imaging

High-resolution plan view images were captured using a downward-facing underwater Chimaera MKII camera with external flash, manufactured by SubC Control, Newfoundland, Canada (Figure 2). The Chimaera MKII was equipped with dual lasers located 2.5 in (6.25 cm) apart, which allowed an accurate scale to be applied to each image. The PV camera and external flash were mounted on the frame of the SPI camera in a downward-looking orientation. Images were collected just before the SPI camera touched the seafloor, using a 5 lb (2 kg) lead ball attached to a trigger cable, which in turn, was attached to a bounce trigger. The trigger cable length was changed depending on water clarity. The clearer the water, the 1.3 m trigger cable was used. At turbid waters, the 0.5 m trigger cable was used. When the SPI camera was raised from the bottom, the bounce trigger was automatically reset, and the PV camera was ready to take another image. The total surface area captured in the PV camera field of view increased or decreased depending on water clarity at the site. On average, the plan view camera captured a 7.5 ft^2 (0.7 m^2) area of the seafloor during the Lease Area survey. An attempt was made to collect triplicate PV images at each station in conjunction with each of the triplicate SPI camera drops. A minimum of two interpretable PV images were analyzed at each station. The initial distance between drops was 33 ft (10 m). However, on several occasions the PV images were capturing the bottom disturbance of the previous drop rendering the image useless for analysis. The distance between drops was then increased to 49 ft (15 m) apart. Each drop was taken within the 66 ft (20 m) diameter sample target boundary area.

2.3. SPI/PV Data Analysis

The following subsections describe the major components of analysis for SPI and PI images.

2.3.1 Sediment Profile Image Analysis

Computer image analysis of SPI images followed a formal and standardized technique developed by Rhoads and Germano (1982, 1986). Physical and biological parameters were measured directly from the digital SPI images by an image analyst using a Geographic Information System (GIS)-based image analysis platform. Descriptive comments were also recorded for each image.

- Grain size major mode and sediment type
- Prism penetration depth
- Surface boundary roughness
- Apparent redox potential discontinuity (aRPD) depth
- Infaunal successional stage (presence and absence of feeding voids)
- Sediment oxygen demand proxies (presence/absence of methane, sulfate-reducing bacteria)
- Organism-Sediment Index (OSI) calculation (derived from depth of the aRPD, infaunal successional stage, presence or absence of sedimentary methane and dissolved oxygen condition inferred from sediment oxygen demand proxies)
- CMECS Substrate Group and Subgroup.

2.3.1.1 Grain Size Major Mode and Sediment Type

The sediment grain-size major mode and range, in phi units, are visually determined from the SPI images by overlaying a grain-size comparator at the same scale. This comparator was prepared by photographing a series of Udden-Wentworth size classes (equal to or less than coarse silt up to granule and larger sizes) through the SPI optical system. Seven grain-size classes are provided on the grain-size comparator used for this survey: $\geq$ 4 phi (silt/clay), 4 to 3 phi (very fine sand), 3 to 2 phi (fine sand), 2 to 1 phi (medium sand), 1 to 0 phi (coarse sand), 0 to -1 phi (very coarse sand), and < -1 phi (gravels). The lower limit of optical resolution on the SPI camera is approximately 0.025 in (62 μm) ($\geq$ 4 phi), allowing recognition of grain sizes equal to or greater than coarse silt. The accuracy of this method of grain size comparison has been documented by comparing SPI estimates using a grain-size comparator with grain-size statistics determined from laboratory sieve analyses (SAIC 1986).

2.3.1.2 Prism Penetration Depth

The prism penetration depth was determined by measuring both the largest and smallest linear distance between the sediment-water interface and the bottom of the film frame. Observations regarding the nature and condition of the sediment-water interface are also recorded. Comparative penetration depths from stations of similar grain-size give an indication of relative sediment water content and shear strength.

2.3.1.3 Surface Boundary Roughness

Surface boundary roughness is determined by measuring the vertical distance (parallel to the image border) between the highest and lowest points of the sediment-water interface. In addition, the origin (physical or biogenic) of this small-scale topographic relief is sometimes

evident and can be recorded. In sandy sediments, boundary roughness can be a measure of sand-wave height. On silt-clay bottoms, boundary roughness values often reflect biogenic features such as fecal mounds or surface burrows. These features are abundant only in areas where boundary shear stresses are low enough that such delicate features are preserved. Other surface features are noted when evident, including shell fragments/lag deposits, mud-clay clasts, and wood debris. Physical surface disturbances (e.g., surface ripples) can often introduce high surface relief on an otherwise "smooth" bottom.

2.3.1.4 Apparent Redox Potential Discontinuity Depth

The depth of the apparent redox potential discontinuity depth (aRPD), which is the change from oxidized to reduced sediment, can be measured using SPI imaging and computer image analysis. The upper surface of aerobic fine-grained sediments has a higher light reflectance value than underlying hypoxic or anoxic sediments. This is readily apparent in SPI images and is due to oxidized surface sediment that contains minerals in an oxidized state (typically an olive brown color), while the reduced sediments below this oxygenated layer are generally green, gray, blue, or black. The boundary between the colored ferric hydroxide surface sediment and underlying sediment is called the aRPD. The aRPD is a sensitive indicator of infaunal succession, sediment bioturbation activity, and sediment oxygen demand. The depth of the aRPD has proven to be a useful parameter for mapping gradients of enrichment on the seafloor (Rhoads and Germano 1982, Lyle 1983).

The actual RPD is the boundary that separates the positive Eh region (presence of free oxygen) of the sediment column from the underlying negative Eh region (absence of free oxygen). The exact location of the Eh boundary (where Eh = 0) can only be determined with microelectrodes. Therefore, the reflectance boundary observed in the SPI images is termed the aRPD. In general, the depth of the actual RPD can be similar to or shallower than the depth of the aRPD, because organisms cause bioturbation of ferric hydroxide-coated particles downward below the Eh = 0 horizon. As a result, the aRPD depth provides an estimate of the degree of biogenic sediment mixing. Bioturbation vertically transports buried reduced compounds to the sediment surface and exposes them to an oxidizing water column (Aller 1982). Bioturbation also affects sediment transport by changing the physical properties of sediments and their mechanical behavior (Rhoads and Boyer 1982).

Another important characteristic of the aRPD is the contrast in reflectance values at this boundary. This contrast is related to the interactions among the degree of organic-loading in the sediment, bioturbation, and bottom-water dissolved oxygen levels. High inputs of labile organic material increase sediment oxygen demand, stimulate sulfate reduction rate, and result in sulfidic products. This results in more highly reduced (lower-reflectance) sediments at depth and higher aRPD contrasts. In a region where generally low aRPD contrasts exist, images with high aRPD contrasts indicate localized sites of relatively high inputs of organic-rich material.

In sandy sediments that have very low sediment oxygen demand (SOD), the sediment may lack a visibly reduced layer even if an aRPD is present. Because the determination of the aRPD requires discrimination of optical contrast between oxidized and reduced particles, it may be difficult to determine the depth of the aRPD in well-sorted sands with little to no silt or organic matter.

2.3.1.5 Infaunal Successional Stage

The mapping of infaunal successional stages from SPI images is based on the theory that organism-sediment interactions follow a predictable sequence after a major seafloor perturbation. This theory states that primary succession results in "the predictable appearance of macrobenthic invertebrates belonging to specific functional types following a benthic disturbance and these invertebrates interact with sediments in specific ways. Moreover, functional types are the biological units of interest, and by definition do not demand a sequential appearance of particular invertebrate species or genera" (Rhoads and Boyer 1982).

Infaunal succession following a major seafloor disturbance initially involves pioneering populations (Primary or Stage I succession) of very small organisms that live at or near the sediment/water interface (Pearson and Rosenberg 1978, Rhoads and Germano 1986). In the absence of further disturbance, infaunal deposit feeders eventually replace these early successional assemblages. The start of this "infaunalization" process is designated as Stage II. Large, deep-burrowing infauna (Stage III taxa) represents a high order successional stage typically found in areas of low disturbance. Pioneering assemblages (Stage I assemblages) usually consist of dense aggregations of near-surface living, tube-dwelling polychaetes; alternately, opportunistic bivalves may colonize in dense aggregations after a disturbance (Rhoads and Germano 1982, Santos and Simon 1980). These functional types are usually associated with a shallow redox boundary; and bioturbation depths are shallow, particularly in the earliest stages of colonization (Figure 3).

Many deep-burrowing infauna feed at depth in a head-down orientation. This localized feeding activity results in distinctive excavations called feeding voids. Diagnostic features of these feeding structures include a generally semicircular shape with a flat bottom and arched roof, and a distinct granulometric change in the sediment particles overlying the floor of the structure. The relatively coarse-grained material represents particles rejected by head-down deposit-feeders, as this deep-dwelling infauna preferentially ingest the finer sediment particles. Other subsurface structures, including burrows or methane bubbles, do not exhibit these characteristics. The bioturbation activities of these deposit-feeders are responsible for aerating the sediment and causing the redox horizon to be located several centimeters below the sediment-water interface.

The presence of Stage III feeding voids indicates the presence of Stage III organisms. The mapped distribution of deep infaunal assemblages may be useful in identifying undisturbed sites in both shallow and deep-water environments. In sediment environments rich in labile organic material, it is not uncommon to observe Stage I communities coexisting with Stage II or III communities (Rhoads and Germano 1986). These mixed infaunal stages are classified as Stage I on II, or Stage I on III.

In sandy, dynamic environments, the climax communities may consist primarily of surface dwellers that reside in the upper cm of the sediment surface and have few if any naturally burrowing community members. These type communities are classified as Stage I communities by SPI image analysis reflective of an area influenced by physical factors (e.g., higher energy) and the presence of a sandy substrate, rather than a higher order successional stage that would

typically be assigned a climax community (as described above) in a depositional environment dominated by a silt/clay substrate.

2.3.1.6 Sediment Oxygen Demand Proxies

Sediment oxygen demand (SOD) represents the overall rate of oxygen consumption in surface sediments from chemical and biological processes. The relative amount of organic enrichment is indicated by sediment color; darker coloration indicates more reduced sediments with greater organic loading and higher SOD (Fenchel 1969, Rhoads 1974, Lyle 1983).

Under high organic matter loading and subsequently high SOD, microbial sulfate reduction proceeds and may completely deplete porewater sulfate concentrations. Under these conditions, methanogenesis can occur, leading to methane bubbles in the sediment column. In SPI, methane appears as irregular shaped gas-filled voids with a glassy texture (due to the reflection of the strobe off the gas bubble).

Similarly, under highly reduced anoxic conditions, sulfate-reducing bacterial colonies (*Beggiatoa*) can exist on the sediment surface (at the interface between oxic and anoxic conditions). Bacterial colonies typically live within sediments and their presence on the surface indicates the lack of oxygen in underlying sediments. Bacterial mats can have the appearance of layers of white fibrous material overlying sediments that may appear black and anoxic (Nilsson and Rosenberg 1997, Germano et al. 2011).

2.3.1.7 Organism-Sediment Index

The OSI provides a measure of general benthic habitat quality based on the depth of the aRPD, infaunal successional stage, presence or absence of sedimentary methane and dissolved oxygen condition inferred from sediment oxygen demand proxies (Rhoads and Germano 1986). The OSI is a numerical index ranging from -10 to +11. The lowest value is given to bottom sediments with low or no dissolved oxygen in the overlying bottom water, no apparent macrofaunal life, and methane gas present in the sediment. High OSI values are given to aerobic bottom sediments with a deep aRPD, mature macrofaunal community, and no methane gas. The numerical values and ranges used in calculating the OSI are provided in Table 2.

2.3.1.8 CMECS Substrate Group and Subgroup

The SPI images were used to classify the substrate following CMECS classifications as modified for EFH assessments (NOAA Fisheries 2021). The surface layer[1] in the Lease Area was limited to the Fine Unconsolidated Substrate Subclass, which contains less than 5 percent gravel. The following substrate group and subgroups were included in the classifications for the Lease Area:

Substrate Group: Sand – Geologic Substrate surface layer composed of ≥90 percent sand

Substrate subgroup: Very Coarse/Coarse Sand[2] – Geologic Substrate surface layer composed of ≥90 percent sand, with a median grain size of 0.5 mm to <2 mm

[1]The surface layer in the Lease Area consisted of the upper 6 in (15 cm) of soft substrate as defined in CMECS (FGDC 2012).

[2] Indicates a CMECS classification that was modified by combining subclasses or subgroups, or a new classification added to simplify classification for habitat delineation (NOAA Fisheries 2021).

Substrate subgroup: Medium Sand – Geologic Substrate surface layer composed of ≥90 percent sand, with a median grain size of 0.25 mm to <0.5 mm

Substrate subgroup: Fine/Very Find Sand[2] – Geologic Substrate surface layer composed of ≥90 percent sand, with a median grain size of 0.0625 mm to <0.25 mm

Substrate Group: Muddy Sand – Geologic Substrate surface layer contains 50 percent to <90 percent sand and <5 percent gravel

Substrate Group: Sandy Mud – Geologic Substrate surface layer contains 10 percent to <50 percent sand and <5 percent gravel

Substrate Group: Mud – Geologic Substrate surface layer contains ≥90 percent mud and <5 percent gravel

2.3.2 Plan View Image Analysis

PV images provide a downward facing field of view of the seafloor. Typical parameters measured from PV images include sediment topography, structures such as feeding mounds and burrows openings, observations of shell hash, benthic algae, larger macrofauna, epifauna, and/or fish/invertebrates, bacterial colonies, and bedforms. Descriptive comments were recorded for each replicate PV image. The field-of-view for the PV images was measured using the scale information provided by the underwater lasers (i.e., the measurement between two laser points with a known distance of 2.5 in [62.5 mm]). SPI images were used to aid in the PV analysis whenever details in structure or biota could not be resolved in the PV image. PV image analysis results were also used for verification and confirmation of observations made in synoptic SPI images.

2.3.2.1 Bedforms

Sediment bedforms such as ripples and sand waves are physical features visible on the seafloor that develop because of hydrodynamic conditions. For example, short wavelength ripples on a sandy bottom can suggest active bedload transport In contrast, fine-grained sediments in a quiescent depositional environments may show biological structures with little to no surficial bedforms. The view of the seafloor provided in most of the PV images collected was less than one square meter, which is a relatively small area to distinguish bedforms that exist over larger scales (e.g., sand waves or dunes).

2.3.2.2 Fauna and Flora Presence

Where visible in PV images, flora and fauna were identified to the lowest possible taxonomic group. The inferred presence of fauna was identified through observations of burrows, tubes, tracks, foraging pits, and fecal casts. The presence of surficial tubes and deep voids were also noted in SPI images. Fauna were grouped into several categories: infauna, sessile epifauna, mobile epifauna, emergent fauna, flora, fish, presence of eggs, , and non-native taxa. Epifauna taxa is a CMECS modifier (Associated Taxa), adding detail to the CMECS classifications. Where attached flora and fauna were present in PV images, the percent coverage of the image was estimated using the CMECS Percent Cover Modifier (FGDC 2012).

2.3.2.3 Taxa Potentially Vulnerable to Project Impacts

Sensitive seafloor habitats include corals, submerged aquatic vegetation (SAV) beds, and valuable cobble and boulder habitat (BOEM 2019, NOAA Fisheries 2021). Taxa that are vulnerable to project impacts such as long-lived and habitat-forming species like sponges, anemones, bryozoans, hydrozoans, corals, tunicates, and bivalves (NOAA Fisheries 2021) were grouped into the category of Potentially Vulnerable Species (PVS) for image analysis. Other PVS such as squid eggs, black sea bass and sea scallop, were also taken into consideration (Guida et al. 2017).

The percent cover of emergent fauna was documented, recognizing that three-dimensional structures created by tube-forming amphipods represented a primary source of ephemeral habitat complexity within the Lease Area (Auster et al. 1997) but are not considered sensitive habitat by either BOEM or NOAA Fisheries. Presence/absence of each PVS was noted for each replicate PV and SPI image.

2.3.2.4 Non-Native Taxa

The introduction of non-native species to the water column and benthic habitat is an important concern related to offshore development. The introduction of new structures to the seafloor (e.g., concrete mattresses) during construction may also lead to the introduction of non-native species. References for potential non-native species included the Northeastern Aquatic Nuisance Species Panel (https://www.northeastans.org/) and the National Exotic Marine and Estuarine Species Information System database (NEMESIS) curated by the Smithsonian Environmental Research Center. Species recognized as introduced (non-native) were not identified at the Lease Area.

2.3.2.5 CMECS Biotic Subclass

The Biotic Component of CMECS is a classification of the living organisms of the seabed and water column together with their physical associations at a variety of spatial scales. The Biotic Component is organized into a branched hierarchy of five nested levels: Biotic Setting, Biotic Class, Biotic Subclass, Biotic Group, and Biotic Community (FGDC 2012).

The PV images from the Lease Area were used to determine the CMECS Biotic Subclass, the key CMECS classifier that presents information about the surveyed area in terms of physical habitat and the potential presence of sensitive taxa. The dominant Biotic Subclass and a Co-occurring Biotic Subclass (next dominant by percent cover) were determined. Within the Faunal Bed class, which was the most relevant to the Lease Area, the three Biotic Subclasses were Attached Fauna, Soft Sediment Fauna, and Inferred Fauna. The descriptions of the three Biotic Subclasses are cited in FGDC (2012) and presented below:

- **Attached Fauna** – Areas characterized by rock substrates, gravel substrates, other hard substrates, or mixed substrates that are dominated by fauna which maintain contact with the substrate surface, including firmly attached, crawling, resting, interstitial, or clinging fauna. Fauna may be found on, between, or under rocks or other hard substrates or substrate mixes. These fauna use pedal discs, cement, byssal threads, feet, claws, appendages, spines, suction, negative density, or other means to stay in contact

with the (generally) hard substrate, and may or may not be capable of slow movement over the substrate. Many attached fauna are suspension feeders and feed from the water column.

- **Soft Sediment Fauna** – Areas that are characterized by fine unconsolidated substrates (sand, mud) and that are dominated in percent cover or in estimated biomass by infauna, sessile epifauna, mobile epifauna, mobile fauna that create semi-permanent burrows as homes, or by structures or evidence associated with these fauna (e.g., tilefish burrows, lobster burrows). These animals may tunnel freely within the sediment or embed themselves wholly or partially in the sediment. In many cases, they will regularly leave their burrows, and may move rapidly or swim actively after doing so, but any animal that creates a semi-permanent home in the sediment can be classified as Soft Sediment Fauna. These animals may also move slowly over the sediment surface but are not capable of moving outside of the boundaries of the classification unit within one day. Most of these fauna possess specialized organs for burrowing, digging, embedding, tube-building, anchoring, or locomotory activities in soft substrates.
- **Inferred Fauna** – Areas dominated by evidence (real or inferred) of faunal activity, but where the fauna themselves are not currently present or evident, given the sampling methodology.

2.4. Data Quality Assurance and Quality Control

Data quality assurance and quality control for the SPI and PV field survey included bench testing of systems prior to deployment to verify equipment calibration and operation, and sending full backup systems, including a second SPI camera head and full PV backup system and tools, parts, and electronics.

Digital image files were renamed with the appropriate station names prior to image analysis. The image file time stamp was verified with the recorded time in the navigation log as a quality assurance check. Quality assurance review of image analysis results consisted of a minimum 15 percent review of results by senior scientists to ensure quality and accuracy of data and results presented in this report.

2.4.1 SPI/PV Image Quality

Image quality was affected by several factors described below for both SPI and PV cameras.

Images acquired from the SPI camera were checked for proper lighting, presence of undisturbed sediment water interface (SWI), prism over-penetration (i.e., SWI is not present), sediment disturbance due to yanking of the SPI frame through the winch cable or by any other physical disturbance that may have rendered the SPI image unacceptable for analysis (e.g., destroyed SWI or stirring of surface sediment). If any factor affecting image quality caused the image to be rejected, then the SPI camera would be redeployed to obtain acceptable images for analysis.

Images acquired from the plan view camera were checked for proper lighting, water clarity, bottom sediment disturbance and general surface area coverage. In a few occasions the hardware malfunctioned affected image quality or did not obtain images. When factors affecting

PV image quality caused the image to be rejected, the camera was redeployed to obtain acceptable images for analysis.

Water clarity was an important factor in obtaining good quality PV images. Due to suspended particulates in the water column, such as sediment or planktonic organisms, water clarity significantly decreased at most stations. The greater the concentration of suspended particles, the lower the resolution of the plan view images due to scattering of the strobe light over the sea bottom. For some images it was possible to improve the quality with the help of a computer software such as Adobe Photoshop. However, for the most part, the PV trigger cable was shortened so that photographs could be taken closer to the sea bottom (from 6.6 ft to 3.3 ft [2.0 m to 1.0 m] from bottom) and thus minimize the amount of backscattered light from suspended particles in the water column. A third option was to revisit the same location at a different time when water clarity could have improved.

3.0 Site Specific SPI and PV Survey Results

The SPI and PV results for the Beacon Wind Lease Area are described in detail below.

3.1 SPI Results

The results for the SPI image analysis are found in Addendum C.

3.1.1 Grain Size Major Mode and Sediment Type

The grain size major mode (i.e., the dominant grain size) of surface sediments determined using SPI was predominantly silt and clay (≥4 phi) (72 percent of SPI replicates), with sand content increasing to the northeast in the Lease Area. An example SPI image showing typical silt and clay sediments in the Lease Area is provided in Figure 4.

Very fine and fine sand was present at 27 percent of the SPI replicates. Two stations (IAC-66 and WTG-077) had a grain size mode of coarse sand (1 to 0 phi) (Figure 5).

3.1.2 Prism penetration depth

The distribution of SPI camera prism penetration (in centimeters) in the Lease Area surface sediments is presented in Figure 6. Mean penetration depth is the distance that the SPI camera prism penetrates the sediment. The number of weights used in the weight racks (10 total) and adjustable stops on the SPI frame (set at 13.5 inches [34 cm]) were maintained throughout the entire survey. Therefore, the prism penetration depth provided a relative measure of sediment water content and shear strength of surface sediments in the Lease Area.

The camera prism penetration depths presented in Figure 6 are the averages of the two SPI replicate values obtained at each station. In general, prism penetration depths were relatively deep throughout the lease area and followed a pattern similar to the grain size major mode. Lower prism penetration was generally observed where surface sediments consisted of medium or coarse sand. For individual replicates, penetration depths at the Lease Area ranged from 1.5 in (3.7 cm) at Station IAC-188 to 7.4 in (18.9 cm) at Station IAC-121 with a site-wide mean of 5.6 in ± 0.95 in (14.3 cm ±2.41 cm, n = 750).

3.1.3 Surface boundary roughness

Mean small-scale boundary roughness, or surface relief, is the difference between the highest and lowest penetration depths measured in an SPI image and can be present on the seabed because of physical and biological processes. The mean surface boundary roughness values presented in Figure 7 are the averages of the two SPI replicate values obtained at each station. For individual replicates, boundary roughness at the Lease Area ranged from 0 to 2.5 in (0 to 6.3 cm) with a site-wide mean of 0.4 in ± 0.27 in (1.0 cm ±0.69 cm, n = 750). The highest mean boundary roughness values (1.2 to 1.4 in [3.0 to 3.5 cm]) were measured at stations IAC-167, IAC-193, and IAC-208, in the northeast portion of the Lease Area (Figure 7). The larger boundary roughness was due to a sloped surface, which may be related to surface ripples (physical roughness). The split between biological versus physical roughness was fairly even across the

site, with 48 percent of the replicates classified as biogenic roughness and 52 percent of the replicates classified as physical roughness.

3.1.4 Apparent Redox Potential Discontinuity Depth

The aRPD depth is an estimate of the depth of oxygenation in the upper sediment column and reflects the degree of biogenic or physical sediment mixing. The mean aRPD depths presented in Figure 8 are the averages of the two SPI replicate values obtained at each station. The overall trend showed increasing aRPD depths to the northeast in the Lease Area. The deeper aRPD depths toward the northeast were generally correlated with the presence of very fine and fine sands. For individual replicates, aRPD depths at the Lease Area ranged from 0.2 to 3.2 in (0.5 to 8.1 cm) with a site-wide mean of 1.2 in ± 0.5 in (3.1 cm ±1.3 cm, n = 750).

3.1.5 Infaunal Successional Stage

The infaunal successional stage in the Lease Area sediments was predominantly Stage III, the advanced successional stage where larger head-down deposit feeding organisms (and feeding voids) were present. Evidence of Stage III infauna (feed voids, burrows, or organisms at depth) was observed at 90 percent of the stations in the Lease Area (Figure 9). Several images showed Stage I and Stage II communities coexisting with the Stage III communities. Stage I on III was observed in 50 percent of the images, and Stage II on III was observed in 23 percent of the images.

Stage I succession only, the initial pioneering stage, was observed in 3 percent of the images. Stations showing Stage I succession only were located in areas with coarse sand and in the northeastern end of the Lease Area where medium sand was present. Stage II succession only, the transitional stage between I and III (typically showing the presence of amphipod surface tubes), was observed at 8 percent of the images and found across the Lease Area with no distinct pattern.

3.1.6 Sediment Oxygen Demand Proxies

Sediment conditions with high organic matter loading (and subsequently high SOD) may result in methanogenesis with methane bubbles in the sediment column. These conditions may also lead to sulfate reducing bacterial colonies on the sediment surface. High SOD was not present in the Lease Area. Methane gas bubbles and sulfate reducing bacteria were not observed in any areas of the Lease Area.

3.1.7 Organism-Sediment Index Calculation

The OSI provides a measure of general benthic habitat quality and considers dissolved oxygen concentrations within the upper sediment column, presence or absence of sedimentary methane, the depth of the aRPD, and the infaunal successional stage. The OSI ranges from −10 to +11 and is useful for showing gradients of sediment disturbance (Rhoads and Germano 1986).

The mean OSI values presented in Figure 10 are the averages of the two SPI replicate values obtained at each station. The mean OSI values in the Lease Area range from +4 to +11. OSI values showed a general increasing trend toward the northeast. OSI values of +6 to +11

represent relatively undisturbed ambient conditions or conditions where physical disturbances have occurred but deep aRPD depths and/or Stage III communities are present. The vast majority (99 percent) of OSI values in the Lease Area were +6 or higher. OSI values of +4 to +5 were measured in small clusters (4 stations each) in the northeast, central northern perimeter, and the central southern portion of the Lease Area (see Figure 10). Those specific clusters of locations where OSI was less than +6 showed the presence of medium or coarse sand, which is a habitat type that can remain in an earlier infaunal successional stage.

3.1.8 CMECS Substrate Group and Subgroup

The distribution of CMECS substrate group and subgroup classifications determined from SPI images is plotted in Figure 11. The dominant substrate group in the Lease Area was sandy mud (52 percent of images), followed by muddy sand (41 percent of images) The general distribution was sandy mud in the southwest, trending to muddy sand to the northeast. Stations classified with sand subgroups (very coarse/coarse sand, medium sand, fine/very fine sand) were limited to a few locations in the northeast and along the central northern perimeter (see Figure 11).

3.2 PV Results

The results from PV image analysis are found in Addendum D.

3.2.1 Bedforms

Sediment bedforms (small and large ripples) were identified in 45 percent of PV images in the Lease Area. Small ripples (wavelength of approximately 4 – 5 in [10-12 cm]) were observed at one PV replicate each at stations WTG-004 (replicate C) and WTG-085 (replicate A). Larger ripples (wavelength of approximately 12 in [30 cm]) were observed in one PV replicate image at WTG-077 (replicate B). Sand waves have wavelengths that are typically larger than the field of view for PV images and could not be identified, if present.

3.2.2 Fauna and Flora Presence

No submerged aquatic vegetation such as eelgrass beds or presence of macroalgae such as a kelp, green or red algae were observed in the Lease Area.

Fauna observed in PV images at the Lease Area were identified to the lowest possible taxonomic group (see Addendum D). The inferred presence of fauna was identified through observations of burrows, tubes, tracks, foraging pits, and fecal casts. The presence of surficial tubes and deep voids were also noted in SPI images (see Addendum C).

Fauna were grouped into the following categories: infauna, sessile epifauna, mobile epifauna, flora, fish, presence of eggs, sensitive taxa, and non-native taxa (Addendum D). Where attached fauna or emergent taxa were present in PV images, the percent coverage of the image was estimated using the CMECS Percent Cover Modifier (FGDC 2012).

A summary of observed fauna from PV images in the Lease Area is provided in Table 2. Emergent fauna in the form of clusters of tube-dwelling amphipods (possibly *Ampelisca vadorum*) were the dominant organism observed in the Lease Area, with documented presence at 85 percent of the WTG/IAC stations (Addendum D). The clusters of tube-dwelling amphipods

are not considered sensitive habitat by either BOEM or NOAA Fisheries. The percent cover of the emergent taxa (tube-dwelling amphipods) is plotted in Figures 12 and 13. Tube-dwelling amphipods were absent in areas of fine and very fine sand located at the northwest portion of the Lease Area (Figures 12 and 13). However, they were also absent from the southwest area with no correlation with grain size.

Other dominant infaunal organisms were bivalves (estimate of 3,300 siphons counted), followed by 157 sand dollars (*Echinarachnius parma*) and 69 Ceriantharia (tube-dwelling anemones). Note that the sand dollar was also observed in a mobile epifauna state. Sessile epifauna observed consisted of 27 hydroids and three sponges (Addendum D).

The dominant mobile epifauna was the sand dollar *E. parma* (Figure 14, quantity 5,480), followed by 953 shrimp and 219 hermit crabs (Paguroidea) (Table 2 and Figure 14). The most common fish observed included 30 right eye flounders (Pleuronectidae), 20 unidentified fish, and 12 sea robin (Triglidae). Data on PVS and non-native taxa are provided in the following sections.

Flora was not identified in PV and SPI images at any location in the Lease Area.

3.2.3 Taxa Vulnerable to Project Impacts

This survey recorded the identification of taxa, in particular long-lived and habitat-forming species that are potentially vulnerable to project impacts (e.g., sponges, anemones, bryozoans, hydrozoans, corals, tunicates, and bivalves) as described in NOAA Fisheries Updated Recommendations for Mapping Fish Habitat (2021).

Species, such as scallops and longfin squid egg mops (bottom-attached egg masses) are not long-lived and habitat-forming species. Conversely, they are immobile or with limited mobility during at least one life stage and therefore are unable to escape from habitats subject to potential project impacts (Guida et al. 2017).

Single squid egg mops were observed at four stations out of 357 stations and accounted for one percent of the total number of stations (WTG-040, WTG-089, IAC-089 and IAC-126) (Figures 15 and 16).

A single scallop specimen (IAC-182) was observed on the northwest portion of the Lease Area, accounting for 0.3 percent of total stations

Other PVS observed accounted for 8.0 percent of total number of stations sampled (30 out of 375 stations) and included bivalves, sponges, and scallops (Figure 16 and Addendum D) and broken down as follows.

Ceriantharia was found in 27 stations (7.0 percent of all stations), mostly in the southwest portion of the Lease Area (Figure 16 and Addendum D).

Bivalves were observed in 25 stations (6.6 percent of all stations), mostly in the central and northeast portion of the Lease Area (Figure 16 and Addendum D).

Three single sponge colonies (stations IAC-206, WTG-004 and WTG-002), were observed on the northwest portion of the Lease Area, accounting for 0.8 percent of total stations.

The detection of bivalves in sediments was limited to observations of presence of inhaling and exhaling siphon openings at the sediment surface in PV images (e.g., WTG-036, replicate A). Therefore, it was not possible to determine if an observed bivalve was a commercially managed species such as the ocean quahog clam (Guida et al. 2017). The identification of bivalve species and size can only be determined and confirmed from the taxonomic data obtained from sieved sediment samples from the same location. The presence of bivalve siphons was conservatively flagged as presence of species potentially vulnerable to project impacts as described by NOAA Fisheries (2021). However, the presence of bivalve siphons does not confirm the existence of commercially managed species. The distribution of observed bivalves is plotted in Figure 16.

No other PVS, such as hard and soft corals, bryozoans, tunicates or juvenile American lobster, were observed in SPI and PV images at any of the Lease Area stations.

3.2.4 Non-Native Taxa

Non-native taxa were not identified in PV and SPI images at any location in the Lease Area.

3.2.5 CMECS Biotic Subclass

Within the CMECS Faunal Bed class, which was the most relevant to the Lease Area, the Biotic Subclasses determined from PV images were either Soft Sediment Fauna or Inferred Fauna. A few images containing yellow sponges, were determined as Attached Fauna, and were observed in PV replicate images from WTG-004 (replicate C), WTG-007 (replicate C) and a small specimen at IAC-206 (replicate A) (Figure 17).

The dominant Biotic Subclass and Co-occurring Biotic Subclass (next dominant by percent cover) were determined for each station location. The dominant Biotic Subclass is plotted in Figure 18. Soft Sediment Fauna was the dominant Biotic Subclass, present in 70 percent of PV images in the Lease Area.

4.0 Summary of SPI and PV Survey Results

A SPI and PV imaging survey was conducted at the Equinor Lease Area in support of a benthic assessment to document seafloor habitat and contribute toward understanding of the benthic environment and EFH per the BOEM (2019) and NOAA Fisheries (2021) guidelines for the development of a wind farm. The baseline seafloor survey characterized the benthic habitat within the Lease Area that may be affected by the proposed construction and operations of the wind farm project.

The findings of this SPI and PV imaging survey were as follows:

4.1 SPI Results

- The grain size major mode of surface sediments was silt and clay (≥4 phi) with increasing sands to the northeast in the Lease Area. The distribution of CMECS substrate group and subgroup classifications followed a similar pattern, with a dominant substrate group in the Lease Area of sandy mud followed by muddy sand. The general distribution was sandy mud in the southwest, trending to muddy sand to the northeast.
- SPI camera prism penetration, a proxy for sediment water content and shear stress, was relatively deep throughout the lease area. Lower prism penetration was generally observed where surface sediments consisted of medium or coarse sand.
- Mean small-scale boundary roughness, or surface relief, ranged from 0 to 2.5 in (0 to 6.3 cm) with a site-wide mean of 0.4 in (1.0 cm). The highest mean boundary roughness values were measured at stations in the northeast portion of the Lease Area, likely due to physical roughness (surface ripples).
- The aRPD depths showed an increasing trend to the northeast in the Lease Area. The deeper aRPD depths were generally correlated with the presence of very fine and fine sands.
- The infaunal successional stage in the Lease Area sediments was predominantly Stage III (90 percent of SPI replicates), the advanced successional stage where larger head-down deposit feeding organisms and feeding voids were present.
- Non-native taxa were not identified in SPI images at any location in the Lease Area.
- Evidence of high SOD was not observed in any surface sediments within the Lease Area.
- The OSI, a general measure of benthic habitat quality, ranged from +4 to +11. OSI values showed a general increasing trend toward the northeast. The vast majority (99 percent) of OSI values in the Lease Area were +6 or higher representing relatively undisturbed ambient conditions

4.2 PV Results

- Sediment bedforms (small and large ripples) were identified in 45 percent of PV images in the Lease Area.

- This survey recorded the identification of taxa, in particular long-lived and habitat-forming species that are particularly vulnerable to project impacts (e.g., sponges, anemones, bryozoans, hydrozoans, corals, tunicates, and bivalves) as described by NOAA/NMFS Updated Recommendations for Mapping Fish Habitat (2021). Species vulnerable to project impacts, were categorized as Potentially Vulnerable Species for image analysis.
- Single squid egg mops were observed at four stations out of 357 stations and accounted for one percent of the total number of stations.
- A single scallop specimen was observed on the northwest portion of the Lease Area, accounting for 0.3 percent of total stations
- Other PVS observed accounted for 8.0 percent of total number of stations sampled (30 out of 375 stations) and included bivalves, sponges, and scallops and described as follows.
    - Ceriantharia was found in 27 stations (7.0 percent of all stations), mostly in the southwest portion of the Lease Area.
    - Bivalves were observed in 25 stations (6.6 percent of all stations), mostly in the central and northeast portion of the Lease Area.
    - Three single sponge colonies, were observed on the northwest portion of the Lease Area, accounting for 0.8 percent of total stations.
- Emergent fauna in the form of clusters of tube-dwelling amphipods (possibly *Ampelisca vadorum*) were the dominant organism observed in the Lease Area, with documented presence at 85 percent of the foundation and interarray cable stations. The organism itself is not classified among the potentially vulnerable species.
- Other infaunal organisms observed in PV images in the Lease Area were dominated by bivalves (estimate of 3,300 clam siphons counted), followed by 157 sand dollars (*Echinarachnius parma*) and 69 Ceriantharia (tube-dwelling anemones). Sand dollars were present as both infauna and mobile epifauna. The dominant mobile epifauna was the sand dollar (*E. parma*) (quantity 5,480), followed by 1,100 shrimp and 225 hermit crabs (Paguroidea). The most common fish observed included 30 right eye flounders (Pleuronectidae), 20 unidentified fish, and 12 sea robin (Triglidae).
- Non-native taxa were not identified in PV images at any location in the Lease Area.
- The CMECS Biotic Subclasses determined from PV images were either Soft Sediment Fauna or Inferred Fauna, both subclasses were evenly distributed throughout the Lease Area. Three sponges (attached fauna) were observed in PV replicate images from WTG-004 (replicate C), WTG-007 (replicate C) and a small specimen at IAC-206 (replicate A). Soft Sediment Fauna was the dominant Biotic Subclass, present in 70 percent of PV images in the Lease Area.

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TABLES

Table 1. Calculation of the Organism-Sediment Index (OSI)

Choose One Value:

Mean aRPD Depth Classes	Index Value
0 in (0.00 cm)	0
> 0 – 0.295 in (> 0 – 0.75 cm)	1
0.299 – 0.59 in (0.76 – 1.50 cm)	2
0.594 – 0.886 in (1.51 – 2.25 cm)	3
0.889 – 1.18 in (2.26 – 3.00 cm)	4
1.185 – 1.476 in (3.01 – 3.75 cm)	5
>1.476 in (> 3.75 cm)	6

Choose One Value:

Successional Stage	Index Value
Azoic	- 4
Stage I	1
Stage I – II	2
Stage II	3
Stage II – III	4
Stage III	5
Stage I on III	5
Stage II on III	5

Choose One or Both if Appropriate:

Chemical Parameters	Index Value
Methane Present	- 2
No/Low Dissolved Oxygen	- 4

SPI Organism-Sediment Index = Range: - 10 to + 11

Table 2. Number and Type of Infauna, Epifauna, and Fish Observed in PV Images

Infauna	Sessile (Attached & Emergent) Epifauna	Mobile Epifauna	Fish
Interarray cable Stations			
29 Ceriantharia	21 Hydroids	414 Shrimp	7 Unidentified Fish
2318 Bivalves (estimated)	[1]Tube-dwelling amphipods (*Ampelisca vadorum*)	72 Sea Stars (Astropecten?)	4 Triglidae
2 Burrowing Anemone		129 Paguroidea (hermit)	14 Pleuronectidae
		11 Crabs	1 *Lophius americanus*
		12 Sea slug	2 Skate (*Raja sp*.)
		14 *Tritia trivittata*	
		5478 *Echinarachnius parma*	
		10 *Cancer* sp.	
		2 *Heterocrypta* sp.	
Foundation Stations			
157 *Echinarachnius parma*	4 Hydroid	539 Shrimp	13 Fish
6 Burrowing Anemone	1 Yellow Sponge	137 Sea Stars (Astropecten?)	8 Triglidae
801 Bivalves (Small, Medium, Large)	[1]Tube-dwelling amphipods (*Ampelisca vadorum*)	90 Paguroidea	16 Pleuronectidae
39 Ceriantharia		20 Crabs/*Cancer borealis*	1 *Lophius americanus*
		17 Sea slug	
		1 *Loligo peali*	
		1 *Tritia trivittata*	
		2 *Echinarachnius parma*	

[1] Percent cover of emergent taxa are presented in lieu of counts of individual amphipods (see Figure 13).

FIGURES

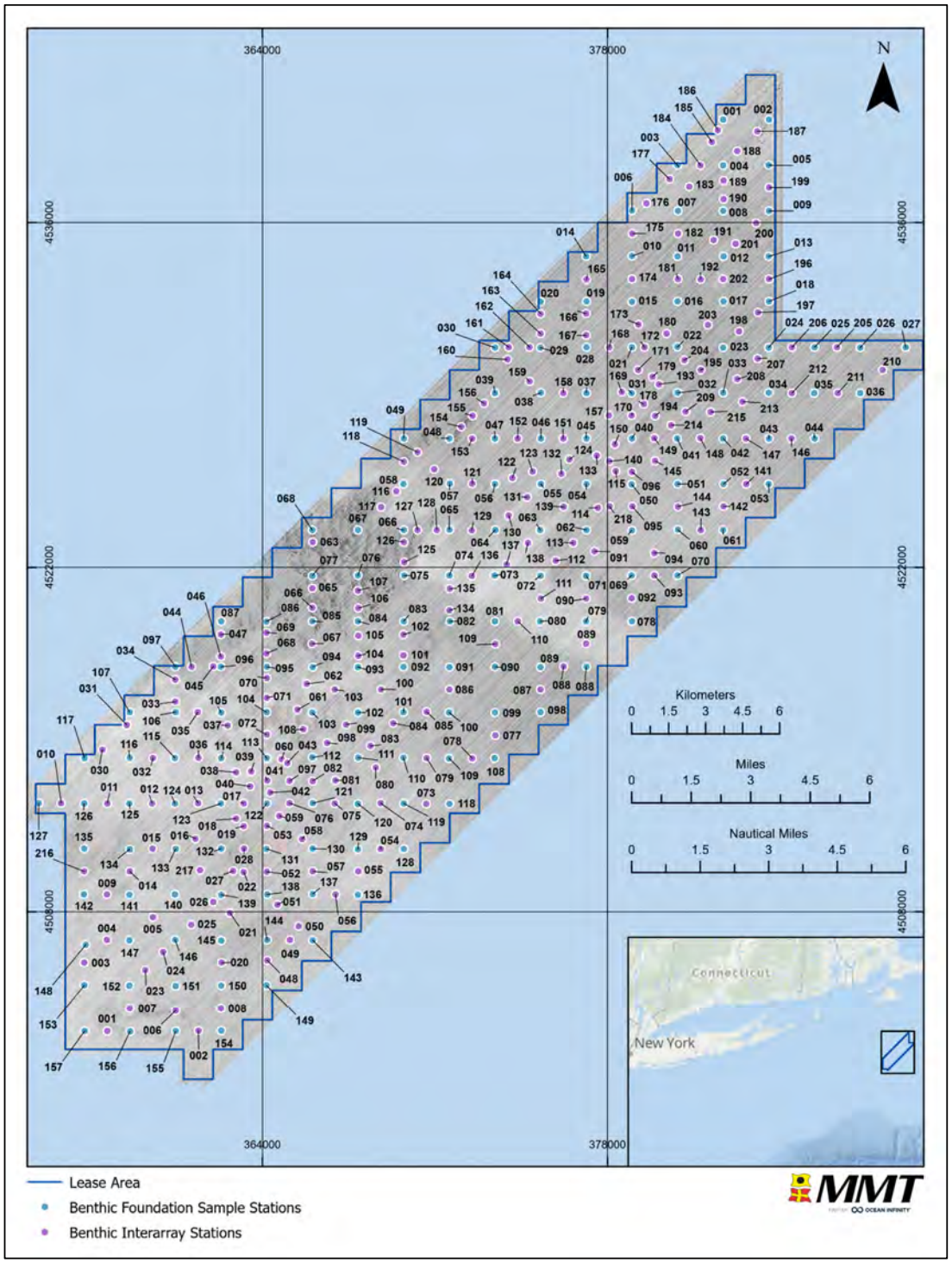


Figure 1. Lease Area overview with the distribution of foundation and interarray cable benthic stations.

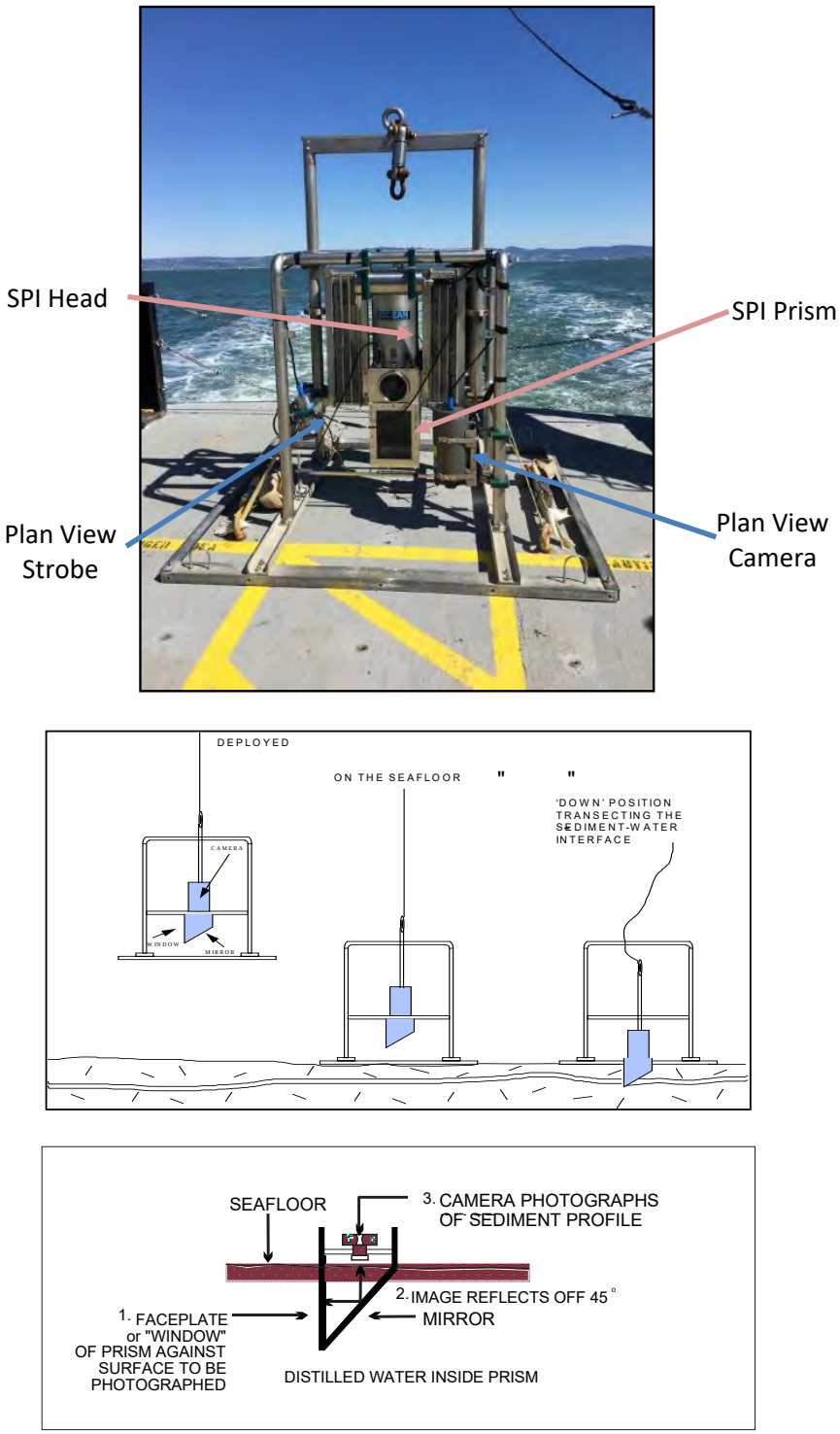


Figure 2. Ocean Imaging Systems Model 3731 Sediment-Profile Camera with Chimaera MKII Plan View Camera and Sequence of SPI Operation on Deployment.

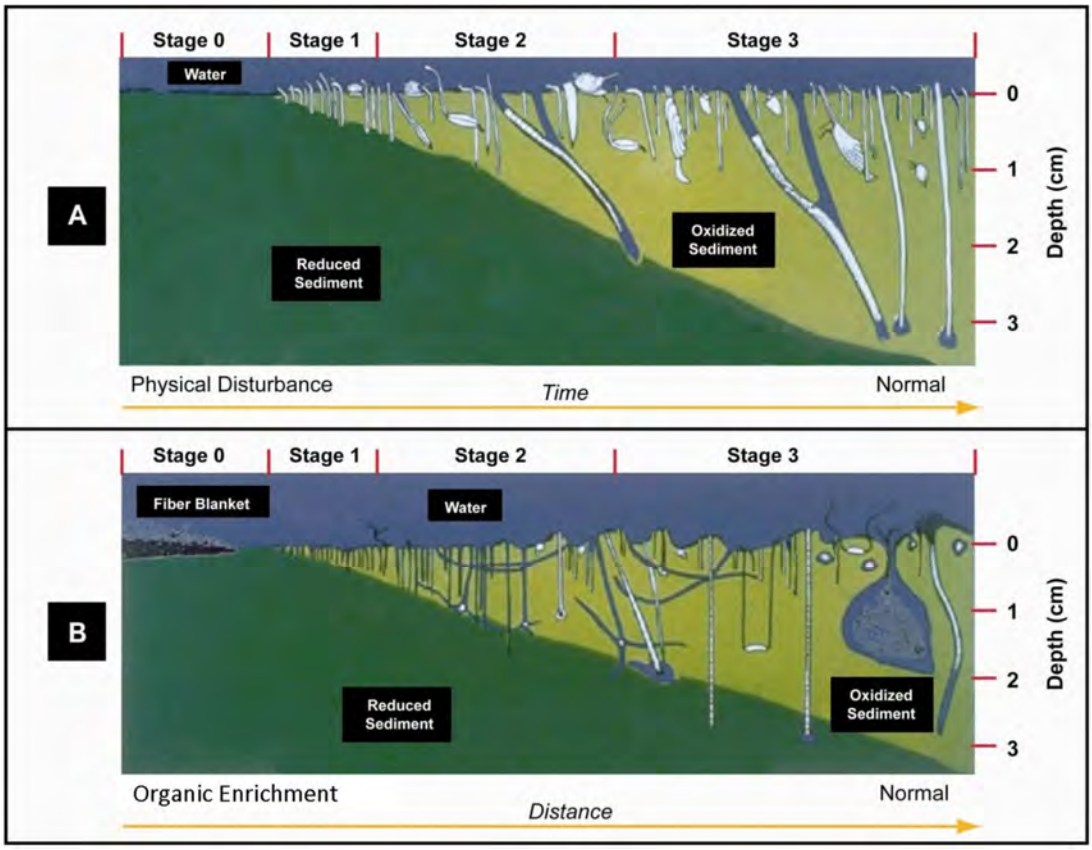
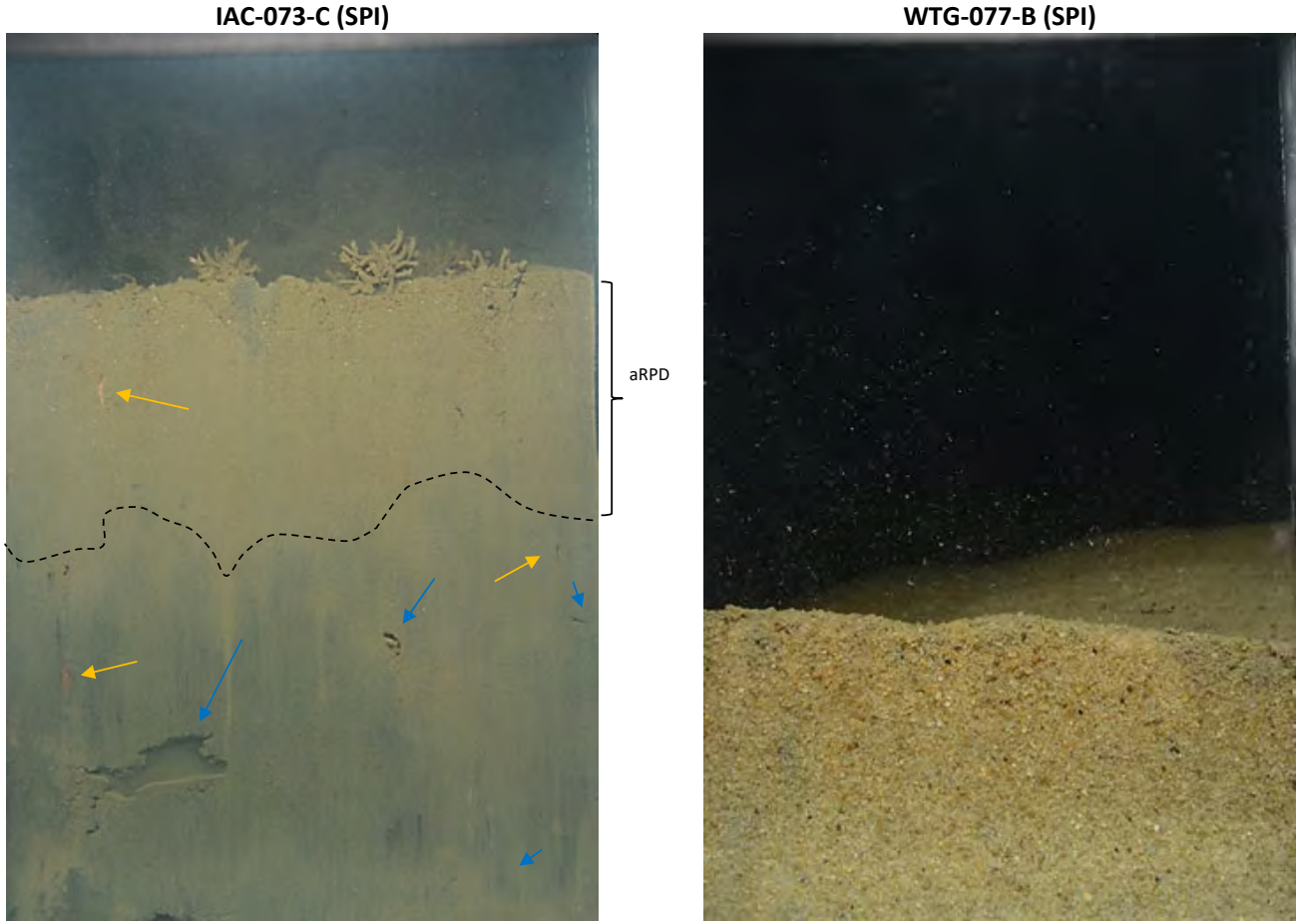


Figure 3. Successional Stage Assemblages and Relationship to SPI Assemblages in Soft Bottom Benthic Communities in Response to (A) Physical Disturbance or (B) Organic Enrichment; from Rhoads and Germano (1982).



The SPI image from Station IAC-073 (replicate C) showed the predominant surface sediment type at the Lease Area, which consisted of sandy mud with a grain size mode of silt/clay (>4 phi). Clusters of amphipod tubes (*Ampelisca vadorum*) were visible on the sediment surface and feeding voids (blue arrow) and small polychaetes (orange arrows) were visible at depth. The aRPD was well developed. The SPI image from Station WTG-077 (replicate B) showed tan, medium to coarse sands. The surface appeared to show evidence of ripples. SPI image width = 5.9 in (15cm).

Figure 4. Example of SPI Images Collected in the Lease Area.

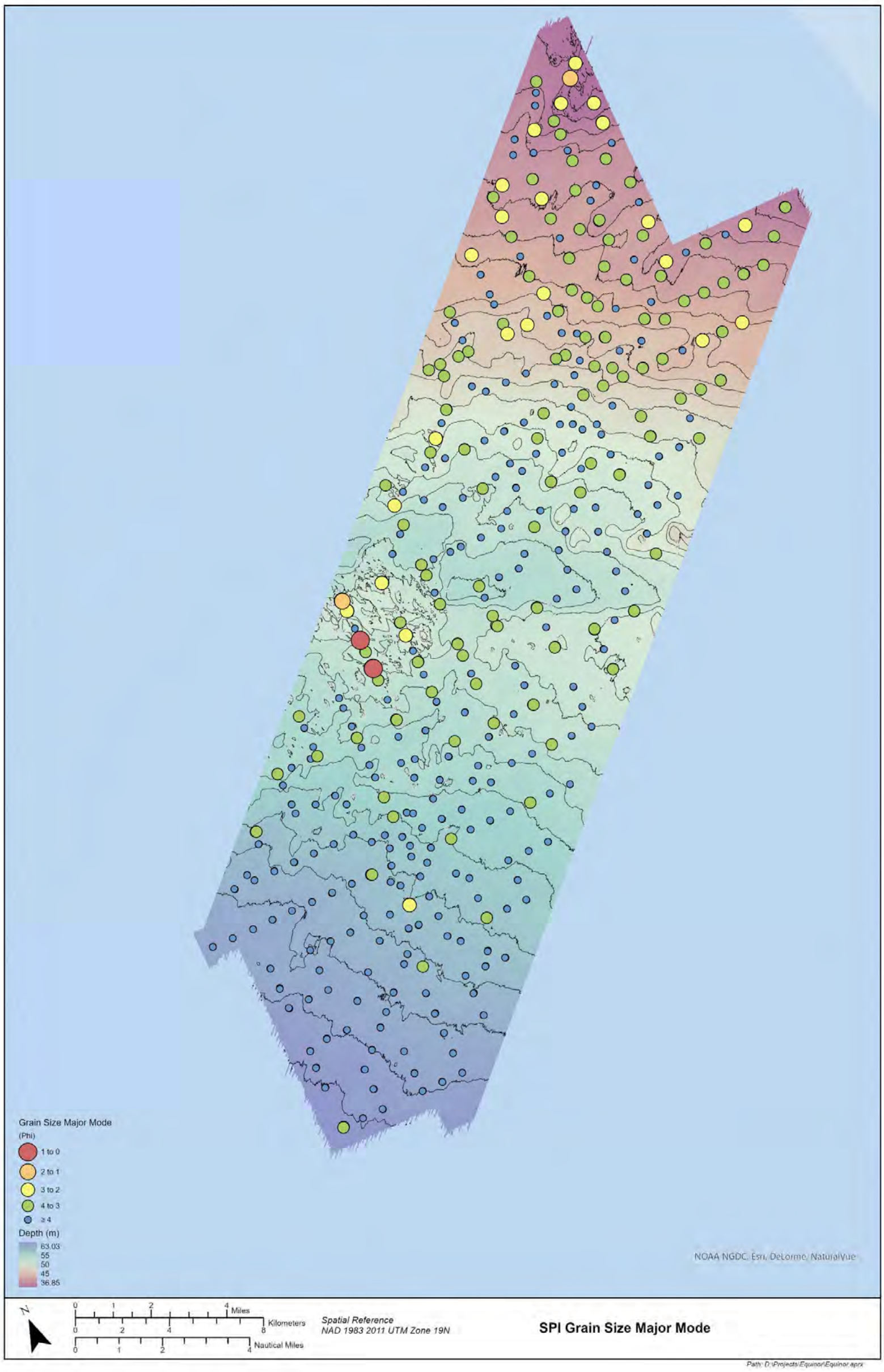


Figure 5. SPI Grain Size Major Mode.

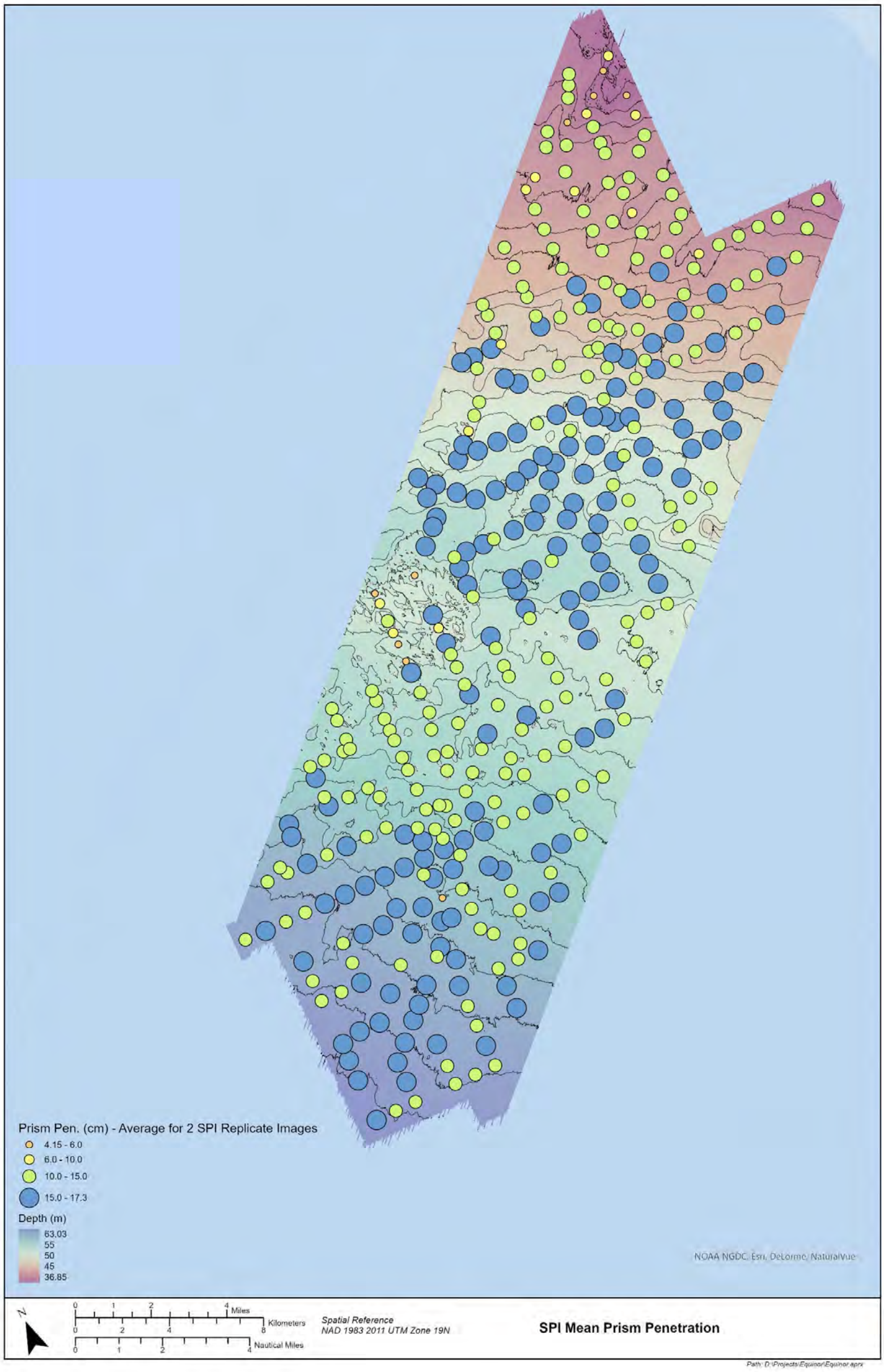


Figure 6. SPI Mean Prism Penetration.



Figure 7. SPI Mean Surface Boundary Roughness.

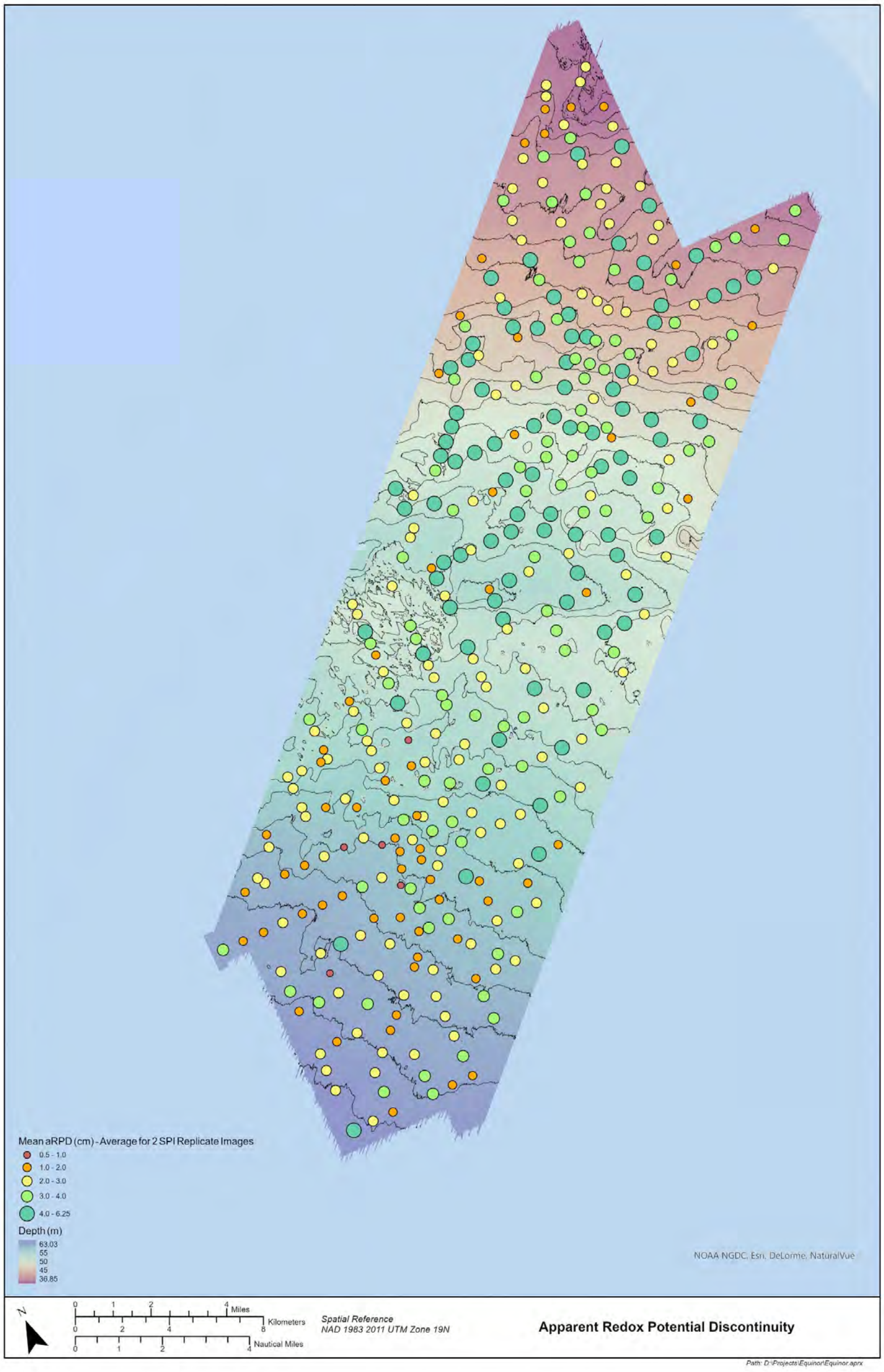


Figure 8. SPI Mean aRPD Depth.

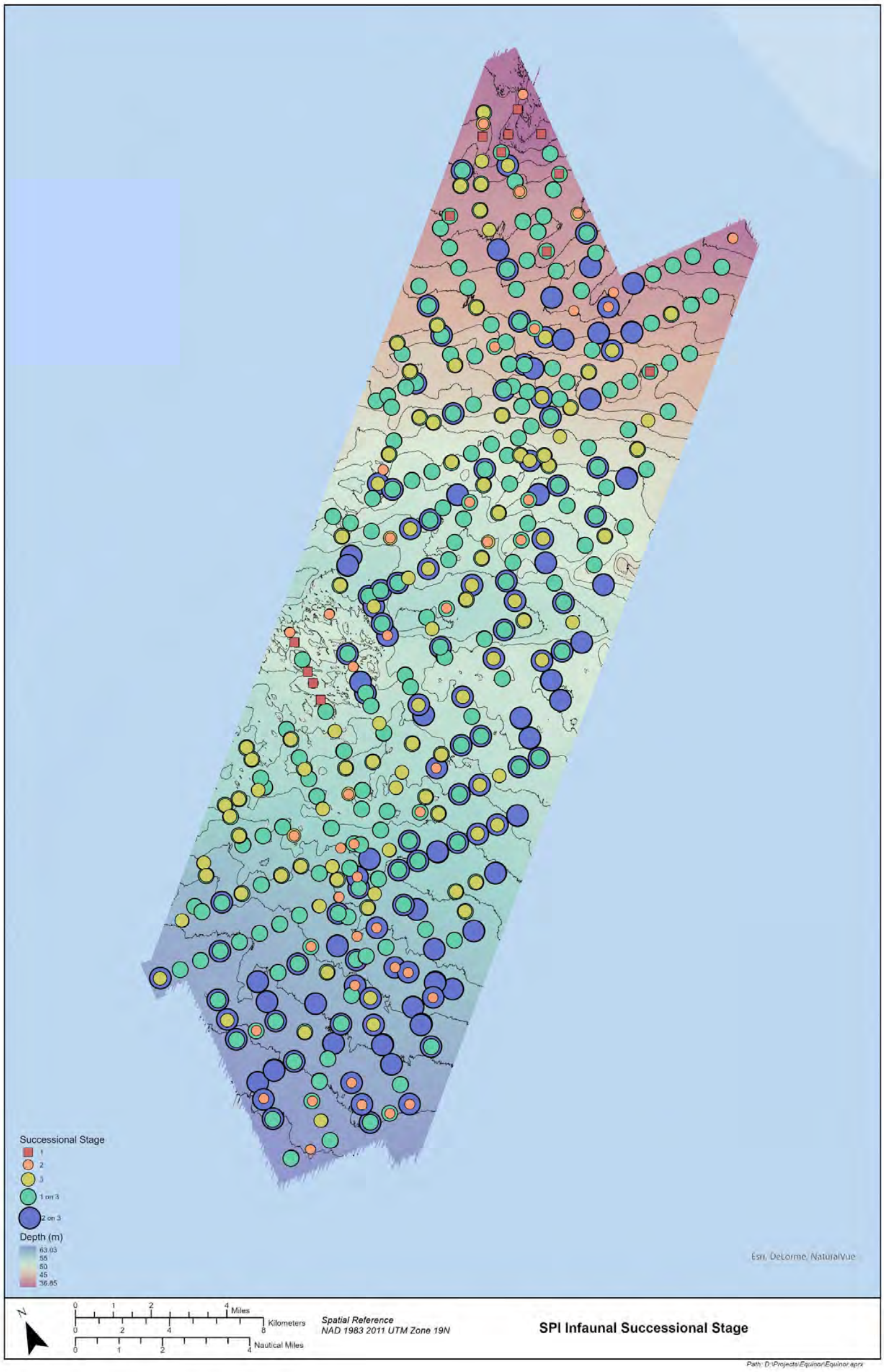


Figure 9. SPI Infaunal Successional Stage.

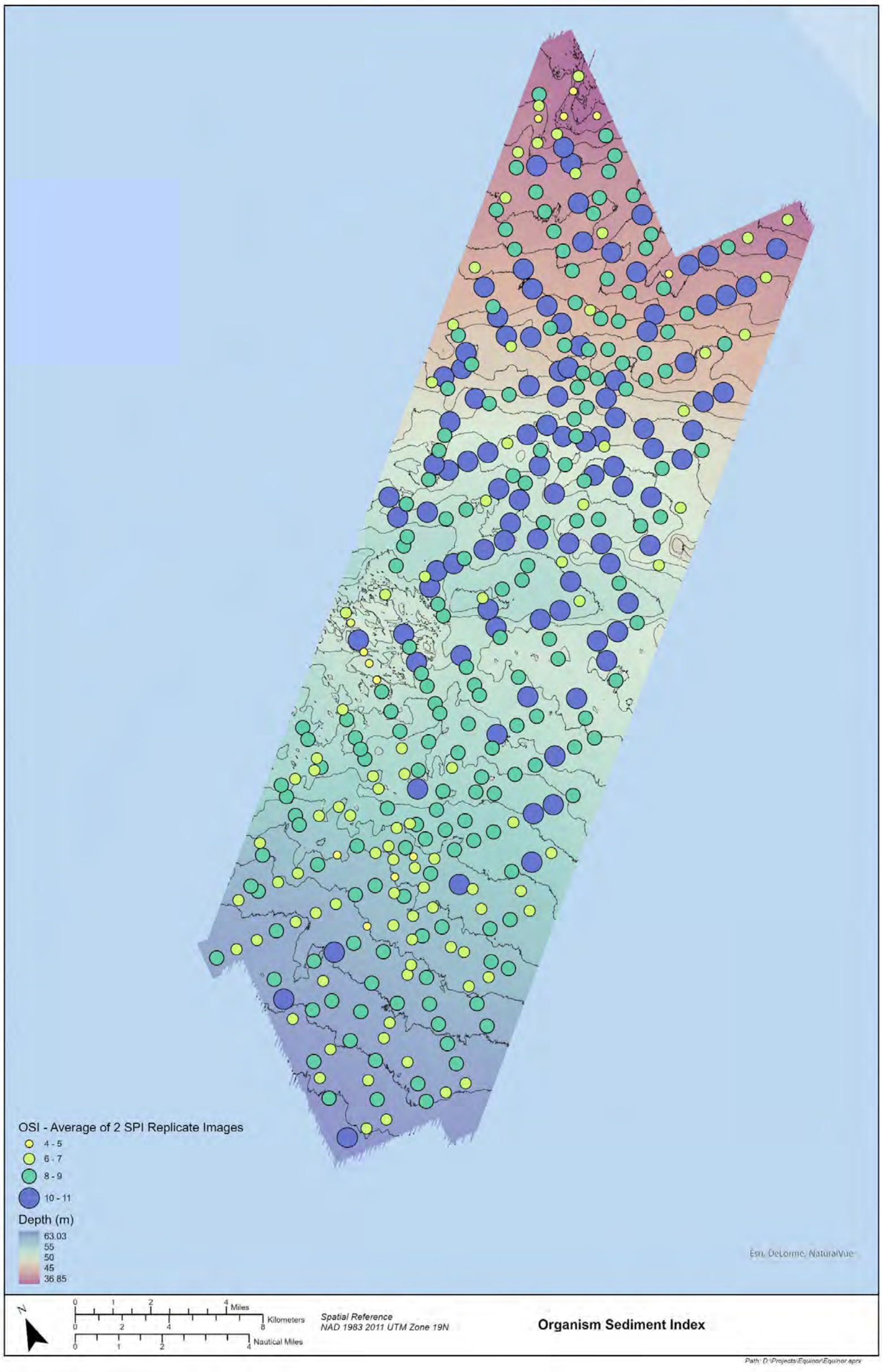


Figure 10. Organism-Sediment Index.

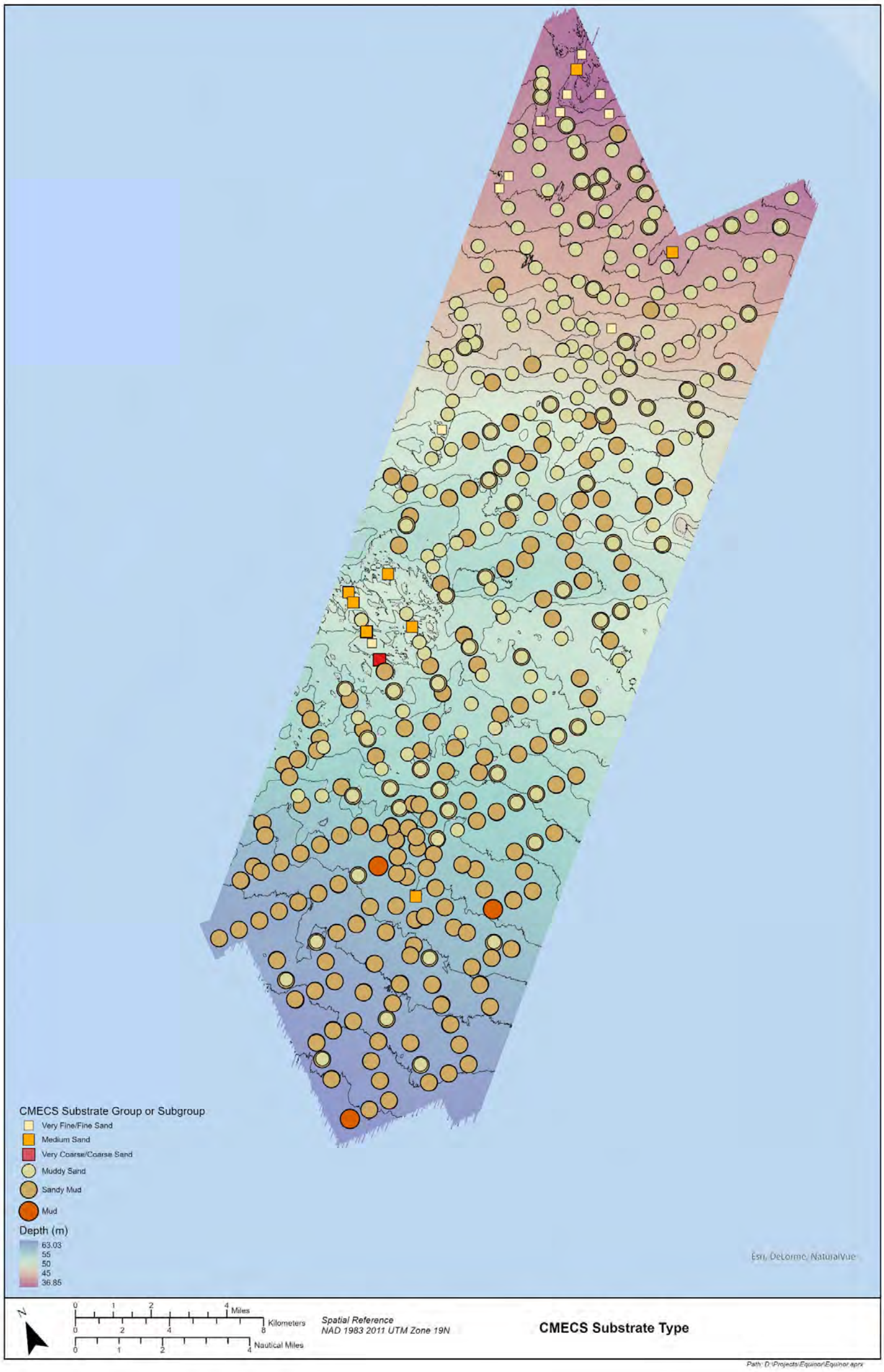


Figure 11. CMECS Substrate Type.

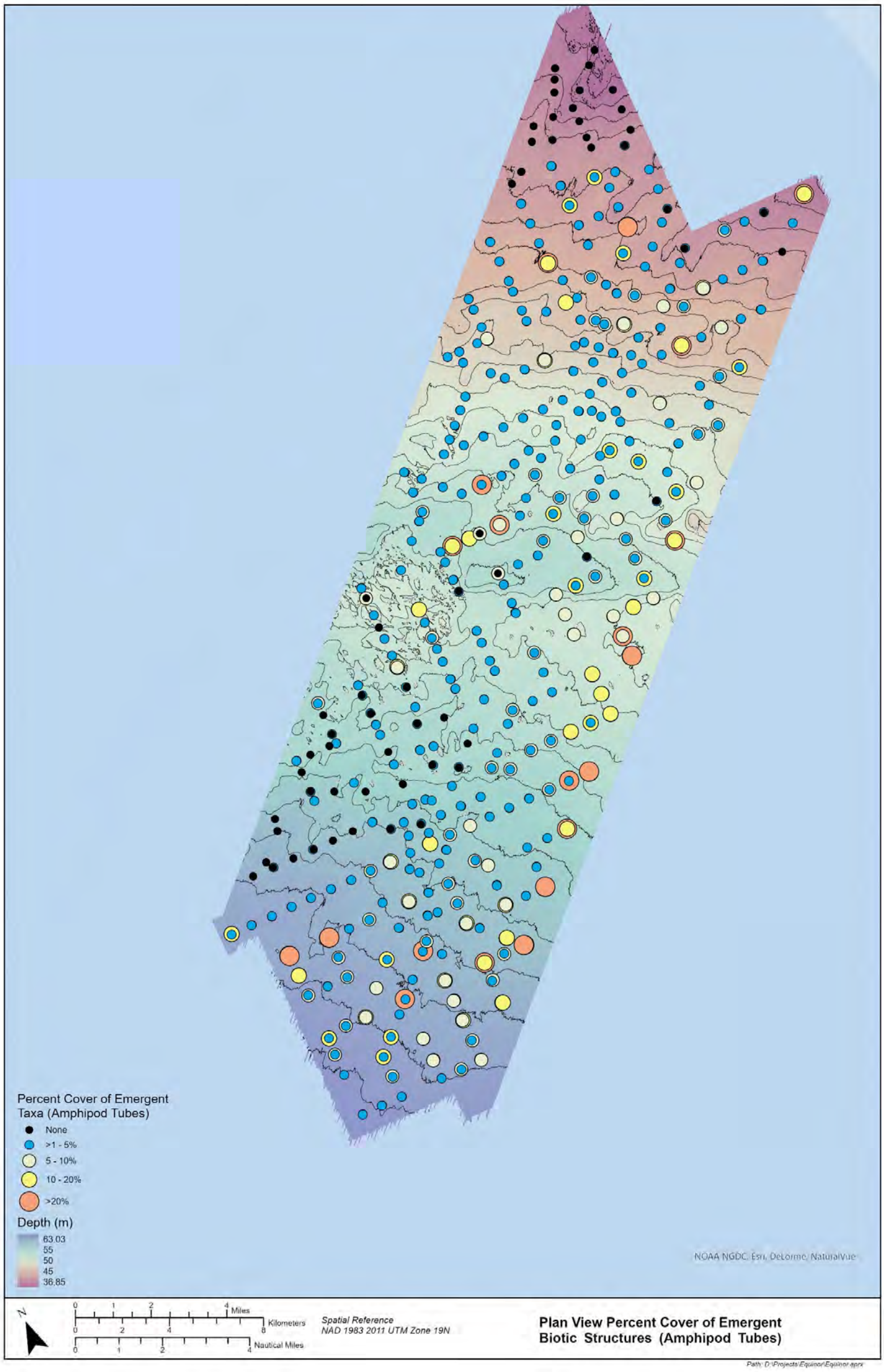


Figure 12. Plan View Percent Cover of Emergent Biotic Structures (Amphipod Tubes).

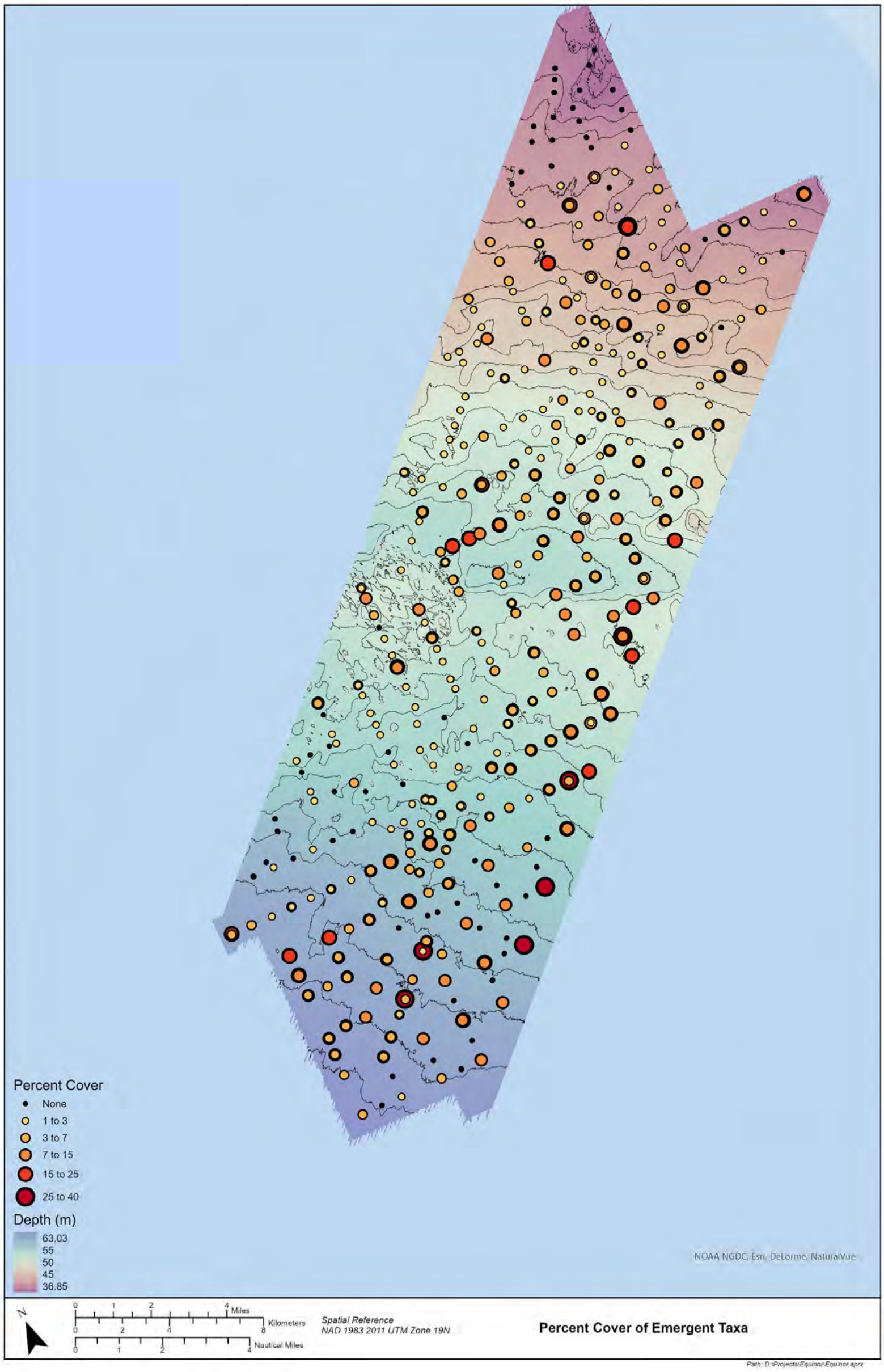
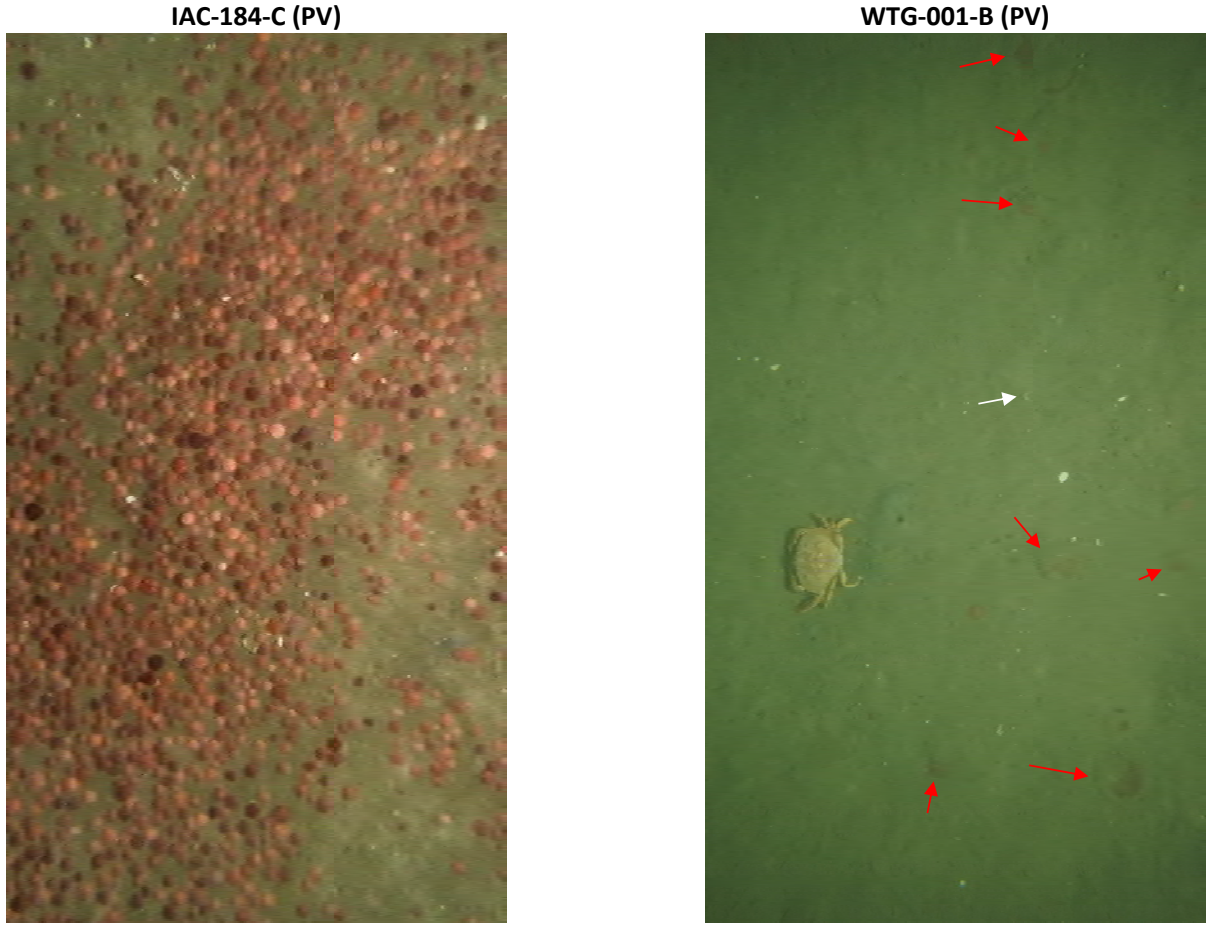
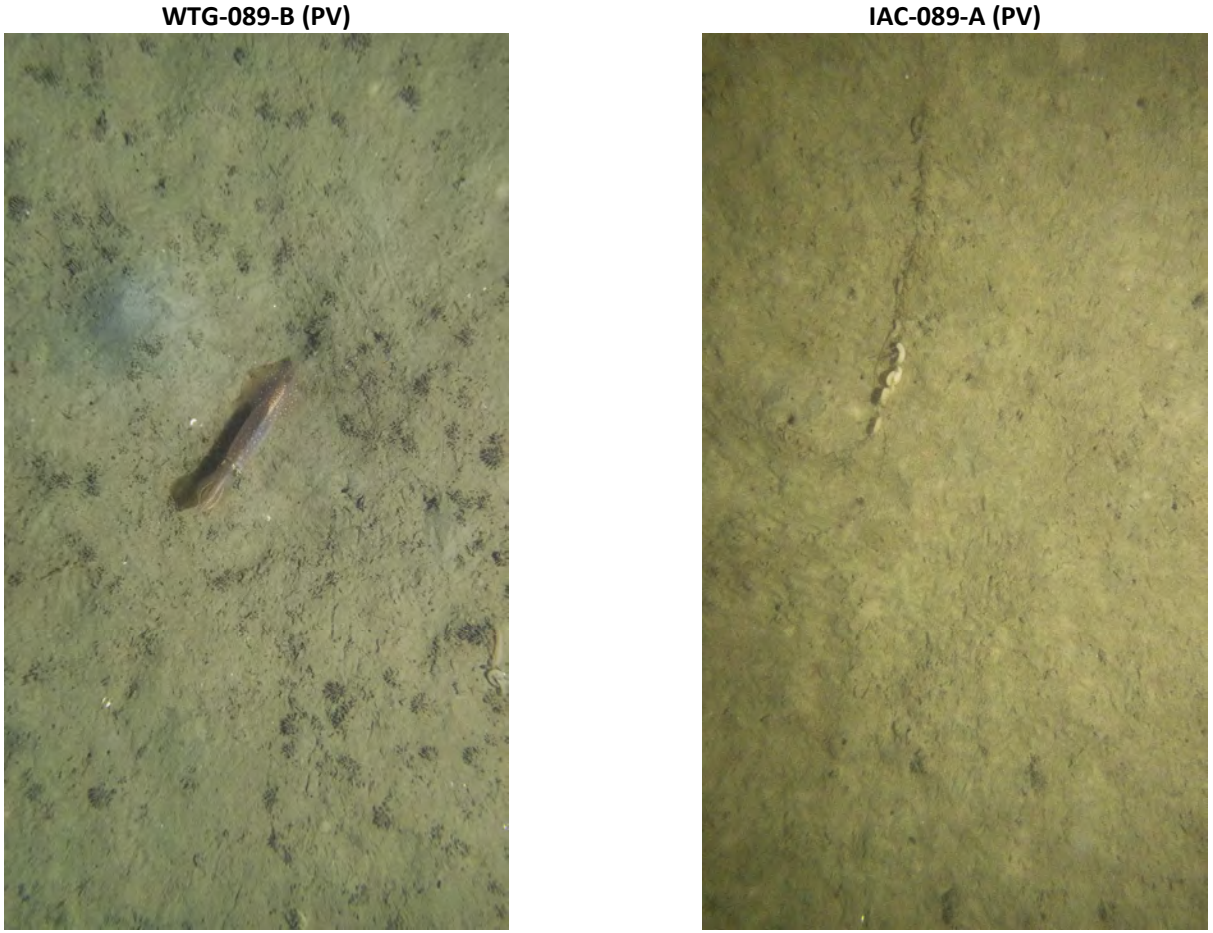


Figure 13. Percent Cover of Emergent Taxa.



The PV image from Station IAC-184 (replicate C) showed a large field of sand dollars present on the sediment surface and were classified as mobile epifauna. The PV image from Station WTG-001 showed a crab (*Cancer irroratus*, red arrow), a small hermit crab (white arrow) and several sand dollars (red arrows) that were partially buried in the sediment surface and classified as infauna. PV image area for IAC-184-C = 0.8 m^2. PV image area for WTG-001-B = 0.9 m^2.

Figure 14. PV Images from IAC-184 and WTG-001.



The PV image from station WTG-089 (replicate B) shows several clusters of amphipod tubes (*Ampelisca vadorum*) on the sediment surface with a squid present in the center of the image. PV image area = 0.8 m^2. The PV image from IAC-089 (replicate A) shows squid egg mops attached to what resembles a hydroid stem. PV image area = 0.5 m^2.

Figure 15. SPI and PV Images from WTG-089 and IAC-089.

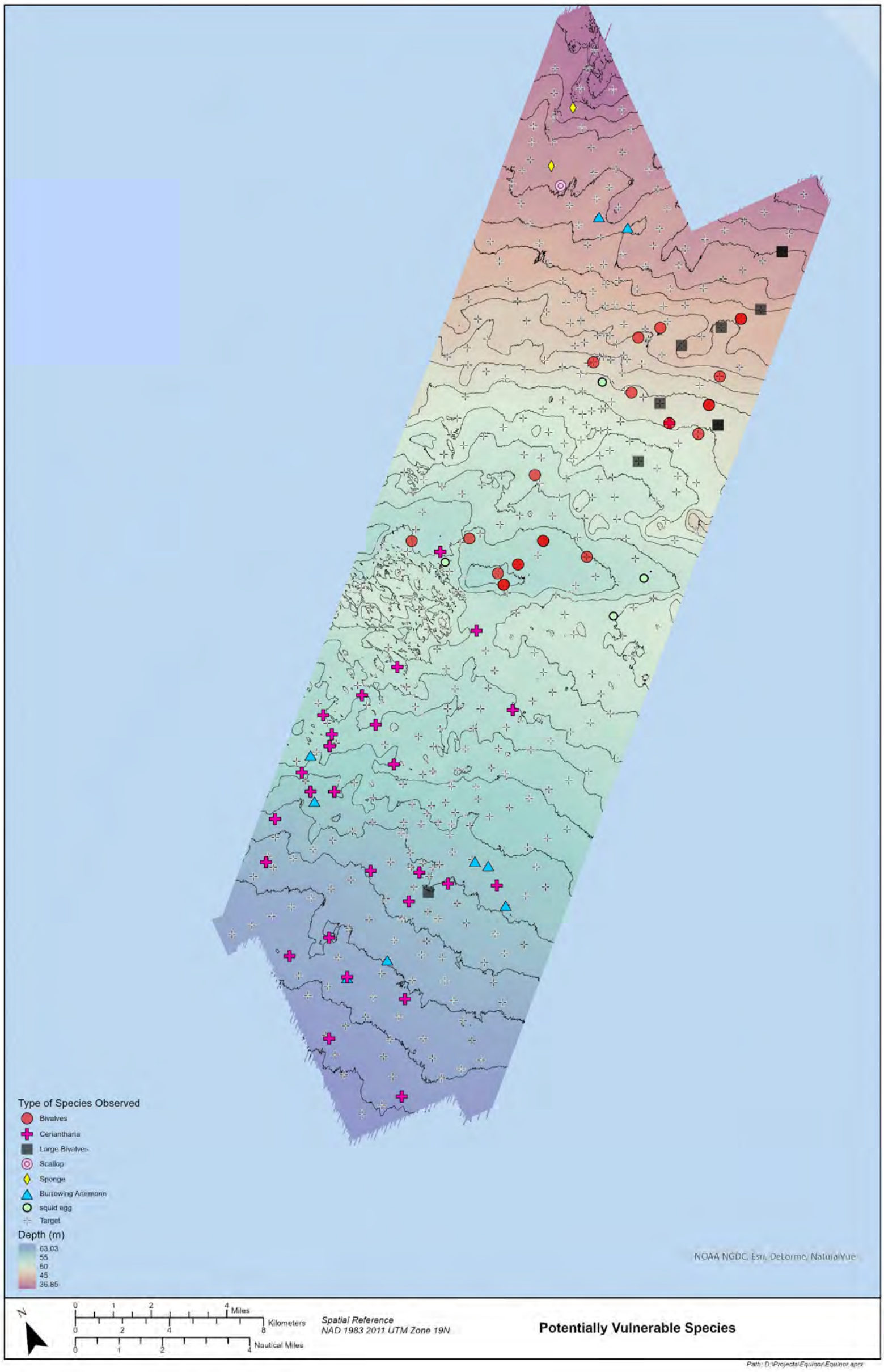
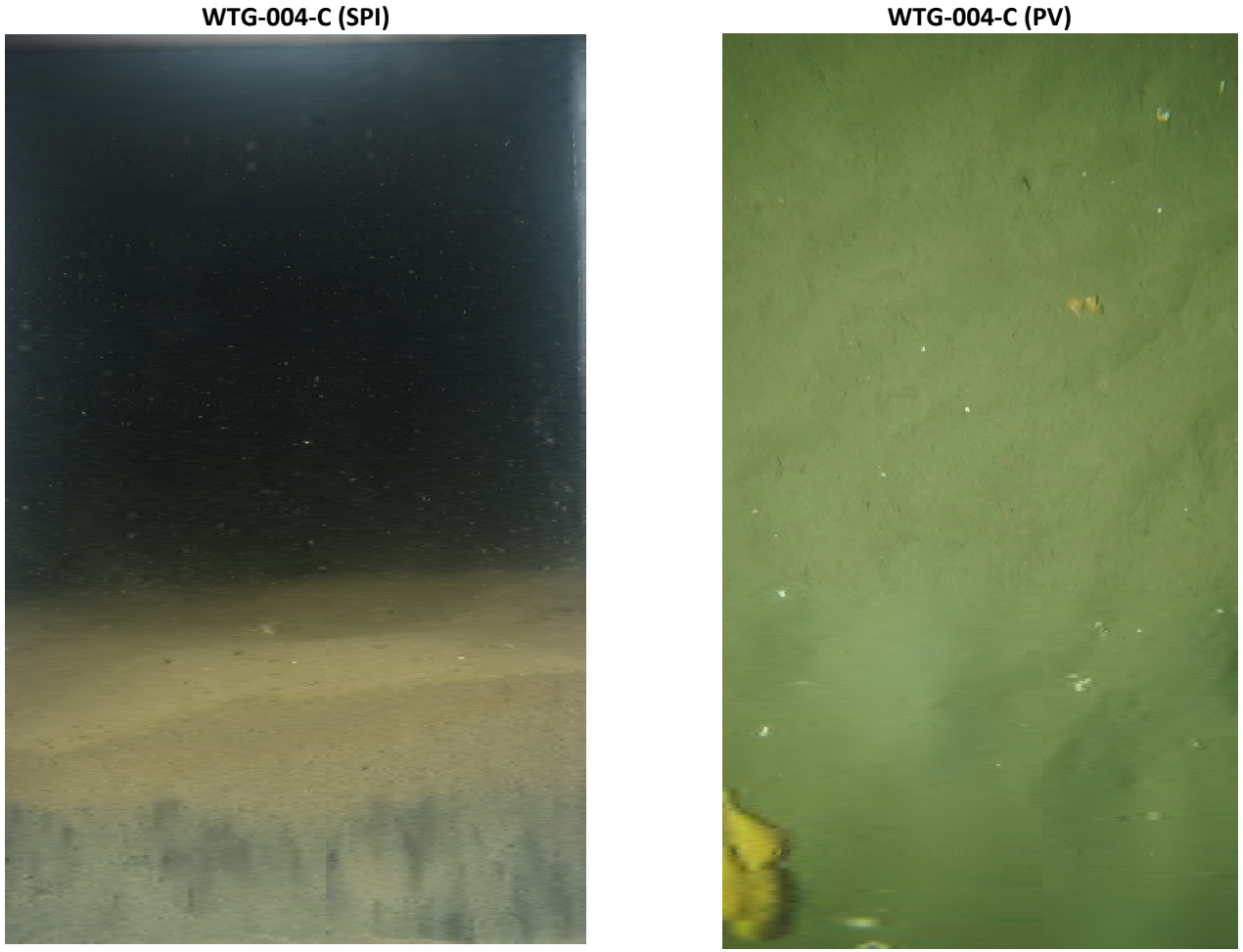


Figure 16. Observed Potentially Vulnerable Species.



The SPI image from Station WTG-004 (replicate B) showed tan, very fine to fine sand with discontinuous patches of dark gray sand at depth. A slight rippled surface was apparent. The PV image from Station WTG-004 (replicate C) showed evidence of the rippled surface with a sponge (yellow arrow) present on the sediment surface. Scattered shell particles were also visible on the sediment surface. SPI image width = 5.9 in (15cm). PV image area = 6.5 ft^2 (0.6 m^2)

Figure 17. SPI and PV Images from WTG-004.

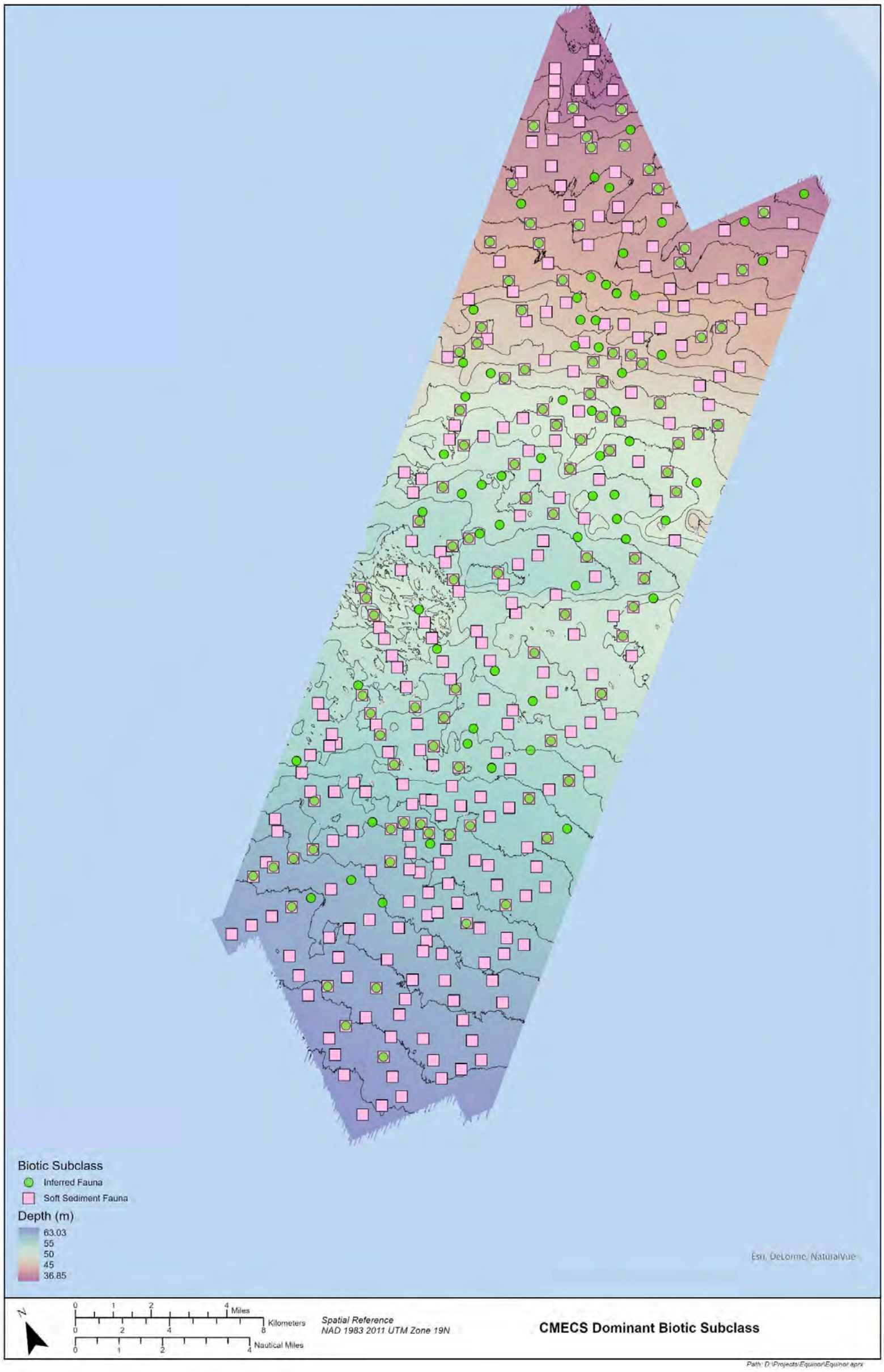


Figure 18. CMECS Dominant Biotic Subclass.

ADDENDUM A | FIELD COLLECTION FORMS

Tombo ENVIRONMENTAL LLC

SPI AND PV IMAGES COLLECTION FORM

NewFields

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-002	A	7/17/21	23:26:32	-36.9	13	5	2	Y	A, Set ISO 2000, fStop 5.6, shutter 1/60
WTG-002	B	7/17/21	23:31:36	-36.8	13	5	2	Y	A, Set ISO 2000, fStop 5.6, shutter 1/61
WTG-002	C	7/17/21	23:36:11	-36.8	13	5	2	Y	A, Set ISO 2000, fStop 5.6, shutter 1/62
WTG-003	A	7/18/21	2:02:11	-38.7	13	5	2	N	A, one bounce image (#2), PV focus is marginal
WTG-003	B	7/18/21	2:06:27	-41.1	13	5	2	N	A, one bounce image (#2), PV focus is marginal
WTG-003	C	7/18/21	2:12:52	-40.9	13	5	2	N	A, one bounce image (#2), PV focus is marginal
WTG-008	A	7/18/21	4:30:42	-40.3	13	5	1.3	N	A, Reduced trigger length due to high turbidity
WTG-008	B	7/18/21	4:35:28	-40.3	13	5	1.3	N	A, Reduced trigger length due to high turbidity
WTG-008	C	7/18/21	4:40:28	-40.2	13	5	1.3	N	A, Reduced trigger length due to high turbidity
WTG-011	A	7/18/21	7:22:54	-41.2	13	5	1.3	Y	New PV and GoPro battery. PV focus not reset
WTG-011	B	7/18/21	7:27:28	-41.1	13	5	1.3	Y	New PV and GoPro battery. PV focus not reset
WTG-011	C	7/18/21	7:32:31	-40.9	13	5	1.3	Y	New PV and GoPro battery. PV focus not reset
WTG-005	A	7/18/21	9:41:54	-37.2	13	5	1.3	Y	A
WTG-005	B	7/18/21	9:46:19	-37.0	13	5	1.3	Y	A
WTG-005	C	7/18/21	9:49:33	-37.2	13	5	1.3	Y	A
WTG-011	D	7/18/21	11:25:36	-41.3	13	5	1.3	Y	PV retaken for lack of focus on first drop
WTG-011	E	7/18/21	11:30:31	-41.5	13	5	1.3	Y	PV retaken for lack of focus on first drop
WTG-011	F	7/18/21	11:34:48	-41.4	13	5	1.3	Y	PV retaken for lack of focus on first drop
WTG-020	A	7/18/21	14:06:50	-45.1	13	5	1.3	Y	A
WTG-020	B	7/18/21	14:11:31	-45.1	13	5	1.3	Y	A
WTG-020	C	7/18/21	14:15:56	-45.2	13	5	1.3	Y	A
WTG-021	A	7/18/21	16:10:06	-45.2	13	5	1.3	Y	A, Set ISO 4000, fStop 7.1, shutter 1/60
WTG-021	B	7/18/21	16:14:18	-45.3	13	5	1.3	Y	A, Set ISO 4000, fStop 7.1, shutter 1/60
WTG-021	C	7/18/21	16:19:08	-45.2	13	5	1.3	Y	A, Set ISO 4000, fStop 7.1, shutter 1/60
WTG-025	A	7/18/21	19:02:11	-40.3	13	5	1.3	Y	A
WTG-025	B	7/18/21	19:07:59	-40.4	13	5	1.3	Y	A
WTG-025	C	7/18/21	19:12:57	-40.5	13	5	1.3	Y	A
WTG-027	A	7/18/21	20:44:44	-38.8	13	5	1.3	Y	A
WTG-027	B	7/18/21	20:50:27	-38.5	13	5	1.3	Y	A
WTG-027	C	7/18/21	20:55:28	-38.4	13	5	1.3	Y	A
WTG-053	A	7/18/21	22:50:04	-44.6	13	5	1.3	Y	A
WTG-053	B	7/18/21	22:56:06	-44.6	13	5	1.3	Y	A
WTG-053	C	7/18/21	23:01:28	-44.7	13	5	1.3	Y	A
WTG-034	A	7/19/21	0:46:54	-42.5	13	5	1.3	Y	A
WTG-034	B	7/19/21	0:52:23	-42.6	13	5	1.3	Y	A
WTG-034	C	7/19/21	0:58:01	-42.5	13	5	1.3	Y	A
WTG-033	A	7/19/21	2:19:27	-43.6	13	5	1.3	Y	SPI acceptable, No PV, USB blocked
WTG-033	B	7/19/21	2:24:42	-43.9	13	5	1.3	Y	SPI acceptable, No PV, USB blocked
WTG-033	C	7/19/21	2:29:48	-43.8	13	5	1.3	Y	SPI acceptable, No PV, USB blocked
WTG-033	D	7/19/21	3:02:03	-43.8	13	5	1.3	Y	A
WTG-033	E	7/19/21	3:07:31	-44.0	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-033	F	7/19/21	3:12:40	-44.1	13	5	1.3	Y	PV disturbed
WTG-040	A	7/19/21	4:42:42	-47.7	13	5	1.3	Y	Replaced PV battery
WTG-040	B	7/19/21	4:48:31	-47.8	13	5	1.3	Y	PV dark
WTG-040	C	7/19/21	4:54:12	-48.0	13	5	1.3	Y	PV dark
WTG-054	A	7/19/21	7:35:12	-48.7	13	5	1.3	Y	A, replaced PV battery, focus reset to 1.5m, backed up all SPI/PV images to hardrive
WTG-054	B	7/19/21	7:40:30	-48.7	13	5	1.3	Y	A, replaced PV battery, focus reset to 1.5m, backed up all SPI/PV images to hardrive
WTG-054	C	7/19/21	7:45:10	-48.6	13	5	1.3	Y	A, replaced PV battery, focus reset to 1.5m, backed up all SPI/PV images to hardrive
WTG-047	A	7/19/21	9:23:52	-49.7	13	5	1.3	Y	A
WTG-047	B	7/19/21	9:28:55	-49.3	13	5	1.3	Y	A
WTG-047	C	7/19/21	9:34:33	-49.6	13	5	1.3	Y	A
WTG-048	A	7/19/21	10:56:07	-49.5	13	5	1.3	Y	A
WTG-048	B	7/19/21	11:01:55	-49.4	13	5	1.3	Y	A
WTG-048	C	7/19/21	11:06:40	-49.5	13	5	1.3	Y	A
WTG-049	A	7/19/21	12:37:54	-50.9	13	5	1.3	Y	Set ISO 2500, fStop 7.1, shutter 1/60, emptied SPI prism to remove particles on mirror, charged planview battery and reset camera to ISO 2000
WTG-049	B	7/19/21	12:42:54	-50.9	13	5	1.3	Y	Set ISO 2500, fStop 7.1, shutter 1/60, emptied SPI prism to remove particles on mirror, charged planview battery and reset camera to ISO 2000
WTG-049	C	7/19/21	12:47:48	-50.8	13	5	1.3	Y	Set ISO 2500, fStop 7.1, shutter 1/60, emptied SPI prism to remove particles on mirror, charged planview battery and reset camera to ISO 2000
WTG-058	A	7/19/21	14:56:57	-52.8	13	5	1.3	Y	A
WTG-058	B	7/19/21	15:00:58	-53.0	13	5	1.3	Y	A
WTG-058	C	7/19/21	15:04:54	-53.0	13	5	1.3	Y	A
WTG-066	A	7/19/21	17:32:04	-52.8	13	5	1.3	Y	A
WTG-066	B	7/19/21	17:37:21	-52.6	13	5	1.3	Y	A
WTG-066	C	7/19/21	17:42:38	-52.7	13	5	1.3	Y	A
WTG-067	A	7/19/21	19:47:29	-50.4	13	5	2	Y	ISO 2000, SHUTTER 1/60, fStop 7.1, trigger 2m
WTG-067	B	7/19/21	19:53:31	-50.3	13	5	2	Y	ISO 2000, SHUTTER 1/60, fStop 7.1, trigger 2m
WTG-067	C	7/19/21	19:58:53	-50.3	13	5	2	Y	ISO 2000, SHUTTER 1/60, fStop 7.1, trigger 2m
WTG-067	D	7/19/21	20:23:00	-50.3	13	5	1.3	Y	Changed trigger to 1.3 m, high turbidity in water column
WTG-067	E	7/19/21	20:28:59	-50.3	13	5	1.3	Y	Changed trigger to 1.3 m, high turbidity in water column
WTG-067	F	7/19/21	20:34:26	-50.2	13	5	1.3	Y	Changed trigger to 1.3 m, high turbidity in water column
WTG-068	A	7/19/21	22:01:47	-49.7	13	5	1.3	Y	High concentration of zooplankton in water column
WTG-068	B	7/19/21	22:06:33	-49.7	13	5	1.3	Y	High concentration of zooplankton in water column
WTG-068	C	7/19/21	22:11:23	-49.6	13	5	1.3	Y	High concentration of zooplankton in water column
WTG-068	D	7/19/21	22:38:13	-49.6	13	5	1.3	Y	A, all images backed up to HD
WTG-068	E	7/19/21	22:43:06	-49.7	13	5	1.3	Y	A, all images backed up to HD
WTG-068	F	7/19/21	22:47:51	-49.8	13	5	1.3	Y	A, all images backed up to HD
WTG-077	A	7/20/21	0:54:11	-51.0	13	5	1.3	N	A, turned off GoPro light to avoid attracting zooplankton
WTG-077	B	7/20/21	0:59:37	-50.7	13	5	1.3	N	A, turned off GoPro light to avoid attracting zooplankton
WTG-077	C	7/20/21	1:05:07	-51.1	13	5	1.3	N	A, turned off GoPro light to avoid attracting zooplankton
WTG-076	A	7/20/21	2:26:05	-50.5	13	5	1.3	N	A
WTG-076	B	7/20/21	2:31:01	-50.5	13	5	1.3	N	A

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Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-076	C	7/20/21	2:36:12	-50.6	13	5	1.3	N	A
WTG-074	A	7/20/21	4:11:06	-53.6	13	5	1.3	N	A
WTG-074	B	7/20/21	4:17:00	-53.6	13	5	1.3	N	A, PV dark
WTG-074	C	7/20/21	4:22:29	-53.6	13	5	1.3	N	A, PV dark
WTG-081	A	7/20/21	5:48:27	-51.3	13	5	1.3	N	PV battery changed, set focus 1.5m, LED 60 and 55
WTG-081	B	7/20/21	5:54:00	-51.3	13	5	1.3	N	PV dark, PV battery changed, set focus 1.5m, LED 60 and 55
WTG-081	C	7/20/21	5:58:36	-51.2	13	5	1.3	N	PV dark, PV battery changed, set focus 1.5m, LED 60 and 55
WTG-078	A	7/20/21	7:39:06	-49.4	13	5	1.3	N	A
WTG-078	B	7/20/21	7:44:06	-49.3	13	5	1.3	N	A
WTG-078	C	7/20/21	7:47:50	-49.3	13	5	1.3	N	A
WTG-098	A	7/20/21	9:25:57	-49.7	13	5	1.3	N	A
WTG-098	B	7/20/21	9:29:56	-49.7	13	5	1.3	N	A
WTG-098	C	7/20/21	9:34:08	-49.6	13	5	1.3	N	A
WTG-090	A	7/20/21	11:01:21	-49.9	13	5	1.3	N	A
WTG-090	B	7/20/21	11:05:39	-49.8	13	5	1.3	N	A
WTG-090	C	7/20/21	11:11:49	-50.0	13	5	1.3	N	A
WTG-101	A	7/20/21	13:18:24	-51.8	13	5	1.3	Y	A
WTG-101	B	7/20/21	13:23:06	-52.0	13	5	1.3	Y	A
WTG-101	C	7/20/21	13:28:52	-52.1	13	5	1.3	Y	A
WTG-083	A	7/20/21	15:25:04	-51.8	13	5	1.3	Y	A
WTG-083	B	7/20/21	15:30:07	-51.7	13	5	1.3	Y	A
WTG-083	C	7/20/21	15:34:37	-51.6	13	5	1.3	Y	A
WTG-084	A	7/20/21	17:05:58	-52.1	13	5	1.3	Y	A, one PV dark, adjusted strobe to improve camera/strobe sync
WTG-084	B	7/20/21	17:11:00	-51.9	13	5	1.3	Y	A, one PV dark, adjusted strobe to improve camera/strobe sync
WTG-084	C	7/20/21	17:15:27	-51.9	13	5	1.3	Y	A, one PV dark, adjusted strobe to improve camera/strobe sync
WTG-085	A	7/20/21	19:11:59	-51.8	13	5	1.3	Y	A, some PV dark, adjusted strobe to 50%
WTG-085	B	7/20/21	19:17:51	-51.8	13	5	1.3	Y	A, some PV dark, adjusted strobe to 50%
WTG-085	C	7/20/21	19:22:38	-51.7	13	5	1.3	Y	A, some PV dark, adjusted strobe to 50%
WTG-087	A	7/20/21	21:02:26	-54.1	13	5	1.3	Y	A
WTG-087	B	7/20/21	21:09:27	-53.6	13	5	1.3	Y	A
WTG-087	C	7/20/21	21:14:28	-53.6	13	5	1.3	Y	A
WTG-097	A	7/20/21	22:33:57	-53.6	13	5	1.3	Y	A
WTG-097	B	7/20/21	22:40:21	-53.5	13	5	1.3	Y	A
WTG-097	C	7/20/21	22:45:24	-53.5	13	5	1.3	Y	A
WTG-107	A	7/21/21	1:03:28	-56.2	13	5	1.3	Y	A
WTG-107	B	7/21/21	1:09:50	-56.2	13	5	1.3	Y	A
WTG-107	C	7/21/21	1:15:01	-56.2	13	5	1.3	Y	A
WTG-095	A	7/21/21	3:20:02	-53.1	13	5	1.3	Y	A
WTG-095	B	7/21/21	3:25:57	-53.2	13	5	1.3	Y	A
WTG-095	C	7/21/21	3:32:10	-53.2	13	5	1.3	Y	A
WTG-104	A	7/21/21	4:46:49	-54.3	13	5	1.3	N	A
WTG-104	B	7/21/21	4:51:32	-54.2	13	5	1.3	N	A

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Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-104	C	7/21/21	4:56:30	-54.3	13	5	1.3	N	No SPI image, unknown cause, battery flash went off when tested on deck
WTG-134	A	7/21/21	6:57:50	-58.0	13	5	1.3	N	A, backed up images to HD, reformatted SD cards in SPI camera
WTG-134	B	7/21/21	7:02:54	-58.0	13	5	1.3	N	A, backed up images to HD, reformatted SD cards in SPI camera
WTG-134	C	7/21/21	7:08:22	-58.0	13	5	1.3	N	A, backed up images to HD, reformatted SD cards in SPI camera
WTG-123	A	7/21/21	8:42:43	-56.4	13	5	1.3	Y	A
WTG-123	B	7/21/21	8:46:57	-56.3	13	5	1.3	Y	No PV image, battery died at depth, changed GoPro battery
WTG-123	C	7/21/21	8:51:34	-56.3	13	5	1.3	Y	No PV image, battery died at depth
WTG-123	D	7/21/21	9:22:36	-56.2	13	5	1.3	Y	A, changed GoPro battery, changed PV battery, reset focal length 1.5m
WTG-123	E	7/21/21	9:27:22	-56.1	13	5	1.3	Y	A, changed GoPro battery, changed PV battery, reset focal length 1.5m
WTG-122	A	7/21/21	10:51:24	-55.3	13	5	1.3	Y	A, Nikon software not communicating with PC, SPI camera button was unresponsive, not able to download images most likely due to low battery voltage. Used MS Windows to download images. SPI battery switched out and tested successfully
WTG-122	B	7/21/21	10:55:52	-55.3	13	5	1.3	Y	A, Nikon software not communicating with PC, SPI camera button was unresponsive, not able to download images most likely due to low battery voltage. Used MS Windows to download images. SPI battery switched out and tested successfully
WTG-122	C	7/21/21	10:59:45	-55.4	13	5	1.3	Y	A, Nikon software not communicating with PC, SPI camera button was unresponsive, not able to download images most likely due to low battery voltage. Used MS Windows to download images. SPI battery switched out and tested successfully
WTG-128	A	7/21/21	13:18:23	-54.3	13	5	1.3	Y	A
WTG-128	B	7/21/21	13:26:41	-53.7	13	5	1.3	Y	A
WTG-128	C	7/21/21	13:31:28	-54.1	13	5	1.3	Y	A
WTG-137	A	7/21/21	15:07:57	-56.2	13	5	1.3	Y	A
WTG-137	B	7/21/21	15:12:33	-56.1	13	5	1.3	Y	A
WTG-137	C	7/21/21	15:17:03	-56.2	13	5	1.3	Y	A
WTG-157	A	7/21/21	20:04:54	-60.9	13	5	1.3	Y	A
WTG-157	B	7/21/21	20:10:07	-60.8	13	5	1.3	Y	A
WTG-157	C	7/21/21	20:14:36	-60.8	13	5	1.3	Y	A
WTG-155	A	7/21/21	21:41:30	-59.2	13	5	1.3	Y	A
WTG-155	B	7/21/21	21:46:21	-59.2	13	5	1.3	Y	A
WTG-155	C	7/21/21	21:50:57	-59.3	13	5	1.3	Y	A
WTG-143	A	7/21/21	23:42:47	-56.0	13	5	1.3	Y	A
WTG-143	B	7/21/21	23:47:27	-55.9	13	5	1.3	Y	A
WTG-143	C	7/21/21	23:50:00	-56.1	13	5	1.3	Y	A
WTG-131	A	7/22/21	1:24:20	-55.7	13	5	1.3	Y	A
WTG-131	B	7/22/21	1:30:23	-55.7	13	5	1.3	Y	A
WTG-131	C	7/22/21	1:35:58	-55.6	13	5	1.3	Y	A
WTG-111	A	7/22/21	3:33:18	-53.9	13	5	1.3	Y	A
WTG-111	B	7/22/21	3:38:38	-54.0	13	5	1.3	Y	A
WTG-111	C	7/22/21	3:44:00	-53.9	13	5	1.3	Y	A
WTG-119	A	7/22/21	5:05:06	-54.4	13	5	1.3	Y	A
WTG-119	B	7/22/21	5:10:42	-54.5	13	5	1.3	Y	A
WTG-119	C	7/22/21	5:15:27	-54.5	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-108	A	7/22/21	7:00:34	-51.5	13	5	1.3	Y	A
WTG-108	B	7/22/21	7:05:37	-51.2	13	5	1.3	Y	A
WTG-108	C	7/22/21	7:10:18	-51.5	13	5	1.3	Y	A
WTG-088	A	7/22/21	8:43:20	-50.2	13	5	1.3	Y	A
WTG-088	B	7/22/21	8:48:17	-50.4	13	5	1.3	Y	A
WTG-088	C	7/22/21	8:53:35	-50.3	13	5	1.3	Y	A
WTG-072	A	7/22/21	10:24:35	-51.8	13	5	1.3	Y	A
WTG-072	B	7/22/21	10:29:14	-51.7	13	5	1.3	Y	A
WTG-072	C	7/22/21	10:33:11	-51.7	13	5	1.3	Y	No PV, battery died, PV battery changed, set focus 1.5m, power 55%, lamp 60%
WTG-071	A	7/22/21	12:01:49	-50.2	13	5	1.3	Y	A, images slightly out of focus, refocus camera 4 clicks above 1m
WTG-071	B	7/22/21	12:06:51	-50.0	13	5	1.3	Y	A, images slightly out of focus, refocus camera 4 clicks above 1m
WTG-071	C	7/22/21	12:12:15	-50.1	13	5	1.3	Y	A, images slightly out of focus, refocus camera 4 clicks above 1m
WTG-059	A	7/22/21	13:54:43	-49.2	13	5	1.3	Y	PV dark
WTG-059	B	7/22/21	13:59:07	-49.1	13	5	1.3	Y	PV dark
WTG-059	C	7/22/21	14:03:53	-49.1	13	5	1.3	Y	PV dark
WTG-059	D	7/22/21	14:31:20	-49.3	13	5	1.3	Y	A
WTG-059	E	7/22/21	14:35:30	-49.2	13	5	1.3	Y	A
WTG-059	F	7/22/21	14:40:03	-49.3	13	5	1.3	Y	A
WTG-061	A	7/22/21	16:17:41	-48.2	13	5	1.3	Y	A
WTG-061	B	7/22/21	16:21:45	-48.1	13	5	1.3	Y	A
WTG-061	C	7/22/21	16:25:24	-48.2	13	5	1.3	Y	A
WTG-051	A	7/22/21	17:43:37	-47.9	13	5	1.3	Y	A
WTG-051	B	7/22/21	17:48:17	-47.9	13	5	1.3	Y	A
WTG-051	C	7/22/21	17:53:23	-47.9	13	5	1.3	Y	A
WTG-042	A	7/22/21	19:32:51	-44.7	13	5	1.3	Y	A
WTG-042	B	7/22/21	19:37:16	-44.7	13	5	1.3	Y	A
WTG-042	C	7/22/21	19:42:13	-44.6	13	5	1.3	Y	A
WTG-036	A	7/22/21	21:28:11	-41.5	13	5	1.3	Y	A
WTG-036	B	7/22/21	21:33:14	-41.5	13	5	1.3	Y	A
WTG-036	C	7/22/21	21:38:00	-41.6	13	5	1.3	Y	A
WTG-017	A	7/22/21	23:26:50	-41.8	13	5	1.3	Y	A
WTG-017	B	7/22/21	23:31:52	-41.6	13	5	1.3	Y	A
WTG-017	C	7/22/21	23:36:56	-41.8	13	5	1.3	Y	A
WTG-004	A	7/23/21	1:21:26	-38.0	13	5	1.3	Y	A
WTG-004	B	7/23/21	1:26:32	-38.1	13	5	1.3	Y	A
WTG-004	C	7/23/21	1:32:07	-38.0	13	5	1.3	Y	A
WTG-001	A	7/23/21	2:47:32	-38.6	13	5	1.3	Y	A
WTG-001	B	7/23/21	2:53:28	-38.7	13	5	1.3	Y	A
WTG-001	C	7/23/21	2:59:07	-38.5	13	5	1.3	Y	A
WTG-006	A	7/23/21	4:39:57	-41.1	13	5	1.3	Y	A
WTG-006	B	7/23/21	4:45:41	-41.2	13	5	1.3	Y	A
WTG-006	C	7/23/21	4:52:10	-41.3	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-015	A	7/23/21	6:41:21	-43.5	13	5	1.3	Y	A
WTG-015	B	7/23/21	6:46:47	-43.6	13	5	1.3	Y	A
WTG-015	C	7/23/21	6:52:32	-43.6	13	5	1.3	Y	A
WTG-032	A	7/23/21	8:16:06	-45.3	13	5	1.3	Y	A, changed PV battery, set focus 1.4m, LED 70%/45%, set to still. After setting up, flash did not go off, USB box showed blue screen, could not reset. PV camera power cable was disconnected and found wet, it was dried out, used contact solution and white lubricant. USB box returned to normal after restablishing contact. Set camera to ISO 2000, fStop 8.0, shutter 1/60, focal length 1.4m, strobe light 45%, reset clock, flash now worked.
WTG-032	B	7/23/21	8:21:34	-45.1	13	5	1.3	Y	A, changed PV battery, set focus 1.4m, LED 70%/45%, set to still. After setting up, flash did not go off, USB box showed blue screen, could not reset. PV camera power cable was disconnected and found wet, it was dried out, used contact solution and white lubricant. USB box returned to normal after restablishing contact. Set camera to ISO 2000, fStop 8.0, shutter 1/60, focal length 1.4m, strobe light 45%, reset clock, flash now worked.
WTG-032	C	7/23/21	8:26:23	-45.1	13	5	1.3	Y	A, changed PV battery, set focus 1.4m, LED 70%/45%, set to still. After setting up, flash did not go off, USB box showed blue screen, could not reset. PV camera power cable was disconnected and found wet, it was dried out, used contact solution and white lubricant. USB box returned to normal after restablishing contact. Set camera to ISO 2000, fStop 8.0, shutter 1/60, focal length 1.4m, strobe light 45%, reset clock, flash now worked.
WTG-045	A	7/23/21	10:41:56	-48.4	13	5	1.3	Y	A
WTG-045	B	7/23/21	10:47:16	-48.3	13	5	1.3	Y	A
WTG-045	C	7/23/21	10:52:28	-48.3	13	5	1.3	Y	A
WTG-037	A	7/23/21	12:29:13	-45.6	13	5	1.3	Y	SPI acceptable, only 2 PV
WTG-037	B	7/23/21	12:33:35	-45.7	13	5	1.3	Y	SPI acceptable, only 2 PV
WTG-037	C	7/23/21	12:40:33	-45.5	13	5	1.3	Y	SPI acceptable, only 2 PV
WTG-029	A	7/23/21	14:19:34	-45.7	13	5	1.3	Y	A
WTG-029	B	7/23/21	14:24:18	-45.7	13	5	1.3	Y	A
WTG-029	C	7/23/21	14:28:31	-45.7	13	5	1.3	Y	A
WTG-039	A	7/23/21	16:01:25	-48.1	13	5	1.3	Y	A
WTG-039	B	7/23/21	16:06:21	-48.3	13	5	1.3	Y	A
WTG-039	C	7/23/21	16:10:44	-48.2	13	5	1.3	Y	A
WTG-056	A	7/23/21	17:45:02	-51.6	13	5	1.3	Y	A
WTG-056	B	7/23/21	17:49:07	-51.6	13	5	1.3	Y	A
WTG-056	C	7/23/21	17:54:04	-51.6	13	5	1.3	Y	A
WTG-065	A	7/23/21	19:37:02	-53.0	13	5	1.3	Y	A
WTG-065	B	7/23/21	19:42:10	-53.0	13	5	1.3	Y	A
WTG-065	C	7/23/21	19:46:52	-53.0	13	5	1.3	Y	A
WTG-075	A	7/23/21	21:05:36	-51.8	13	5	1.3	Y	A
WTG-075	B	7/23/21	21:10:38	-51.7	13	5	1.3	Y	A
WTG-075	C	7/23/21	21:15:15	-51.5	13	5	1.3	Y	A
WTG-092	A	7/23/21	22:46:42	-51.6	13	5	1.3	Y	A
WTG-092	B	7/23/21	22:52:24	-51.7	13	5	1.3	Y	A
WTG-092	C	7/23/21	22:58:07	-51.6	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-103	A	7/24/21	0:37:30	-53.0	13	5	1.3	N	A
WTG-103	B	7/24/21	0:43:48	-53.0	13	5	1.3	N	A
WTG-103	C	7/24/21	0:49:26	-52.9	13	5	1.3	N	A
WTG-094	A	7/24/21	2:24:17	-51.9	13	5	1.3	Y	A
WTG-094	B	7/24/21	2:30:09	-51.9	13	5	1.3	Y	A +1 Water Shot
WTG-094	C	7/24/21	2:35:47	-51.9	13	5	1.3	Y	A
WTG-086	A	7/24/21	3:58:48	-52.0	13	5	1.3	Y	A
WTG-086	B	7/24/21	4:05:16	-51.9	13	5	1.3	Y	A
WTG-086	C	7/24/21	4:11:06	-51.9	13	5	1.3	Y	A
WTG-105	A	7/24/21	5:58:38	-55.3	13	5	1.3	Y	A
WTG-105	B	7/24/21	6:04:08	-55.3	13	5	1.3	Y	A
WTG-105	C	7/24/21	6:10:08	-55.3	13	5	1.3	Y	A
WTG-115	A	7/24/21	8:11:07	-56.8	13	5	1.3	Y	A
WTG-115	B	7/24/21	8:15:04	-56.9	13	5	1.3	Y	A
WTG-115	C	7/24/21	8:19:10	-57.0	13	5	1.3	Y	A
WTG-126	A	7/24/21	9:48:02	-58.8	13	5	1.3	Y	A, PV Battery Changed
WTG-126	B	7/24/21	9:53:00	-58.9	13	5	1.3	Y	A, PV Battery Changed
WTG-126	C	7/24/21	9:57:06	-58.9	13	5	1.3	Y	A, PV Battery Changed
WTG-142	A	7/24/21	11:20:44	-59.3	13	5	1.3	Y	SPI A, PV images were water shots, cannot determine reason this is happening.
WTG-142	B	7/24/21	11:24:29	-59.2	13	5	1.3	Y	SPI A, PV images were water shots, cannot determine reason this is happening.
WTG-142	C	7/24/21	11:27:35	-59.2	13	5	1.3	Y	SPI A, PV images were water shots, cannot determine reason this is happening.
WTG-142	D	7/24/21	12:40:56	-58.9	13	5	1.3	Y	SPI A, No PV
WTG-142	E	7/24/21	12:45:47	-58.9	13	5	1.3	Y	SPI A, No PV
WTG-142	F	7/24/21	12:50:13	-58.9	13	5	1.3	Y	SPI A, No PV
WTG-142	G	7/24/21	13:17:40	-58.8	13	5	1.3	Y	A
WTG-142	H	7/24/21	13:23:34	-58.7	13	5	1.3	Y	A
WTG-142	I	7/24/21	13:29:18	-58.8	13	5	1.3	Y	A
WTG-140	A	7/24/21	15:00:00	-57.5	13	5	1.3	Y	A
WTG-140	B	7/24/21	15:04:18	-57.4	13	5	1.3	Y	A
WTG-140	C	7/24/21	15:08:00	-57.6	13	5	1.3	Y	A
WTG-146	A	7/24/21	16:36:20	-58.0	13	5	1.3	Y	A
WTG-146	B	7/24/21	16:41:55	-58.3	13	5	1.3	Y	A
WTG-146	C	7/24/21	16:45:34	-57.9	13	5	1.3	Y	A
WTG-152	A	7/24/21	18:50:39	-60.0	13	5	1.3	Y	A
WTG-152	B	7/24/21	18:55:41	-59.9	13	5	1.3	Y	A
WTG-152	C	7/24/21	19:00:41	-59.9	13	5	1.3	Y	A
WTG-150	A	7/25/21	20:32:26	-59.0	13	5	1.3	Y	A
WTG-150	B	7/25/21	20:39:00	-59.0	13	5	1.3	Y	A
WTG-150	C	7/25/21	20:43:53	-59.0	13	5	1.3	Y	A
WTG-149	A	7/25/21	21:58:58	-58.4	13	5	1.3	Y	A
WTG-149	B	7/25/21	22:03:22	-58.4	13	5	1.3	Y	A
WTG-149	C	7/25/21	22:09:38	-58.4	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-154	A	7/25/21	23:24:08	-58.9	13	5	1.3	Y	A
WTG-154	B	7/25/21	23:29:20	-59.0	13	5	1.3	Y	A
WTG-154	C	7/25/21	23:34:36	-58.9	13	5	1.3	Y	A
WTG-151	A	7/25/21	1:03:58	-58.6	13	5	1.3	Y	A
WTG-151	B	7/25/21	1:09:09	-58.6	13	5	1.3	Y	A
WTG-151	C	7/25/21	1:15:14	-58.6	13	5	1.3	Y	A
WTG-156	A	7/25/21	2:47:19	-59.1	13	5	1.3	Y	A
WTG-156	B	7/25/21	2:52:30	-59.1	13	5	1.3	Y	A
WTG-156	C	7/25/21	2:57:46	-58.8	13	5	1.3	Y	A
WTG-153	A	7/25/21	4:25:41	-59.8	13	5	1.3	Y	A
WTG-153	B	7/25/21	4:30:55	-59.9	13	5	1.3	Y	A
WTG-153	C	7/25/21	4:36:35	-59.8	13	5	1.3	Y	A
WTG-147	A	7/25/21	6:36:25	-59.2	13	5	1.3	Y	A
WTG-147	B	7/25/21	6:41:36	-59.2	13	5	1.3	Y	A
WTG-147	C	7/25/21	6:45:47	-57.4	13	5	1.3	Y	A
WTG-141	A	7/25/21	8:04:23	-59.0	13	5	1.3	N	A
WTG-141	B	7/25/21	8:09:09	-59.0	13	5	1.3	N	A
WTG-141	C	7/25/21	8:13:29	-59.0	13	5	1.3	N	A
WTG-139	A	7/25/21	9:36:43	-57.8	13	5	1.3	Y	A, GoPro Battery Changed
WTG-139	B	7/25/21	9:40:12	-57.8	13	5	1.3	Y	SPI A, PV Disturbed,PV Battery Changed & Settings. Fstop 8.0, ISO 2000, 1/60
WTG-139	C	7/25/21	9:43:36	-57.8	13	5	1.3	Y	SPI and PV A, PV Battery Changed & Settings. Fstop 8.0, ISO 2000, 1/60
WTG-145	A	7/25/21	11:12:07	-57.8	13	5	1.3	Y	A
WTG-145	B	7/25/21	11:16:11	-57.7	13	5	1.3	Y	A
WTG-145	C	7/25/21	11:20:29	-57.7	13	5	1.3	Y	A
WTG-144	A	7/25/21	13:13:42	-56.6	13	5	1.3	Y	A
WTG-144	B	7/25/21	13:18:04	-56.6	13	5	1.3	Y	A
WTG-144	C	7/25/21	13:22:24	-56.5	13	5	1.3	Y	A
WTG-138	A	7/25/21	14:48:30	-56.1	13	5	1.3	Y	A
WTG-138	B	7/25/21	14:52:47	-55.9	13	5	1.3	Y	A
WTG-138	C	7/25/21	14:57:21	-56.2	13	5	1.3	Y	A
WTG-136	A	7/27/21	1:36:15	-55.9	13	5	1.3	Y	A
WTG-136	B	7/27/21	1:42:15	-55.8	13	5	1.3	Y	A
WTG-136	C	7/27/21	1:50:21	-55.7	13	5	1.3	Y	A
WTG-129	A	7/27/21	3:09:09	-54.8	13	5	1.3	Y	A
WTG-129	B	7/27/21	3:14:56	-54.8	13	5	1.3	Y	A
WTG-129	C	7/27/21	3:21:28	-54.8	13	5	1.3	Y	A
WTG-120	A	7/27/21	4:54:24	-54.4	13	5	1.3	N	A
WTG-120	B	7/27/21	4:59:21	-54.4	13	5	1.3	N	A
WTG-120	C	7/27/21	5:04:21	-54.3	13	5	1.3	N	A
WTG-121	A	7/27/21	6:40:39	-55.1	13	5	1.3	Y	A
WTG-121	B	7/27/21	6:45:09	-55.1	13	5	1.3	Y	A
WTG-121	C	7/27/21	6:56:15	-55.1	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-130	A	7/27/21	8:12:07	-55.8	13	5	1.3	Y	A
WTG-130	B	7/27/21	8:16:27	-55.9	13	5	1.3	Y	A
WTG-130	C	7/27/21	8:20:27	-55.9	13	5	1.3	Y	A
WTG-132	A	7/27/21	10:00:01	-57.2	13	5	1.3	Y	A
WTG-132	B	7/27/21	10:04:49	-57.3	13	5	1.3	Y	A
WTG-132	C	7/27/21	10:10:37	-57.2	13	5	1.3	Y	A
WTG-133	A	7/27/21	11:33:51	-58.0	13	5	1.3	Y	SPI A, Only 2 PV Accectable
WTG-133	B	7/27/21	11:38:21	-58.0	13	5	1.3	Y	SPI A, Only 2 PV Accectable
WTG-133	C	7/27/21	11:43:26	-58.1	13	5	1.3	Y	SPI A, Only 2 PV Accectable
WTG-124	A	7/27/21	13:13:42	-57.6	13	5	1.3	Y	SPI A, Only 2 PV Accectable Others are Turbid
WTG-124	B	7/27/21	13:18:00	-57.6	13	5	1.3	Y	SPI A, Only 2 PV Accectable Others are Turbid
WTG-124	C	7/27/21	13:22:43	-57.6	13	5	1.3	Y	SPI A, Only 2 PV Accectable Others are Turbid
WTG-125	A	7/27/21	14:59:08	-57.8	13	5	1.3	Y	A
WTG-125	B	7/27/21	15:03:56	-58.1	13	5	1.3	Y	A
WTG-125	C	7/27/21	15:09:08	-57.9	13	5	1.3	Y	A
WTG-135	A	7/27/21	16:28:23	-58.2	13	5	1.3	Y	A
WTG-135	B	7/27/21	16:32:48	-58.3	13	5	1.3	Y	A
WTG-135	C	7/27/21	16:37:22	-58.2	13	5	1.3	Y	A
WTG-148	A	7/27/21	18:26:42	-59.5	13	5	1.3	Y	A
WTG-148	B	7/27/21	18:33:36	-59.5	13	5	1.3	Y	A
WTG-148	C	7/27/21	18:40:40	-59.6	13	5	1.3	Y	A
WTG-127	A	7/28/21	20:31:36	-59.2	13	5	1.3	Y	SPI A, Battery dead on PV system. Lasers off. Charged battery and focused. Settings f 8.0, ISO 2000, 1/60 focus 1m + 4
WTG-127	B	7/28/21	20:36:12	-59.4	13	5	1.3	Y	SPI A, Battery dead on PV system. Lasers off. Charged battery and focused. Settings f 8.0, ISO 2000, 1/60 focus 1m + 4
WTG-127	C	7/28/21	20:41:49	-59.4	13	5	1.3	Y	SPI A, Battery dead on PV system. Lasers off. Charged battery and focused. Settings f 8.0, ISO 2000, 1/60 focus 1m + 4
WTG-117	A	7/28/21	22:29:41	-58.5	13	5	1.3	Y	SPI A, No PV short at trigger connection on battery - clean and redeploy
WTG-117	B	7/28/21	22:35:26	-58.6	13	5	1.3	Y	SPI A, No PV short at trigger connection on battery - clean and redeploy
WTG-117	C	7/28/21	22:42:23	-58.6	13	5	1.3	Y	SPI A, No PV short at trigger connection on battery - clean and redeploy
WTG-117	D	7/28/21	23:03:31	-58.3	13	5	1.3	Y	SPI A, No PV, swapped battery to 3000m stainless refocus 1m + 4
WTG-117	E	7/28/21	23:08:58	-57.5	13	5	1.3	Y	SPI A, No PV, swapped battery to 3000m stainless refocus 1m + 4
WTG-117	F	7/28/21	23:16:07	-57.0	13	5	1.3	Y	SPI A, No PV, swapped battery to 3000m stainless refocus 1m + 4
WTG-117	G	7/28/21	0:06:51	-58.4	13	5	1.3	Y	SPI is H20 shot (00:02), Touch bottom and return to surface to check - PV Triggered
WTG-117	H	7/28/21	0:12:40	-58.5	13	5	1.3	Y	A +1 disturbed PV bounce
WTG-117	I	7/28/21	0:20:45	-58.5	13	5	1.3	Y	A
WTG-116	A	7/28/21	3:25:46	-57.1	13	5	1.3	Y	SPI A, PV Dark
WTG-116	B	7/28/21	3:31:46	-57.2	13	5	1.3	Y	SPI A, PV Too Dark, Not acceptable
WTG-116	C	7/28/21	3:35:57	-57.1	13	5	1.3	Y	SPI A, PV Too Dark, Not acceptable
WTG-116	D	7/28/21	4:15:55	-56.8	13	5	1.3	Y	SPI A, PV Too Dark and 1 PV bounce
WTG-116	E	7/28/21	4:21:53	-55.2	13	5	1.3	Y	A
WTG-106	A	7/28/21	6:08:53	-55.3	13	5	1.3	Y	SPI A, 2 PV Acceptable 1 PV Too Dark, Adujsted LED Light to 70%

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-106	B	7/28/21	6:13:43	-55.5	13	5	1.3	Y	SPI A, 2 PV Acceptable 1 PV Too Dark, Adujsted LED Light to 70%
WTG-106	C	7/28/21	6:18:23	-55.6	13	5	1.3	Y	SPI A, 2 PV Acceptable 1 PV Too Dark, Adujsted LED Light to 70%
WTG-096	A	7/28/21	8:29:24	-53.8	13	5	1.3	N	A, PV battery Changed, Settings - LED Power to 45%, 1/60 f 8.0, ISO 2000, focal length 1 m +4
WTG-096	B	7/28/21	8:33:29	-53.8	13	5	1.3	N	A, PV battery Changed, Settings - LED Power to 45%, 1/60 f 8.0, ISO 2000, focal length 1 m +4
WTG-096	C	7/28/21	8:38:12	-53.9	13	5	1.3	N	A, PV battery Changed, Settings - LED Power to 45%, 1/60 f 8.0, ISO 2000, focal length 1 m +4
WTG-114	A	7/28/21	10:14:37	-56.4	13	5	1.3	Y	A
WTG-114	B	7/28/21	10:18:52	-56.4	13	5	1.3	Y	SPI A, PV Disturbed
WTG-114	C	7/28/21	10:23:39	-56.3	13	5	1.3	Y	A
WTG-113	A	7/28/21	11:47:53	-55.8	13	5	1.3	Y	A, GoPro Battery Changed, Flashlight Battery Changed
WTG-113	B	7/28/21	11:52:13	-55.8	13	5	1.3	Y	A, GoPro Battery Changed, Flashlight Battery Changed
WTG-113	C	7/28/21	11:56:39	-55.8	13	5	1.3	Y	SPI A, PV Disturbed, GoPro Battery Changed, Flashlight Battery Changed
WTG-112	A	7/28/21	13:39:01	-54.5	13	5	1.3	Y	A
WTG-112	B	7/28/21	13:43:29	-54.4	13	5	1.3	Y	A
WTG-112	C	7/28/21	13:49:16	-54.4	13	5	1.3	Y	A
WTG-110	A	7/28/21	15:28:06	-53.1	13	5	1.3	Y	A
WTG-110	B	7/28/21	15:32:13	-53.2	13	5	1.3	Y	A
WTG-110	C	7/28/21	15:37:19	-53.1	13	5	1.3	Y	A
WTG-118	A	7/28/21	17:11:12	-52.6	13	5	1.3	Y	A
WTG-118	B	7/28/21	17:14:38	-52.7	13	5	1.3	Y	A
WTG-118	C	7/28/21	17:19:55	-52.6	13	5	1.3	Y	A
WTG-109	A	7/28/21	18:56:31	-51.8	13	5	1.3	Y	A
WTG-109	B	7/28/21	19:00:48	-51.8	13	5	1.3	Y	A
WTG-109	C	7/28/21	19:06:36	-51.8	13	5	1.3	Y	A
WTG-100	A	7/29/21	20:25:13	-51.2	13	5	1.3	Y	A
WTG-100	B	7/29/21	20:30:54	-51.4	13	5	1.3	Y	A
WTG-100	C	7/29/21	20:36:17	-51.3	13	5	1.3	Y	A
WTG-102	A	7/29/21	22:16:01	-53.4	13	5	1.3	Y	A
WTG-102	B	7/29/21	22:21:25	-53.4	13	5	1.3	Y	A
WTG-102	C	7/29/21	22:27:12	-53.3	13	5	1.3	Y	A
WTG-093	A	7/29/21	23:50:43	-53.0	13	5	1.3	Y	A
WTG-093	B	7/29/21	23:55:46	-53.1	13	5	1.3	Y	A
WTG-093	C	7/29/21	0:01:01	-53.1	13	5	1.3	Y	A
WTG-093	A	7/29/21	1:39:41	-53.0	13	5	1.3	Y	A
WTG-091	A	7/29/21	1:39:41	-51.5	13	5	1.3	Y	A
WTG-091	B	7/29/21	1:45:22	-51.5	13	5	1.3	Y	A
WTG-091	C	7/29/21	1:51:06	-51.4	13	5	1.3	Y	A
WTG-099	A	7/29/21	3:07:49	-50.6	13	5	1.3	Y	A
WTG-099	B	7/29/21	3:14:46	-50.5	13	5	1.3	Y	A
WTG-099	C	7/29/21	3:20:06	-50.5	13	5	1.3	Y	A
WTG-089	A	7/29/21	4:48:05	-50.0	13	5	1.3	Y	A
WTG-089	B	7/29/21	4:52:54	-50.1	13	5	1.3	Y	SPI A, Large Squid on PV
WTG-089	C	7/29/21	4:58:39	-49.8	13	5	1.3	Y	SPI A, No PV

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-079	A	7/29/21	6:42:40	-51.1	13	5	1.3	Y	A
WTG-079	B	7/29/21	6:46:52	-51.0	13	5	1.3	Y	A
WTG-079	C	7/29/21	6:52:08	-51.0	13	5	1.3	Y	SPI & H20 Shot
WTG-080	A	7/29/21	8:15:06	-52.2	13	5	1.3	Y	A
WTG-080	B	7/29/21	8:19:46	-52.1	13	5	1.3	Y	A
WTG-080	C	7/29/21	8:23:53	-52.2	13	5	1.3	Y	SPI A, PV Dark
WTG-082	A	7/29/21	12:50:37	-51.2	13	5	1.3	Y	Vessel was outside circle - reposition and restart
WTG-082	B	7/29/21	12:59:09	-51.1	13	5	1.3	Y	A
WTG-082	C	7/29/21	13:03:40	-51.2	13	5	1.3	Y	A
WTG-082	D	7/29/21	13:08:13	-51.2	13	5	1.3	Y	A
WTG-073	A	7/29/21	15:51:56	-52.8	13	5	1.3	Y	A
WTG-073	B	7/29/21	15:57:15	-52.8	13	5	1.3	Y	A
WTG-073	C	7/29/21	16:02:17	-52.8	13	5	1.3	Y	A
WTG-064	A	7/29/21	17:32:36	-51.2	13	5	1.3	Y	A
WTG-064	B	7/29/21	17:37:17	-51.3	13	5	1.3	Y	A
WTG-064	C	7/29/21	17:42:27	-51.2	13	5	1.3	Y	A
WTG-063	A	7/29/21	19:29:19	-50.9	13	5	1.3	Y	A
WTG-063	B	7/29/21	19:34:20	-50.9	13	5	1.3	Y	A
WTG-063	C	7/29/21	19:39:28	-51.0	13	5	1.3	Y	A
WTG-062	A	7/30/21	20:58:51	-50.4	13	5	1.3	Y	A
WTG-062	B	7/30/21	21:04:55	-50.4	13	5	1.3	Y	A
WTG-062	C	7/30/21	21:10:24	-50.4	13	5	1.3	Y	A
WTG-069	A	7/31/21	5:06:07	-49.9	13	5	1.3	Y	A
WTG-069	B	7/31/21	5:11:32	-49.9	13	5	1.3	Y	A
WTG-069	C	7/31/21	5:16:46	-50.1	13	5	1.3	Y	A
WTG-070	A	7/31/21	6:57:51	-48.7	13	5	1.3	Y	A
WTG-070	B	7/31/21	7:02:54	-48.5	13	5	1.3	Y	A
WTG-070	C	7/31/21	7:07:28	-48.8	13	5	1.3	Y	A
WTG-060	A	7/31/21	8:27:28	-48.5	13	5	1.3	Y	PV OK, SPI No Images. SPI camera was off to lubricate trigger and not truned on afterwards.
WTG-060	B	7/31/21	8:31:32	-48.6	13	5	1.3	Y	PV OK, SPI No Images. SPI camera was off to lubricate trigger and not truned on afterwards.
WTG-060	C	7/31/21	8:35:22	-48.7	13	5	1.3	Y	PV OK, SPI No Images. SPI camera was off to lubricate trigger and not truned on afterwards.
WTG-060	D	7/31/21	9:03:00	-48.7	13	5	1.3	Y	A
WTG-060	E	7/31/21	9:07:39	-48.6	13	5	1.3	Y	A
WTG-060	F	7/31/21	9:11:24	-48.5	13	5	1.3	Y	A
WTG-052	A	7/31/21	10:32:24	-46.6	13	5	1.3	Y	A
WTG-052	B	7/31/21	10:36:51	-46.6	13	5	1.3	Y	A
WTG-052	C	7/31/21	10:41:01	-46.7	13	5	1.3	Y	A
WTG-050	A	7/31/21	12:25:32	-48.7	13	5	1.3	Y	A
WTG-050	B	7/31/21	12:30:29	-48.7	13	5	1.3	Y	A
WTG-050	C	7/31/21	12:35:33	-48.7	13	5	1.3	Y	A
WTG-055	A	7/31/21	14:12:31	-51.0	13	5	1.3	Y	A
WTG-055	B	7/31/21	14:16:53	-50.9	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-055	C	7/31/21	14:22:34	-50.9	13	5	1.3	Y	A
WTG-057	A	7/31/21	16:17:35	-52.0	13	5	1.3	Y	A
WTG-057	B	7/31/21	16:21:22	-51.8	13	5	1.3	Y	A
WTG-057	C	7/31/21	16:25:05	-51.9	13	5	1.3	Y	A
WTG-046	A	7/31/21	18:43:09	-49.6	13	5	1.3	Y	A
WTG-046	B	7/31/21	18:47:58	-49.2	13	5	1.3	Y	A
WTG-046	C	7/31/21	18:53:30	-49.2	13	5	1.3	Y	SPI A, No PV, PV Battery Changed
WTG-046	D	7/31/21	19:31:50	-49.4	13	5	1.3	Y	A
WTG-046	E	7/31/21	19:38:55	-49.3	13	5	1.3	Y	A
WTG-046	F	7/31/21	19:43:28	-49.3	13	5	1.3	Y	A
WTG-038	A	8/1/21	21:01:14	-47.9	13	5	1.3	Y	A
WTG-038	B	8/1/21	21:06:12	-47.7	13	5	1.3	Y	A
WTG-038	C	8/1/21	21:11:00	-47.8	13	5	1.3	Y	A
WTG-031	A	8/1/21	22:39:09	-45.4	13	5	1.3	Y	A
WTG-031	B	8/1/21	22:43:57	-45.3	13	5	1.3	Y	A
WTG-031	C	8/1/21	22:48:39	-45.3	13	5	1.3	Y	A
WTG-041	A	8/1/21	0:34:14	-45.9	13	5	1.3	Y	A
WTG-041	B	8/1/21	0:38:24	-46.0	13	5	1.3	Y	A
WTG-041	C	8/1/21	0:42:44	-45.9	13	5	1.3	Y	A
WTG-043	A	8/1/21	2:22:36	-44.6	13	5	1.3	Y	A
WTG-043	B	8/1/21	2:27:14	-44.6	13	5	1.3	Y	A
WTG-043	C	8/1/21	2:31:54	-44.6	13	5	1.3	Y	A
WTG-044	A	8/1/21	3:49:07	-43.2	13	5	1.3	Y	SPI A, PV Monk Fish?
WTG-044	B	8/1/21	3:54:24	-43.3	13	5	1.3	Y	SPI A, PV Disturbed
WTG-044	C	8/1/21	3:59:58	-43.2	13	5	1.3	Y	A
WTG-035	A	8/1/21	5:11:49	-41.5	13	5	1.3	Y	A
WTG-035	B	8/1/21	5:16:05	-41.6	13	5	1.3	Y	A
WTG-035	C	8/1/21	5:21:30	-41.7	13	5	1.3	Y	A
WTG-026	A	8/1/21	7:04:40	-39.3	13	5	1.3	Y	A
WTG-026	B	8/1/21	7:08:48	-39.3	13	5	1.3	Y	A
WTG-026	C	8/1/21	7:12:49	-39.3	13	5	1.3	Y	A
WTG-024	A	8/1/21	8:36:45	-40.5	13	5	1.3	Y	A
WTG-024	B	8/1/21	8:40:58	-40.4	13	5	1.3	Y	A
WTG-024	C	8/1/21	8:45:08	-40.6	13	5	1.3	Y	A
WTG-023	A	8/1/21	9:57:42	-42.1	13	5	1.3	Y	A
WTG-023	B	8/1/21	10:02:07	-42.0	13	5	1.3	Y	A
WTG-023	C	8/1/21	10:06:13	-41.9	13	5	1.3	Y	A
WTG-022	A	8/1/21	11:19:47	-43.3	13	5	1.3	Y	A
WTG-022	B	8/1/21	11:23:55	-43.3	13	5	1.3	Y	A
WTG-022	C	8/1/21	11:28:00	-43.5	13	5	1.3	Y	A
WTG-028	A	8/1/21	13:06:23	-45.9	13	5	1.3	Y	A, PV Changed Battery
WTG-028	B	8/1/21	13:11:28	-45.8	13	5	1.3	Y	A, PV Changed Battery

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
WTG-028	C	8/1/21	13:15:52	-45.8	13	5	1.3	Y	SPI A, No PV Image, PV Changed Battery
WTG-030	A	8/1/21	14:46:52	-46.6	13	5	1.3	Y	A
WTG-030	B	8/1/21	14:50:32	-46.6	13	5	1.3	Y	A
WTG-030	C	8/1/21	14:54:54	-46.5	13	5	1.3	Y	A
WTG-019	A	8/1/21	16:24:15	-44.0	13	5	1.3	Y	A
WTG-019	B	8/1/21	16:28:28	-44.0	13	5	1.3	Y	A
WTG-019	C	8/1/21	16:32:27	-44.1	13	5	1.3	Y	A
WTG-014	A	8/1/21	17:42:51	-42.9	13	5	1.3	Y	A
WTG-014	B	8/1/21	17:47:00	-42.9	13	5	1.3	Y	A
WTG-014	C	8/1/21	17:52:31	-42.9	13	5	1.3	Y	A
WTG-010	A	8/1/21	19:26:01	-42.1	13	5	1.3	Y	A
WTG-010	B	8/1/21	19:30:53	-42.1	13	5	1.3	Y	A
WTG-010	C	8/1/21	19:35:54	-41.9	13	5	1.3	Y	A
WTG-016	A	8/2/21	20:48:40	-42.1	13	5	1.3	Y	A
WTG-016	B	8/2/21	20:53:11	-42.2	13	5	1.3	Y	A
WTG-016	C	8/2/21	20:57:49	-42.3	13	5	1.3	Y	A
WTG-018	A	8/2/21	22:17:09	-41.3	13	5	1.3	Y	A
WTG-018	B	8/2/21	22:21:16	-41.3	13	5	1.3	Y	A
WTG-018	C	8/2/21	22:25:19	-41.4	13	5	1.3	Y	A
WTG-013	A	8/2/21	23:28:05	-40.5	13	5	1.3	Y	A
WTG-013	B	8/2/21	23:32:01	-40.5	13	5	1.3	Y	A
WTG-013	C	8/2/21	23:36:19	-40.5	13	5	1.3	Y	A
WTG-009	A	8/2/21	1:08:33	-40.5	13	5	1.3	Y	A
WTG-009	B	8/2/21	1:13:39	-40.5	13	5	1.3	Y	A
WTG-009	C	8/2/21	1:18:22	-40.5	13	5	1.3	Y	A
WTG-012	A	8/2/21	2:35:44	-42.4	13	5	1.3	Y	A
WTG-012	B	8/2/21	2:40:30	-42.4	13	5	1.3	Y	A
WTG-012	C	8/2/21	2:44:44	-42.4	13	5	1.3	Y	A
WTG-007	A	8/2/21	4:05:53	-41.0	13	5	1.3	Y	A
WTG-007	B	8/2/21	4:10:41	-40.9	13	5	1.3	Y	A
WTG-007	C	8/2/21	4:14:59	-41.0	13	5	1.3	Y	A
IAC-186	A	8/2/21	5:08:00	-39.6	13	5	1.3	Y	A
IAC-186	B	8/2/21	5:13:27	-39.6	13	5	1.3	Y	A
IAC-186	C	8/2/21	5:19:03	-39.7	13	5	1.3	Y	SPI A, No PV
IAC-187	A	8/2/21	6:34:14	-37.8	13	5	1.3	Y	A
IAC-187	B	8/2/21	6:38:51	-38.1	13	5	1.3	Y	A
IAC-187	C	8/2/21	6:43:30	-40.7	13	5	1.3	Y	SPI A, No PV
IAC-188	A	8/2/21	7:13:17	-37.6	13	5	1.3	Y	A
IAC-188	B	8/2/21	7:18:00	-37.5	13	5	1.3	Y	A
IAC-188	C	8/2/21	7:22:11	-37.6	13	5	1.3	Y	A
IAC-185	A	8/2/21	7:51:43	-39.8	13	5	1.3	Y	A
IAC-185	B	8/2/21	7:55:54	-39.7	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-185	C	8/2/21	8:00:17	-39.8	13	5	1.3	Y	A, Flounder
IAC-184	A	8/2/21	8:29:46	-39.2	13	5	1.3	Y	A
IAC-184	B	8/2/21	8:33:53	-39.5	13	5	1.3	Y	A
IAC-184	C	8/2/21	8:38:14	-39.2	13	5	1.3	Y	A
IAC-177	A	8/2/21	9:07:53	-40.7	13	5	1.3	Y	A
IAC-177	B	8/2/21	9:12:53	-40.3	13	5	1.3	Y	A
IAC-177	C	8/2/21	9:17:12	-40.7	13	5	1.3	Y	A
IAC-183	A	8/2/21	9:46:56	-40.0	13	5	1.3	N	A
IAC-183	B	8/2/21	9:53:30	-40.0	13	5	1.3	N	A
IAC-183	C	8/2/21	9:58:19	-40.0	13	5	1.3	N	A
IAC-189	A	8/2/21	10:37:16	-39.3	13	5	1.3	Y	A
IAC-189	B	8/2/21	10:41:08	-39.2	13	5	1.3	Y	A
IAC-189	C	8/2/21	10:45:06	-39.3	13	5	1.3	Y	A
IAC-190	A	8/2/21	11:15:53	-40.4	13	5	1.3	Y	A
IAC-190	B	8/2/21	11:20:35	-40.2	13	5	1.3	Y	A
IAC-190	C	8/2/21	11:25:19	-40.4	13	5	1.3	Y	A
IAC-199	A	8/2/21	12:58:40	-38.8	13	5	1.3	Y	SPI A, 2 PV Acceptable, SPI and PV Battery Changed, Settings the same
IAC-199	B	8/2/21	13:03:45	-38.9	13	5	1.3	Y	SPI A, 2 PV Acceptable, SPI and PV Battery Changed, Settings the same
IAC-199	C	8/2/21	13:07:51	-38.9	13	5	1.3	Y	SPI A, 2 PV Acceptable, SPI and PV Battery Changed, Settings the same
IAC-200	A	8/2/21	13:49:05	-41.0	13	5	1.3	Y	A
IAC-200	B	8/2/21	13:52:57	-41.0	13	5	1.3	Y	A
IAC-200	C	8/2/21	13:56:43	-40.8	13	5	1.3	Y	A
IAC-201	A	8/2/21	14:31:39	-41.8	13	5	1.3	Y	A
IAC-201	B	8/2/21	14:35:21	-41.7	13	5	1.3	Y	A
IAC-201	C	8/2/21	14:39:14	-41.7	13	5	1.3	Y	A
IAC-191	A	8/2/21	15:13:14	-41.4	13	5	1.3	Y	A
IAC-191	B	8/2/21	15:17:20	-41.5	13	5	1.3	Y	A
IAC-191	C	8/2/21	15:21:07	-41.5	13	5	1.3	Y	A
IAC-182	A	8/2/21	15:59:09	-41.6	13	5	1.3	Y	A
IAC-182	B	8/2/21	16:03:38	-41.6	13	5	1.3	Y	A
IAC-182	C	8/2/21	16:07:57	-41.6	13	5	1.3	Y	A
IAC-176	A	8/2/21	16:49:10	-41.4	13	5	1.3	Y	A
IAC-176	B	8/2/21	16:53:03	-41.4	13	5	1.3	Y	A
IAC-176	C	8/2/21	16:56:39	-41.4	13	5	1.3	Y	A
IAC-175	A	8/2/21	17:25:15	-41.8	13	5	1.3	Y	A
IAC-175	B	8/2/21	17:28:57	-41.7	13	5	1.3	Y	A
IAC-175	C	8/2/21	17:32:58	-41.8	13	5	1.3	Y	A
IAC-165	A	8/2/21	18:29:04	-43.7	13	5	1.3	Y	A
IAC-165	B	8/2/21	18:35:02	-43.5	13	5	1.3	Y	A
IAC-165	C	8/2/21	18:40:31	-43.4	13	5	1.3	Y	A
IAC-174	A	8/2/21	19:16:55	-43.0	13	5	1.3	Y	A
IAC-174	B	8/2/21	19:22:04	-43.1	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-174	C	8/2/21	19:26:35	-43.0	13	5	1.3	Y	A
IAC-181	A	8/2/21	20:03:00	-41.8	13	5	1.3	Y	SPI A, 2 PV Acceptable
IAC-181	B	8/2/21	20:07:26	-41.9	13	5	1.3	Y	SPI A, 2 PV Acceptable
IAC-181	C	8/2/21	20:12:02	-41.8	13	5	1.3	Y	SPI A, 2 PV Acceptable
IAC-192	A	8/2/21	20:48:52	-41.3	13	5	1.3	Y	A
IAC-192	B	8/2/21	20:54:13	-41.6	13	5	1.3	Y	A
IAC-192	C	8/2/21	20:59:56	1.3	13	5	1.3	Y	A
IAC-202	A	8/2/21	21:36:54	-40.0	13	5	1.3	Y	A
IAC-202	B	8/2/21	21:41:55	-40.0	13	5	1.3	Y	A
IAC-202	C	8/2/21	21:46:35	-40.0	13	5	1.3	Y	A
IAC-196	A	8/2/21	22:30:47	-40.8	13	5	1.3	Y	A
IAC-196	B	8/2/21	22:35:48	-41.0	13	5	1.3	Y	A
IAC-196	C	8/2/21	22:40:00	-41.0	13	5	1.3	Y	A
IAC-197	A	8/2/21	23:18:25	-41.4	13	5	1.3	N	A
IAC-197	B	8/2/21	23:23:13	-41.3	13	5	1.3	N	A
IAC-197	C	8/2/21	23:27:32	-41.3	13	5	1.3	N	A
IAC-198	A	8/3/21	0:22:20	-41.7	13	5	1.3	Y	A
IAC-198	B	8/3/21	0:27:27	-41.8	13	5	1.3	Y	A
IAC-198	C	8/3/21	0:32:12	-41.8	13	5	1.3	Y	A
IAC-203	A	8/3/21	1:04:58	-41.6	13	5	1.3	Y	A
IAC-203	B	8/3/21	1:09:31	-41.5	13	5	1.3	Y	A
IAC-203	C	8/3/21	1:17:20	-41.5	13	5	1.3	Y	A
IAC-180	A	8/3/21	1:55:52	-43.5	13	5	1.3	N	A
IAC-180	B	8/3/21	2:01:41	-43.5	13	5	1.3	N	A
IAC-180	C	8/3/21	2:07:25	-43.5	13	5	1.3	N	A
IAC-172	A	8/3/21	2:42:07	-44.4	13	5	1.3	N	A
IAC-172	B	8/3/21	2:47:43	-44.4	13	5	1.3	N	A
IAC-172	C	8/3/21	2:52:14	-44.3	13	5	1.3	N	A
IAC-173	A	8/3/21	3:23:54	-44.1	13	5	1.3	N	A
IAC-173	B	8/3/21	3:29:34	-44.1	13	5	1.3	N	A
IAC-173	C	8/3/21	3:34:26	-44.1	13	5	1.3	N	A
IAC-168	A	8/3/21	4:17:14	-45.2	13	5	1.3	N	A
IAC-168	B	8/3/21	4:21:51	-45.2	13	5	1.3	N	A
IAC-168	C	8/3/21	4:26:26	-45.1	13	5	1.3	N	A
IAC-167	A	8/3/21	5:02:02	-45.7	13	5	1.3	N	A
IAC-167	B	8/3/21	5:06:05	-45.8	13	5	1.3	N	A
IAC-167	C	8/3/21	5:10:30	-45.7	13	5	1.3	N	A
IAC-166	A	8/3/21	6:18:01	-44.2	13	5	1.3	N	A
IAC-166	B	8/3/21	6:23:04	-44.2	13	5	1.3	N	A
IAC-166	C	8/3/21	6:27:56	-44.0	13	5	1.3	N	A
IAC-164	A	8/3/21	7:08:25	-45.2	13	5	1.3	N	A, PV Battery Changed
IAC-164	B	8/3/21	7:13:30	-45.4	13	5	1.3	N	A, PV Battery Changed

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-164	C	8/3/21	7:18:07	-45.3	13	5	1.3	N	A, PV Battery Changed
IAC-163	A	8/3/21	7:43:46	-45.9	13	5	1.3	N	A
IAC-163	B	8/3/21	7:48:15	-46.0	13	5	1.3	N	A
IAC-163	C	8/3/21	7:52:53	-46.0	13	5	1.3	N	A
IAC-162	A	8/3/21	8:20:13	-46.1	13	5	1.3	N	A
IAC-162	B	8/3/21	8:24:14	-46.2	13	5	1.3	N	A
IAC-162	C	8/3/21	8:28:46	-46.2	13	5	1.3	N	A
IAC-161	A	8/3/21	8:58:02	-46.1	13	5	1.3	N	A, Changed Focus to 1m + 3
IAC-161	B	8/3/21	9:02:57	-46.3	13	5	1.3	N	A, Changed Focus to 1m + 3
IAC-161	C	8/3/21	9:06:55	-46.2	13	5	1.3	N	A, Changed Focus to 1m + 3
IAC-160	A	8/3/21	9:36:16	-46.6	13	5	1.3	Y	A, Reset Focus to 1m + 3
IAC-160	B	8/3/21	9:40:57	-46.6	13	5	1.3	Y	A, Reset Focus to 1m + 3
IAC-160	C	8/3/21	9:45:26	-46.7	13	5	1.3	Y	A, Reset Focus to 1m + 3
IAC-159	A	8/3/21	10:19:49	-47.3	13	5	1.3	Y	A
IAC-159	B	8/3/21	10:24:15	-47.3	13	5	1.3	Y	A
IAC-159	C	8/3/21	10:28:55	-47.2	13	5	1.3	Y	A
IAC-158	A	8/3/21	11:04:31	-47.0	13	5	1.3	Y	A
IAC-158	B	8/3/21	11:09:07	-47.0	13	5	1.3	Y	A
IAC-158	C	8/3/21	11:13:53	-47.0	13	5	1.3	Y	A
IAC-169	A	8/3/21	12:19:04	-45.4	13	5	1.3	Y	A
IAC-169	B	8/3/21	12:23:46	-45.6	13	5	1.3	Y	A
IAC-169	C	8/3/21	12:28:18	-45.6	13	5	1.3	Y	A
IAC-171	A	8/3/21	13:07:19	-44.7	13	5	1.3	Y	A
IAC-171	B	8/3/21	13:10:48	-44.7	13	5	1.3	Y	A
IAC-171	C	8/3/21	13:14:25	-44.7	13	5	1.3	Y	A
IAC-179	A	8/3/21	13:42:19	-44.5	13	5	1.3	Y	A
IAC-179	B	8/3/21	13:47:00	-44.6	13	5	1.3	Y	A
IAC-179	C	8/3/21	13:51:13	-44.5	13	5	1.3	Y	A
IAC-193	A	8/3/21	14:16:50	-45.0	13	5	1.3	Y	A
IAC-193	B	8/3/21	14:20:35	-45.2	13	5	1.3	Y	A
IAC-193	C	8/3/21	14:25:00	-45.2	13	5	1.3	Y	A
IAC-204	A	8/3/21	14:57:41	-43.7	13	5	1.3	Y	A
IAC-204	B	8/3/21	15:02:20	-43.7	13	5	1.3	Y	A
IAC-204	C	8/3/21	15:06:29	-43.7	13	5	1.3	Y	A
IAC-195	A	8/3/21	15:36:08	-43.3	13	5	1.3	Y	A
IAC-195	B	8/3/21	15:40:32	-43.5	13	5	1.3	Y	A
IAC-195	C	8/3/21	15:44:27	-43.4	13	5	1.3	Y	A
IAC-213	A	8/3/21	16:17:50	-44.0	13	5	1.3	Y	A
IAC-213	B	8/3/21	16:23:06	-43.9	13	5	1.3	Y	A
IAC-213	C	8/3/21	16:26:35	-43.9	13	5	1.3	Y	A
IAC-208	A	8/3/21	16:53:54	-43.0	13	5	1.3	Y	A
IAC-208	B	8/3/21	16:57:53	-43.1	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-208	C	8/3/21	17:03:36	-43.2	13	5	1.3	Y	A
IAC-207	A	8/3/21	17:29:08	-42.0	13	5	1.3	Y	SPI A, 2 PV Acceptable, No Fire on PV System. Changed Battery and Adjusted Spring on Trigger. PV System is Triggering
IAC-207	B	8/3/21	17:33:23	-41.9	13	5	1.3	Y	SPI A, 2 PV Acceptable, No Fire on PV System. Changed Battery and Adjusted Spring on Trigger. PV System is Triggering
IAC-207	C	8/3/21	17:36:56	-42.0	13	5	1.3	Y	SPI A, 2 PV Acceptable, No Fire on PV System. Changed Battery and Adjusted Spring on Trigger. PV System is Triggering
IAC-206	A	8/3/21	19:05:05	-41.0	13	5	1.3	Y	A, Multiple water shots in PV, regreased trigger & battery connection
IAC-206	B	8/3/21	19:10:05	-41.0	13	5	1.3	Y	A, Multiple water shots in PV, regreased trigger & battery connection
IAC-206	C	8/3/21	19:14:14	-40.8	13	5	1.3	Y	A, Multiple water shots in PV, regreased trigger & battery connection
IAC-205	A	8/3/21	19:52:48	-40.2	13	5	1.3	Y	SPI A, 2 PV Acceptable
IAC-205	B	8/3/21	19:57:36	-40.2	13	5	1.3	Y	SPI A, 2 PV Acceptable
IAC-205	C	8/3/21	20:03:17	-40.3	13	5	1.3	Y	SPI A, 2 PV Acceptable
IAC-210	A	8/3/21	20:44:02	-39.8	13	5	1.3	Y	A
IAC-210	B	8/3/21	20:48:37	-39.8	13	5	1.3	Y	A
IAC-210	C	8/3/21	20:53:17	-39.7	13	5	1.3	Y	A
IAC-211	A	8/3/21	21:36:40	-41.1	13	5	1.3	Y	A
IAC-211	B	8/3/21	21:40:39	-41.1	13	5	1.3	Y	A
IAC-211	C	8/3/21	21:44:59	-41.1	13	5	1.3	Y	A
IAC-212	A	8/3/21	22:23:01	-41.8	13	5	1.3	Y	A
IAC-212	B	8/3/21	22:28:12	-41.8	13	5	1.3	Y	SPI A, No PV
IAC-212	C	8/3/21	22:34:34	-41.9	13	5	1.3	Y	SPI A, No PV
IAC-212	D	8/3/21	23:10:43	-41.9	13	5	1.3	N	Water Shot Use Go Pro
IAC-212	E	8/3/21	23:15:23	-41.9	13	5	1.3	N	A
IAC-212	F	8/3/21	23:20:26	-41.8	13	5	1.3	N	Water Shot Use Go Pro
IAC-146	A	8/4/21	0:43:36	-43.6	13	5	1.3	Y	A
IAC-146	B	8/4/21	0:48:27	-43.6	13	5	1.3	Y	A
IAC-146	C	8/4/21	0:53:32	-43.6	13	5	1.3	Y	A
IAC-147	A	8/4/21	1:29:09	-43.8	13	5	1.3	Y	A
IAC-147	B	8/4/21	1:35:09	-43.8	13	5	1.3	Y	A
IAC-147	C	8/4/21	1:41:16	-43.8	13	5	1.3	Y	A
IAC-148	A	8/4/21	2:24:23	-44.8	13	5	1.3	Y	A
IAC-148	B	8/4/21	2:29:24	-44.8	13	5	1.3	Y	A
IAC-148	C	8/4/21	2:34:02	-44.8	13	5	1.3	Y	A
IAC-215	A	8/4/21	3:09:59	-45.1	13	5	1.3	N	A
IAC-215	B	8/4/21	3:15:32	-45.2	13	5	1.3	N	A
IAC-215	C	8/4/21	3:19:44	-45.1	13	5	1.3	N	A
IAC-209	A	8/4/21	3:55:18	-45.5	13	5	1.3	N	A, Switched Focus to 1m + 4
IAC-209	B	8/4/21	4:00:33	-45.4	13	5	1.3	N	A, Switched Focus to 1m + 4
IAC-209	C	8/4/21	4:05:37	-45.5	13	5	1.3	N	A, Switched Focus to 1m + 4
IAC-214	A	8/4/21	4:37:40	-46.0	13	5	1.3	Y	A
IAC-214	B	8/4/21	4:42:51	-45.9	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-214	C	8/4/21	4:47:20	-45.9	13	5	1.3	Y	A
IAC-149	A	8/4/21	5:17:07	-46.3	13	5	1.3	Y	A
IAC-149	B	8/4/21	5:22:46	-46.3	13	5	1.3	Y	A
IAC-149	C	8/4/21	5:27:07	-46.3	13	5	1.3	Y	A
IAC-194	A	8/4/21	6:26:18	-46.1	13	5	1.3	Y	A
IAC-194	B	8/4/21	6:30:57	-46.1	13	5	1.3	Y	SPI A, PV Disturbed
IAC-194	C	8/4/21	6:35:38	-45.8	13	5	1.3	Y	A
IAC-178	A	8/4/21	7:07:58	-45.9	13	5	1.3	N	A
IAC-178	B	8/4/21	7:12:52	-45.8	13	5	1.3	N	A
IAC-178	C	8/4/21	7:17:46	-45.8	13	5	1.3	N	A
IAC-170	A	8/4/21	7:46:23	-46.5	13	5	1.3	Y	A
IAC-170	B	8/4/21	7:51:04	-46.6	13	5	1.3	Y	A
IAC-170	C	8/4/21	7:55:04	-46.5	13	5	1.3	Y	A
IAC-157	A	8/4/21	8:26:28	-47.0	13	5	1.3	Y	A
IAC-157	B	8/4/21	8:31:08	-46.9	13	5	1.3	Y	A
IAC-157	C	8/4/21	8:35:26	-46.9	13	5	1.3	Y	A
IAC-150	A	8/4/21	9:05:52	-48.0	13	5	1.3	Y	A
IAC-150	B	8/4/21	9:10:29	-48.0	13	5	1.3	Y	A
IAC-150	C	8/4/21	9:15:14	-47.8	13	5	1.3	Y	A
IAC-151	A	8/4/21	9:56:04	-48.5	13	5	1.3	Y	A
IAC-151	B	8/4/21	10:00:49	-48.6	13	5	1.3	Y	A
IAC-151	C	8/4/21	10:05:10	-48.6	13	5	1.3	Y	SPI A, No PV
IAC-152	A	8/4/21	10:43:52	-49.3	13	5	1.3	Y	A
IAC-152	B	8/4/21	10:49:24	-49.4	13	5	1.3	Y	A
IAC-152	C	8/4/21	10:53:38	-49.4	13	5	1.3	Y	A
IAC-156	A	8/4/21	11:30:09	-48.3	13	5	1.3	Y	A
IAC-156	B	8/4/21	11:34:57	-48.4	13	5	1.3	Y	A
IAC-156	C	8/4/21	11:39:40	-48.4	13	5	1.3	Y	A
IAC-155	A	8/4/21	12:32:07	-48.2	13	5	1.3	Y	A
IAC-155	B	8/4/21	12:36:50	-48.3	13	5	1.3	Y	A
IAC-155	C	8/4/21	12:43:19	-48.2	13	5	1.3	Y	A
IAC-154	A	8/4/21	13:14:28	-48.9	13	5	1.3	Y	A
IAC-154	B	8/4/21	13:20:04	-48.9	13	5	1.3	Y	A
IAC-154	C	8/4/21	13:23:37	-48.9	13	5	1.3	Y	A
IAC-153	A	8/4/21	13:58:01	-49.8	13	5	1.3	Y	A
IAC-153	B	8/4/21	14:01:48	-49.8	13	5	1.3	Y	A
IAC-153	C	8/4/21	14:06:25	-49.8	13	5	1.3	Y	A
IAC-119	A	8/4/21	14:53:39	-50.2	13	5	1.3	Y	SPI A, No PV
IAC-119	B	8/4/21	14:58:01	-50.4	13	5	1.3	Y	SPI A, No PV
IAC-119	C	8/4/21	15:01:28	-50.5	13	5	1.3	Y	SPI A, No PV
IAC-119	D	8/4/21	15:18:59	-50.3	13	5	1.3	Y	A
IAC-119	E	8/4/21	15:23:09	-50.5	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-119	F	8/4/21	15:27:27	-50.4	13	5	1.3	Y	A
IAC-118	A	8/4/21	16:01:25	-51.0	13	5	1.3	Y	A
IAC-118	B	8/4/21	16:06:11	-51.1	13	5	1.3	Y	A
IAC-118	C	8/4/21	16:10:05	-51.1	13	5	1.3	Y	A
IAC-120	A	8/4/21	16:46:37	-51.5	13	5	1.3	Y	SPI A, One PV Turbid
IAC-120	B	8/4/21	16:50:25	-51.4	13	5	1.3	Y	SPI A, One PV Turbid
IAC-120	C	8/4/21	16:54:12	-51.5	13	5	1.3	Y	SPI A, One PV Turbid
IAC-116	A	8/4/21	17:33:35	-52.9	13	5	1.3	Y	A
IAC-116	B	8/4/21	17:39:19	-52.7	13	5	1.3	Y	A
IAC-116	C	8/4/21	17:43:13	-52.9	13	5	1.3	Y	A
IAC-117	A	8/4/21	18:53:08	-52.0	13	5	1.3	Y	A
IAC-117	B	8/4/21	18:58:23	-52.4	13	5	1.3	Y	A
IAC-117	C	8/4/21	19:02:19	-52.1	13	5	1.3	Y	A
IAC-126	A	8/6/21	22:21:53	-51.7	13	5	1.3	Y	A
IAC-126	B	8/6/21	22:26:24	-51.7	13	5	1.3	Y	A
IAC-126	C	8/6/21	22:30:34	-51.7	13	5	1.3	Y	A
IAC-125	A	8/6/21	23:00:55	-51.5	13	5	1.3	Y	SPI A, PV Little Bright, Set Camera ISO to 1600
IAC-125	B	8/6/21	23:05:47	-51.4	13	5	1.3	Y	SPI A, PV Little Bright, Set Camera ISO to 1600
IAC-125	C	8/6/21	23:10:35	-51.5	13	5	1.3	Y	SPI A, PV Little Bright, Set Camera ISO to 1600
IAC-127	A	8/6/21	23:47:14	-51.6	13	5	1.3	Y	A
IAC-127	B	8/6/21	23:51:56	-51.6	13	5	1.3	Y	A
IAC-127	C	8/6/21	23:55:52	-51.4	13	5	1.3	Y	A
IAC-128	A	8/7/21	0:42:21	-52.2	13	5	1.3	Y	A
IAC-128	B	8/7/21	0:47:17	-52.1	13	5	1.3	Y	A
IAC-128	C	8/7/21	0:52:48	-52.1	13	5	1.3	Y	A
IAC-129	A	8/7/21	1:28:01	-51.1	13	5	1.3	Y	A
IAC-129	B	8/7/21	1:33:09	-51.2	13	5	1.3	Y	A
IAC-129	C	8/7/21	1:38:12	-51.2	13	5	1.3	Y	A
IAC-121	A	8/7/21	7:16:48	-51.7	13	5	1.3	Y	A
IAC-121	B	8/7/21	7:21:08	-51.6	13	5	1.3	Y	A
IAC-121	C	8/7/21	7:25:06	-51.6	13	5	1.3	Y	A
IAC-130	A	8/7/21	8:05:13	-51.4	13	5	1.3	Y	SPI partial over penetration left side, PV OK
IAC-130	B	8/7/21	8:10:19	-51.5	13	5	1.3	Y	A
IAC-130	C	8/7/21	8:14:47	-51.5	13	5	1.3	Y	A
IAC-131	A	8/7/21	8:46:11	-51.1	13	5	1.3	Y	SPI A, No PV
IAC-131	B	8/7/21	8:51:16	-51.1	13	5	1.3	Y	SPI A, No PV
IAC-131	C	8/7/21	8:56:10	-51.1	13	5	1.3	Y	SPI A, No PV
IAC-131	D	8/7/21	9:25:43	-50.9	13	5	1.3	Y	A
IAC-131	E	8/7/21	9:30:22	-51.0	13	5	1.3	Y	A
IAC-131	F	8/7/21	9:34:42	-50.9	13	5	1.3	Y	A
IAC-122	A	8/7/21	10:06:06	-50.8	13	5	1.3	Y	SPI A, PV Disturbed
IAC-122	B	8/7/21	10:10:36	-50.8	13	5	1.3	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-122	C	8/7/21	10:15:00	-50.8	13	5	1.3	Y	A
IAC-123	A	8/7/21	10:45:35	-50.2	13	5	1.3	Y	SPI A, No PV
IAC-123	B	8/7/21	10:50:24	-50.2	13	5	1.3	Y	SPI A, No PV
IAC-123	C	8/7/21	10:54:41	-50.2	13	5	1.3	Y	SPI A, No PV
IAC-123	D	8/7/21	11:14:00	-50.3	13	5	1.3	Y	A, Change PV Battery
IAC-123	E	8/7/21	11:18:06	-50.0	13	5	1.3	Y	A, Change PV Battery
IAC-123	F	8/7/21	11:22:24	-50.1	13	5	1.3	Y	A, Change PV Battery
IAC-132	A	8/7/21	12:35:18	-49.3	13	5	1.0	Y	A
IAC-132	B	8/7/21	12:40:19	-49.4	13	5	1.0	Y	A
IAC-132	C	8/7/21	12:45:01	-49.3	13	5	1.0	Y	A
IAC-124	A	8/7/21	13:22:44	-48.9	13	5	1.0	Y	A
IAC-124	B	8/7/21	13:27:11	-48.9	13	5	1.0	Y	A
IAC-124	C	8/7/21	13:30:50	-49.0	13	5	1.0	Y	A
IAC-133	A	8/7/21	14:13:20	-48.4	13	5	1.0	Y	A
IAC-133	B	8/7/21	14:17:36	-48.4	13	5	1.0	Y	A
IAC-133	C	8/7/21	14:22:09	-48.4	13	5	1.0	Y	A
IAC-140	A	8/7/21	14:58:36	-48.3	13	5	1.0	Y	A
IAC-140	B	8/7/21	15:03:04	-48.4	13	5	1.0	Y	A
IAC-140	C	8/7/21	15:07:25	-48.1	13	5	1.0	Y	A
IAC-115	A	8/7/21	15:38:18	-48.5	13	5	1.0	Y	A
IAC-115	B	8/7/21	15:42:36	-48.5	13	5	1.0	Y	A
IAC-115	C	8/7/21	15:46:52	-48.5	13	5	1.0	Y	A
IAC-096	A	8/7/21	16:18:08	-47.9	13	5	1.0	Y	A
IAC-096	B	8/7/21	16:21:36	-48.0	13	5	1.0	Y	A
IAC-096	C	8/7/21	16:24:25	-47.8	13	5	1.0	Y	A
IAC-145	A	8/7/21	16:52:10	-47.5	13	5	1.0	Y	A
IAC-145	B	8/7/21	16:54:57	-47.6	13	5	1.0	Y	A
IAC-145	C	8/7/21	16:57:59	-47.7	13	5	1.0	Y	A
IAC-141	A	8/7/21	17:47:55	-46.0	13	5	1.0	Y	A
IAC-141	B	8/7/21	17:51:43	-46.0	13	5	1.0	Y	A
IAC-141	C	8/7/21	17:55:30	-46.0	13	5	1.0	Y	A
IAC-142	A	8/7/21	18:36:48	-47.8	13	5	1.0	Y	A
IAC-142	B	8/7/21	18:42:12	-47.8	13	5	1.0	Y	A
IAC-142	C	8/7/21	18:47:26	-47.9	13	5	1.0	Y	A
IAC-143	A	8/7/21	19:18:22	-48.9	13	5	1.0	Y	A
IAC-143	B	8/7/21	19:22:50	-48.9	13	5	1.0	Y	A
IAC-143	C	8/7/21	19:27:04	-48.9	13	5	1.0	Y	A
IAC-144	A	8/7/21	19:57:10	-48.2	13	5	1.0	Y	A
IAC-144	B	8/7/21	20:01:14	-48.2	13	5	1.0	Y	A
IAC-144	C	8/7/21	20:05:20	-48.3	13	5	1.0	Y	A
IAC-095	A	8/7/21	20:38:15	-49.8	13	5	1.0	Y	A
IAC-095	B	8/7/21	20:43:14	-49.8	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-095	C	8/7/21	20:48:19	-49.7	13	5	1.0	Y	A
IAC-218	A	8/7/21	21:17:02	-50.0	13	5	1.0	Y	A
IAC-218	B	8/7/21	21:21:47	-50.2	13	5	1.0	Y	A
IAC-218	C	8/7/21	21:26:57	-50.1	13	5	1.0	Y	A
IAC-114	A	8/7/21	21:53:39	-50.0	13	5	1.0	Y	A
IAC-114	B	8/7/21	21:58:56	-50.0	13	5	1.0	Y	A
IAC-114	C	8/7/21	22:03:23	-50.0	13	5	1.0	Y	A
IAC-139	A	8/7/21	22:37:27	-49.5	13	5	1.0	Y	A
IAC-139	B	8/7/21	22:42:41	-49.4	13	5	1.0	Y	A
IAC-139	C	8/7/21	22:46:41	-49.5	13	5	1.0	Y	A
IAC-138	A	8/7/21	23:18:39	-51.7	13	5	1.0	Y	A
IAC-138	B	8/7/21	23:22:43	-51.6	13	5	1.0	Y	A
IAC-138	C	8/7/21	23:26:32	-51.7	13	5	1.0	Y	A
IAC-112	A	8/8/21	0:20:48	-50.9	13	5	1.0	Y	A
IAC-112	B	8/8/21	0:25:37	-50.9	13	5	1.0	Y	A
IAC-112	C	8/8/21	0:29:22	-50.8	13	5	1.0	Y	A
IAC-113	A	8/8/21	1:10:18	-50.1	13	5	1.0	Y	A
IAC-113	B	8/8/21	1:15:32	-49.8	13	5	1.0	Y	A
IAC-113	C	8/8/21	1:19:43	-50.2	13	5	1.0	Y	A
IAC-091	A	8/8/21	1:54:37	-50.2	13	5	1.0	Y	A
IAC-091	B	8/8/21	1:59:57	-50.3	13	5	1.0	Y	A
IAC-091	C	8/8/21	2:04:11	-49.4	13	5	1.0	Y	A
IAC-094	A	8/8/21	2:43:56	-48.8	13	5	1.0	Y	A
IAC-094	B	8/8/21	2:49:29	-49.0	13	5	1.0	Y	A
IAC-094	C	8/8/21	2:54:30	-49.0	13	5	1.0	Y	A
IAC-093	A	8/8/21	3:23:03	-49.2	13	5	1.0	Y	A, Crab
IAC-093	B	8/8/21	3:27:21	-49.2	13	5	1.0	Y	A
IAC-093	C	8/8/21	3:31:20	-49.2	13	5	1.0	Y	A
IAC-092	A	8/8/21	4:09:50	-48.7	13	5	1.0	Y	A
IAC-092	B	8/8/21	4:14:56	-48.8	13	5	1.0	Y	A
IAC-092	C	8/8/21	4:18:46	-48.7	13	5	1.0	Y	A
IAC-090	A	8/8/21	5:00:42	-51.0	13	5	1.0	Y	A
IAC-090	B	8/8/21	5:05:20	-51.0	13	5	1.0	Y	A
IAC-090	C	8/8/21	5:10:02	-51.0	13	5	1.0	Y	A
IAC-089	A	8/8/21	5:51:50	-51.8	13	5	1.0	Y	A
IAC-089	B	8/8/21	5:56:11	-51.8	13	5	1.0	Y	A
IAC-089	C	8/8/21	6:00:23	-51.7	13	5	1.0	Y	A
IAC-088	A	8/8/21	6:47:05	-50.1	13	5	1.0	Y	A
IAC-088	B	8/8/21	6:53:24	-50.1	13	5	1.0	Y	A
IAC-088	C	8/8/21	6:57:13	-50.2	13	5	1.0	Y	A
IAC-087	A	8/8/21	7:28:50	-50.4	13	5	1.0	Y	A
IAC-087	B	8/8/21	7:32:55	-50.4	13	5	1.0	Y	A, Crab

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

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Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-087	C	8/8/21	7:37:26	-50.4	13	5	1.0	Y	A
IAC-109	A	8/8/21	8:21:26	-51.0	13	5	1.0	Y	A, Red Hake
IAC-109	B	8/8/21	8:25:53	-51.0	13	5	1.0	Y	A
IAC-109	C	8/8/21	8:29:42	-51.1	13	5	1.0	Y	A
IAC-110	A	8/8/21	9:03:58	-52.9	13	5	1.0	Y	A
IAC-110	B	8/8/21	9:08:03	-52.9	13	5	1.0	Y	A
IAC-110	C	8/8/21	9:12:47	-53.0	13	5	1.0	Y	A
IAC-111	A	8/8/21	9:48:14	-52.5	13	5	1.0	Y	SPI A, No PV
IAC-111	B	8/8/21	9:53:09	-52.4	13	5	1.0	Y	SPI A, No PV
IAC-111	C	8/8/21	9:57:14	-52.3	13	5	1.0	Y	SPI A, No PV
IAC-111	D	8/8/21	10:33:31	-52.2	13	5	1.0	Y	SPI A, PV Slighty Dark, Changed Power From 30% to 35%
IAC-111	E	8/8/21	10:37:29	-52.1	13	5	1.0	Y	SPI A, PV Slighty Dark, Changed Power From 30% to 35%
IAC-111	F	8/8/21	10:41:42	-52.3	13	5	1.0	Y	SPI A, PV Slighty Dark, Changed Power From 30% to 35%
IAC-137	A	8/8/21	11:24:24	-52.3	13	5	1.0	Y	SPI A, PV Slighty Dark, Changed Power From 35% to 40%
IAC-137	B	8/8/21	11:28:22	-52.4	13	5	1.0	Y	SPI A, PV Slighty Dark, Changed Power From 35% to 40%
IAC-137	C	8/8/21	11:32:48	-52.4	13	5	1.0	Y	SPI A, PV Slighty Dark, Changed Power From 35% to 40%
IAC-136	A	8/8/21	12:20:13	-52.5	13	5	1.0	Y	A
IAC-136	B	8/8/21	12:25:15	-52.6	13	5	1.0	Y	A
IAC-136	C	8/8/21	12:30:22	-52.5	13	5	1.0	Y	A
IAC-135	A	8/8/21	13:05:22	-52.8	13	5	1.0	Y	A, Boost Strobe to 45
IAC-135	B	8/8/21	13:09:08	-52.7	13	5	1.0	Y	A, Boost Strobe to 45
IAC-135	C	8/8/21	13:13:00	-52.7	13	5	1.0	Y	A, Boost Strobe to 45
IAC-134	A	8/8/21	13:53:53	-51.0	13	5	1.0	Y	A
IAC-134	B	8/8/21	13:58:21	-51.1	13	5	1.0	Y	A
IAC-134	C	8/8/21	14:02:35	-51.1	13	5	1.0	Y	A
IAC-102	A	8/8/21	14:36:40	-51.0	13	5	1.0	Y	A
IAC-102	B	8/8/21	14:41:52	-51.2	13	5	1.0	Y	A
IAC-102	C	8/8/21	14:47:20	-51.1	13	5	1.0	Y	A
IAC-101	A	8/8/21	15:15:42	-51.3	13	5	1.0	Y	A
IAC-101	B	8/8/21	15:20:06	-51.3	13	5	1.0	Y	A
IAC-101	C	8/8/21	15:23:59	-51.3	13	5	1.0	Y	A
IAC-100	A	8/8/21	16:05:56	-52.3	13	5	1.0	Y	A
IAC-100	B	8/8/21	16:10:20	-52.3	13	5	1.0	Y	A
IAC-100	C	8/8/21	16:14:04	-52.4	13	5	1.0	Y	A
IAC-104	A	8/8/21	13:27:16	-52.2	13	5	1.0	Y	A
IAC-104	B	8/8/21	13:49:42	-52.4	13	5	1.0	Y	A
IAC-104	C	8/8/21	13:51:26	-52.3	13	5	1.0	Y	A
IAC-105	A	8/8/21	17:24:20	-51.7	13	5	1.0	Y	A
IAC-105	B	8/8/21	17:28:35	-51.7	13	5	1.0	Y	A
IAC-105	C	8/8/21	17:32:39	-51.8	13	5	1.0	Y	A
IAC-106	A	8/8/21	18:24:15	-51.0	13	5	1.0	Y	A
IAC-106	B	8/8/21	18:29:46	-51.0	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-106	C	8/8/21	18:34:14	-50.9	13	5	1.0	Y	A
IAC-107	A	8/8/21	19:10:46	-50.3	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-107	B	8/8/21	19:15:38	-50.4	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-107	C	8/8/21	19:20:24	-48.0	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-063	A	8/8/21	20:04:00	-50.3	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-063	B	8/8/21	20:09:22	-50.4	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-063	C	8/8/21	20:14:04	-50.2	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-062	A	8/8/21	20:45:51	-53.4	13	5	1.0	Y	A
IAC-062	B	8/8/21	20:50:40	-52.9	13	5	1.0	Y	A
IAC-062	C	8/8/21	20:54:34	-53.3	13	5	1.0	Y	A
IAC-065	A	8/8/21	21:26:55	-50.6	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-065	B	8/8/21	21:31:04	-50.7	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-065	C	8/8/21	21:35:25	-50.7	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-066	A	8/8/21	22:13:52	-51.1	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-066	B	8/8/21	22:17:58	-51.1	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-066	C	8/8/21	22:22:39	-51.1	13	5	1.0	Y	A, Low Pen on SPI, Very Sandy
IAC-067	A	8/8/21	23:05:42	-51.6	13	5	1.0	N	A, Battery Changed to Stainless, Camera Focus - Strobe set to 30
IAC-067	B	8/8/21	23:10:09	-51.6	13	5	1.0	N	A, Battery Changed to Stainless, Camera Focus - Strobe set to 30
IAC-067	C	8/8/21	23:14:46	-51.7	13	5	1.0	N	A, Battery Changed to Stainless, Camera Focus - Strobe set to 30
IAC-103	A	8/9/21	0:24:19	-53.1	13	5	1.0	Y	A
IAC-103	B	8/9/21	0:29:08	-53.1	13	5	1.0	Y	A
IAC-103	C	8/9/21	0:33:20	-53.1	13	5	1.0	Y	A
IAC-062	A	8/9/21	1:14:49	-53.4	13	5	1.0	Y	A
IAC-062	B	8/9/21	1:19:55	-52.9	13	5	1.0	Y	A
IAC-062	C	8/9/21	1:24:34	-53.3	13	5	1.0	Y	A
IAC-061	A	8/9/21	2:15:50	-53.0	13	5	1.0	Y	A
IAC-061	B	8/9/21	2:20:11	-53.0	13	5	1.0	Y	A
IAC-061	C	8/9/21	2:24:05	-53.0	13	5	1.0	Y	A
IAC-108	A	8/9/21	2:58:31	-52.9	13	5	1.0	Y	A, SPI Dark - No SPI Flash, Replaced SPI Camera #33 with backup unit
IAC-108	B	8/9/21	3:03:21	-53.0	13	5	1.0	Y	A, SPI Dark - No SPI Flash, Replaced SPI Camera #33 with backup unit
IAC-108	C	8/9/21	3:06:59	-52.9	13	5	1.0	Y	A, SPI Dark - No SPI Flash, Replaced SPI Camera #33 with backup unit
IAC-108	D	8/9/21	4:35:14	-53.1	13	5	1.0	Y	A, SPI images dark and only jpg files
IAC-108	E	8/9/21	4:39:30	-53.1	13	5	1.0	Y	A, SPI images dark and only jpg files
IAC-108	F	8/9/21	4:44:09	-53.0	13	5	1.0	Y	A, SPI images dark and only jpg files
IAC-072	A	8/9/21	5:24:14	-54.2	13	5	1.0	Y	A, SPI Still Dark, Changed Settings to ISO 400, 1/30, f13, RAW & JPG, set 2nd SD Card as backup, White Balance to Flash
IAC-072	B	8/9/21	5:28:21	-54.2	13	5	1.0	Y	A, SPI Still Dark, Changed Settings to ISO 400, 1/30, f13, RAW & JPG, set 2nd SD Card as backup, White Balance to Flash
IAC-072	C	8/9/21	5:32:20	-54.2	13	5	1.0	Y	A, SPI Still Dark, Changed Settings to ISO 400, 1/30, f13, RAW & JPG, set 2nd SD Card as backup, White Balance to Flash
IAC-071	A	8/9/21	9:14:52	-54.6	13	5	1.0	Y	A
IAC-071	B	8/9/21	9:19:11	-54.6	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-071	C	8/9/21	9:23:51	-54.6	13	5	1.0	Y	SPI A, PV Disturbed
IAC-070	A	8/9/21	10:03:13	-53.8	13	5	1.0	Y	A
IAC-070	B	8/9/21	10:07:13	-53.8	13	5	1.0	Y	A
IAC-070	C	8/9/21	10:11:44	-53.8	13	5	1.0	Y	A Water Shot - Cleaned Trigger Contact
IAC-068	A	8/9/21	10:47:00	-52.7	13	5	1.0	Y	A
IAC-068	B	8/9/21	10:50:53	-52.7	13	5	1.0	Y	SPI A, PV Disturbed
IAC-068	C	8/9/21	10:55:11	-52.6	13	5	1.0	Y	A
IAC-069	A	8/9/21	11:25:18	-52.9	13	5	1.0	Y	A
IAC-069	B	8/9/21	11:29:33	-52.9	13	5	1.0	Y	A
IAC-069	C	8/9/21	11:33:35	-52.9	13	5	1.0	Y	A
IAC-047	A	8/9/21	12:32:38	-53.2	13	5	1.0	Y	A
IAC-047	B	8/9/21	12:37:35	-53.3	13	5	1.0	Y	A
IAC-047	C	8/9/21	12:42:43	-53.2	13	5	1.0	Y	A
IAC-046	A	8/9/21	13:20:31	-53.1	13	5	1.0	Y	A
IAC-046	B	8/9/21	13:24:37	-53.0	13	5	1.0	Y	A
IAC-046	C	8/9/21	13:28:33	-53.1	13	5	1.0	Y	A
IAC-045	A	8/9/21	14:06:43	-53.5	13	5	1.0	Y	A, Swapped Battery to Titanium, Set Camera Focus and Strobe to 45%
IAC-045	B	8/9/21	14:11:50	-53.5	13	5	1.0	Y	A, Swapped Battery to Titanium, Set Camera Focus and Strobe to 45%
IAC-045	C	8/9/21	14:15:58	-53.5	13	5	1.0	Y	A, Swapped Battery to Titanium, Set Camera Focus and Strobe to 45%
IAC-044	A	8/9/21	14:56:52	-53.3	13	5	1.0	Y	A
IAC-044	B	8/9/21	15:00:37	-53.4	13	5	1.0	Y	A
IAC-044	C	8/9/21	15:04:44	-53.3	13	5	1.0	Y	A
IAC-034	A	8/9/21	15:37:11	-54.5	13	5	1.0	Y	A
IAC-034	B	8/9/21	15:42:01	-54.6	13	5	1.0	Y	A
IAC-034	C	8/9/21	15:46:34	-54.6	13	5	1.0	Y	A
IAC-033	A	8/9/21	16:19:38	-55.1	13	5	1.0	Y	A
IAC-033	B	8/9/21	16:24:11	-55.1	13	5	1.0	Y	A
IAC-033	C	8/9/21	16:28:20	-55.1	13	5	1.0	Y	A
IAC-035	A	8/9/21	17:00:56	-55.1	13	5	1.0	Y	A
IAC-035	B	8/9/21	17:06:10	-55.0	13	5	1.0	Y	A
IAC-035	C	8/9/21	17:10:20	-55.1	13	5	1.0	Y	A
IAC-037	A	8/9/21	17:45:12	-54.9	13	5	1.0	Y	A
IAC-037	B	8/9/21	17:49:14	-54.9	13	5	1.0	Y	A
IAC-037	C	8/9/21	17:53:04	-54.8	13	5	1.0	Y	A
IAC-060	A	8/9/21	18:46:03	-54.7	13	5	1.0	Y	A
IAC-060	B	8/9/21	18:51:07	-54.8	13	5	1.0	Y	A
IAC-060	C	8/9/21	18:55:48	-54.7	13	5	1.0	Y	A
IAC-043	A	8/9/21	19:25:31	-54.7	13	5	1.0	Y	A
IAC-043	B	8/9/21	19:30:02	-54.6	13	5	1.0	Y	A
IAC-043	C	8/9/21	19:33:45	-54.7	13	5	1.0	Y	A
IAC-098	A	8/9/21	20:11:13	-54.5	13	5	1.0	Y	A
IAC-098	B	8/9/21	20:15:13	-54.6	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-098	C	8/9/21	20:18:54	-54.6	13	5	1.0	Y	A
IAC-099	A	8/9/21	20:53:22	-53.9	13	5	1.0	Y	A
IAC-099	B	8/9/21	20:58:24	-54.0	13	5	1.0	Y	A
IAC-099	C	8/9/21	21:03:10	-54.1	13	5	1.0	Y	A
IAC-083	A	8/9/21	21:38:09	-53.7	13	5	1.0	Y	A
IAC-083	B	8/9/21	21:43:04	-53.7	13	5	1.0	Y	A
IAC-083	C	8/9/21	21:47:55	-53.7	13	5	1.0	Y	A
IAC-084	A	8/9/21	22:32:22	-52.6	13	5	1.0	Y	A
IAC-084	B	8/9/21	22:37:22	-52.6	13	5	1.0	Y	A
IAC-084	C	8/9/21	22:42:27	-52.7	13	5	1.0	Y	A
IAC-085	A	8/9/21	23:24:18	-51.8	13	5	1.0	Y	A
IAC-085	B	8/9/21	23:28:04	-51.9	13	5	1.0	Y	A
IAC-085	C	8/9/21	23:32:26	-51.9	13	5	1.0	Y	A
IAC-086	A	8/10/21	0:22:50	-51.5	13	5	1.0	Y	A
IAC-086	B	8/10/21	0:27:13	-51.5	13	5	1.0	Y	A
IAC-086	C	8/10/21	0:31:38	-51.5	13	5	1.0	Y	A
IAC-077	A	8/10/21	1:13:23	-50.8	13	5	1.0	Y	A
IAC-077	B	8/10/21	1:17:56	-50.8	13	5	1.0	Y	A
IAC-077	C	8/10/21	1:22:06	-50.7	13	5	1.0	Y	A
IAC-078	A	8/10/21	1:56:58	-51.3	13	5	1.0	Y	A, Change PV Battery, Setttings 1/60, f8, iso 1,200, 1m + 1, Power to 35%
IAC-078	B	8/10/21	2:01:44	-51.3	13	5	1.0	Y	A, Change PV Battery, Setttings 1/60, f8, iso 1,200, 1m + 1, Power to 35%
IAC-078	C	8/10/21	2:05:46	-51.2	13	5	1.0	Y	A, Change PV Battery, Setttings 1/60, f8, iso 1,200, 1m + 1, Power to 35%
IAC-079	A	8/10/21	2:56:46	-52.2	13	5	1.0	N	A
IAC-079	B	8/10/21	3:02:02	-52.2	13	5	1.0	N	A
IAC-079	C	8/10/21	3:05:43	-52.2	13	5	1.0	N	A
IAC-073	A	8/10/21	3:47:32	-52.9	13	5	1.0	N	SPI A, No PV. Cannot pinpoint faultty source.
IAC-073	B	8/10/21	3:54:02	-53.0	13	5	1.0	N	SPI A, No PV. Cannot pinpoint faultty source.
IAC-073	C	8/10/21	3:58:33	-53.1	13	5	1.0	N	SPI A, No PV. Cannot pinpoint faultty source.
IAC-073	D	8/10/21	8:31:32	-54.0	13	5	1.0	Y	SPI A, No PV. Water intrusion in trigger cable connection short-circuiting PV strobe. Replaced
IAC-073	E	8/10/21	8:36:32	-53.8	13	5	1.0	Y	SPI A, No PV. Water intrusion in trigger cable connection short-circuiting PV strobe. Replaced
IAC-073	F	8/10/21	8:40:59	-53.9	13	5	1.0	Y	SPI A, No PV. Water intrusion in trigger cable connection short-circuiting PV strobe. Replaced
IAC-073	G	8/10/21	9:22:08	-53.9	13	5	1.0	Y	A
IAC-073	H	8/10/21	9:26:39	-53.9	13	5	1.0	Y	A
IAC-073	I	8/10/21	9:31:14	-53.9	13	5	1.0	Y	A
IAC-074	A	8/10/21	10:00:55	-54.9	13	5	1.0	Y	A
IAC-074	B	8/10/21	10:05:36	-54.8	13	5	1.0	Y	SPI A, PV Disturbed
IAC-074	C	8/10/21	10:10:14	-54.8	13	5	1.0	Y	A
IAC-080	A	8/10/21	10:42:16	-54.1	13	5	1.0	Y	A
IAC-080	B	8/10/21	10:46:46	-54.1	13	5	1.0	Y	A
IAC-080	C	8/10/21	10:50:54	-54.2	13	5	1.0	Y	A
IAC-081	A	8/10/21	11:32:34	-54.9	13	5	1.0	Y	A
IAC-081	B	8/10/21	11:37:03	-54.9	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-081	C	8/10/21	11:41:51	-54.9	13	5	1.0	Y	A
IAC-075	A	8/10/21	12:27:34	-54.9	13	5	1.0	Y	A
IAC-075	B	8/10/21	12:31:46	-55.0	13	5	1.0	Y	A
IAC-075	C	8/10/21	12:35:43	-54.9	13	5	1.0	Y	A
IAC-082	A	8/10/21	13:09:49	-54.5	13	5	1.0	Y	A
IAC-082	B	8/10/21	13:13:34	-54.5	13	5	1.0	Y	A
IAC-082	C	8/10/21	13:17:42	-54.6	13	5	1.0	Y	A
IAC-097	A	8/10/21	13:47:19	-54.8	13	5	1.0	Y	A
IAC-097	B	8/10/21	13:51:05	-54.6	13	5	1.0	Y	A
IAC-097	C	8/10/21	13:54:54	-54.7	13	5	1.0	Y	A
IAC-041	A	8/10/21	14:24:23	-55.1	13	5	1.0	N	A
IAC-041	B	8/10/21	14:28:59	-54.8	13	5	1.0	N	A
IAC-041	C	8/10/21	14:33:32	-55.1	13	5	1.0	N	A
IAC-042	A	8/10/21	15:02:17	-55.2	13	5	1.0	Y	A, Battery Swap - Focus 1m + 1, Strobe = 45
IAC-042	B	8/10/21	15:06:01	-55.4	13	5	1.0	Y	A, Battery Swap - Focus 1m + 1, Strobe = 45
IAC-042	C	8/10/21	15:10:08	-55.4	13	5	1.0	Y	A, Battery Swap - Focus 1m + 1, Strobe = 45
IAC-076	A	8/10/21	15:42:55	-54.8	13	5	1.0	Y	A
IAC-076	B	8/10/21	15:47:32	-54.9	13	5	1.0	Y	A
IAC-076	C	8/10/21	15:51:06	-54.8	13	5	1.0	Y	A
IAC-059	A	8/10/21	16:18:25	-55.4	13	5	1.0	Y	A
IAC-059	B	8/10/21	16:22:30	-55.5	13	5	1.0	Y	A
IAC-059	C	8/10/21	16:26:15	-55.5	13	5	1.0	Y	A
IAC-053	A	8/10/21	16:55:08	-55.6	13	5	1.0	Y	A
IAC-053	B	8/10/21	16:59:17	-55.8	13	5	1.0	Y	A
IAC-053	C	8/10/21	17:04:29	-55.7	13	5	1.0	Y	A
IAC-028	A	8/10/21	17:34:10	-56.2	13	5	1.0	Y	A
IAC-028	B	8/10/21	17:38:01	-56.0	13	5	1.0	Y	A
IAC-028	C	8/10/21	17:42:14	-56.3	13	5	1.0	Y	A
IAC-019	A	8/10/21	18:41:50	-56.3	13	5	1.0	Y	A
IAC-019	B	8/10/21	18:46:43	-56.2	13	5	1.0	Y	A
IAC-019	C	8/10/21	18:50:53	-56.3	13	5	1.0	Y	A
IAC-018	A	8/10/21	19:21:51	-56.5	13	5	1.0	Y	A
IAC-018	B	8/10/21	19:26:32	-56.5	13	5	1.0	Y	A
IAC-018	C	8/10/21	19:30:15	-56.5	13	5	1.0	Y	A
IAC-017	A	8/11/21	20:00:16	-56.7	13	5	1.0	Y	A
IAC-017	B	8/11/21	20:04:36	-56.9	13	5	1.0	Y	A
IAC-017	C	8/11/21	20:09:15	-56.6	13	5	1.0	Y	A
IAC-040	A	8/11/21	20:43:20	-56.5	13	5	1.0	Y	A
IAC-040	B	8/11/21	20:47:59	-56.7	13	5	1.0	Y	A
IAC-040	C	8/11/21	20:53:07	-56.5	13	5	1.0	Y	A
IAC-039	A	8/11/21	21:26:48	-56.5	13	5	1.0	Y	A
IAC-039	B	8/11/21	21:30:51	-56.4	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-039	C	8/11/21	21:35:03	-56.6	13	5	1.0	Y	A
IAC-038	A	8/11/21	22:07:14	-56.7	13	5	1.0	Y	A
IAC-038	B	8/11/21	22:12:24	-56.7	13	5	1.0	Y	A
IAC-038	C	8/11/21	22:17:12	-56.7	13	5	1.0	Y	A
IAC-036	A	8/11/21	22:56:18	-56.6	13	5	1.0	Y	A
IAC-036	B	8/11/21	23:00:50	-56.6	13	5	1.0	Y	A
IAC-036	C	8/11/21	23:05:16	-56.6	13	5	1.0	Y	A
IAC-032	A	8/11/21	23:45:00	-56.9	13	5	1.0	Y	A
IAC-032	B	8/11/21	23:49:35	-56.7	13	5	1.0	Y	A
IAC-032	C	8/11/21	23:53:48	-56.6	13	5	1.0	Y	A
IAC-031	A	8/11/21	0:48:22	-57.2	13	5	1.0	Y	A
IAC-031	B	8/11/21	0:52:53	-57.0	13	5	1.0	Y	A
IAC-031	C	8/11/21	0:56:30	-57.0	13	5	1.0	Y	A
IAC-030	A	8/11/21	1:36:13	-57.4	13	5	1.0	Y	A
IAC-030	B	8/11/21	1:40:56	-57.4	13	5	1.0	Y	A
IAC-030	C	8/11/21	1:44:50	-57.3	13	5	1.0	Y	A
IAC-039	A	8/11/21	2:15:29	-56.5	13	5	1.0	Y	A
IAC-039	B	8/11/21	2:20:10	-56.4	13	5	1.0	Y	A
IAC-039	C	8/11/21	2:23:54	-56.6	13	5	1.0	Y	A
IAC-010	A	8/11/21	3:01:35	-58.3	13	5	1.0	Y	A
IAC-010	B	8/11/21	3:06:29	-58.3	13	5	1.0	Y	SPI A, No PV
IAC-010	C	8/11/21	3:11:26	-58.2	13	5	1.0	Y	SPI A, No PV
IAC-010	D	8/11/21	3:32:09	-58.2	13	5	1.0	Y	A, SeaStars
IAC-010	E	8/11/21	3:37:40	-58.2	13	5	1.0	Y	A
IAC-010	F	8/11/21	3:42:48	-58.1	13	5	1.0	Y	A
IAC-011	A	8/11/21	4:21:09	-57.9	13	5	1.0	Y	A
IAC-011	B	8/11/21	4:26:40	-57.9	13	5	1.0	Y	A, SeaStars
IAC-011	C	8/11/21	4:30:22	-57.9	13	5	1.0	Y	SPI A, PV Disturbed
IAC-012	A	8/11/21	5:11:41	-57.6	13	5	1.0	Y	A
IAC-012	B	8/11/21	5:16:00	-57.5	13	5	1.0	Y	A
IAC-012	C	8/11/21	5:19:52	-57.5	13	5	1.0	Y	A
IAC-013	A	8/11/21	6:22:06	-56.7	13	5	1.0	Y	A
IAC-013	B	8/11/21	6:26:45	-56.8	13	5	1.0	Y	A
IAC-013	C	8/11/21	6:30:34	-56.7	13	5	1.0	Y	SPI A, PV Disturbed
IAC-016	A	8/11/21	7:05:25	-57.0	13	5	1.0	Y	A
IAC-016	B	8/11/21	7:10:11	-57.1	13	5	1.0	Y	A
IAC-016	C	8/11/21	7:14:48	-57.1	13	5	1.0	Y	A
IAC-015	A	8/11/21	9:29:22	-58.6	13	5	1.0	Y	A PV, No SPI. SPI camera was deployed with switch on Off position after fog cleared.
IAC-015	B	8/11/21	9:33:38	-58.6	13	5	1.0	Y	A PV, No SPI. SPI camera was deployed with switch on Off position after fog cleared.
IAC-015	C	8/11/21	9:38:38	-58.6	13	5	1.0	Y	A PV, No SPI. SPI camera was deployed with switch on Off position after fog cleared.
IAC-014	A	8/11/21	10:15:55	-59.1	13	5	1.0	Y	A
IAC-014	B	8/11/21	10:21:37	-59.0	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-014	C	8/11/21	10:27:27	-59.1	13	5	1.0	Y	A
IAC-015	D	8/11/21	11:12:55	-58.7	13	5	1.0	Y	A, Change PV Battery, Setttings 1/60, f8, ISO 1,200, 1m + 1, Power to 35%. Began spacing PVs from 10 m to 15 m apart
IAC-015	E	8/11/21	11:20:50	-58.6	13	5	1.0	Y	A, Change PV Battery, Setttings 1/60, f8, ISO 1,200, 1m + 1, Power to 35%. Began spacing PVs from 10 m to 15 m apart
IAC-015	F	8/11/21	11:25:41	-58.7	13	5	1.0	Y	A, Change PV Battery, Setttings 1/60, f8, ISO 1,200, 1m + 1, Power to 35%. Began spacing PVs from 10 m to 15 m apart
IAC-216	A	8/11/21	12:44:25	-58.8	13	5	1.0	Y	A
IAC-216	B	8/11/21	12:50:13	-58.8	13	5	1.0	Y	A
IAC-216	C	8/11/21	12:55:32	-58.9	13	5	1.0	Y	A
IAC-009	A	8/11/21	13:37:36	-58.5	13	5	1.0	Y	A
IAC-009	B	8/11/21	13:43:44	-58.6	13	5	1.0	Y	A
IAC-009	C	8/11/21	13:49:06	-58.5	13	5	1.0	Y	A
IAC-004	A	8/11/21	14:27:21	-59.1	13	5	1.0	Y	A
IAC-004	B	8/11/21	14:32:25	-59.1	13	5	1.0	Y	A
IAC-004	C	8/11/21	14:37:18	-59.0	13	5	1.0	Y	A
IAC-003	A	8/11/21	15:14:41	-59.4	13	5	1.0	Y	A
IAC-003	B	8/11/21	15:20:05	-59.4	13	5	1.0	Y	A
IAC-003	C	8/11/21	15:25:14	-59.5	13	5	1.0	Y	A
IAC-023	A	8/11/21	16:12:12	-58.7	13	5	1.0	Y	A
IAC-023	B	8/11/21	16:17:38	-58.5	13	5	1.0	Y	A
IAC-023	C	8/11/21	16:22:48	-58.6	13	5	1.0	Y	A
IAC-024	A	8/11/21	17:00:12	-58.0	13	5	1.0	Y	A
IAC-024	B	8/11/21	17:04:43	-58.1	13	5	1.0	Y	A
IAC-024	C	8/11/21	17:08:47	-58.3	13	5	1.0	Y	A
IAC-005	A	8/11/21	17:42:23	-58.3	13	5	1.0	Y	A
IAC-005	B	8/11/21	17:47:30	-58.2	13	5	1.0	Y	A
IAC-005	C	8/11/21	17:52:38	-58.3	13	5	1.0	Y	A
IAC-025	A	8/11/21	18:51:37	-57.9	13	5	1.0	Y	A
IAC-025	B	8/11/21	18:57:19	-58.1	13	5	1.0	Y	A
IAC-025	C	8/11/21	19:02:32	-58.0	13	5	1.0	Y	A
IAC-021	A	8/11/21	19:40:27	-57.5	13	5	1.0	Y	A
IAC-021	B	8/11/21	19:45:29	-57.5	13	5	1.0	Y	A
IAC-021	C	8/11/21	19:50:28	-57.4	13	5	1.0	Y	A
IAC-026	A	8/12/21	22:40:28	-57.8	13	5	1.0	Y	A
IAC-026	B	8/12/21	22:46:46	-58.1	13	5	1.0	Y	A
IAC-026	C	8/12/21	22:51:37	-58.0	13	5	1.0	Y	A
IAC-217	A	8/13/21	4:44:56	-56.8	13	5	1.0	Y	A
IAC-217	B	8/13/21	4:53:55	-56.9	13	5	1.0	Y	SPI A, PV Disturbed
IAC-217	C	8/13/21	5:03:17	-56.8	13	5	1.0	Y	A
IAC-027	A	8/13/21	6:16:07	-56.4	13	5	1.0	Y	A
IAC-027	B	8/13/21	6:23:10	-56.2	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-027	C	8/13/21	6:27:30	-56.4	13	5	1.0	Y	A
IAC-022	A	8/13/21	7:03:29	-56.1	13	5	1.0	Y	A
IAC-022	B	8/13/21	7:08:36	-56.2	13	5	1.0	Y	A
IAC-022	C	8/13/21	7:14:09	-56.2	13	5	1.0	Y	A
IAC-052	A	8/13/21	7:57:53	-56.1	13	5	1.0	Y	A
IAC-052	B	8/13/21	8:04:46	-56.1	13	5	1.0	Y	A
IAC-052	C	8/13/21	8:16:24	-53.2	13	5	1.0	Y	A
IAC-058	A	8/13/21	9:03:02	-55.7	13	5	1.0	Y	A
IAC-058	B	8/13/21	9:09:05	-55.7	13	5	1.0	Y	A
IAC-058	C	8/13/21	9:15:42	-55.7	13	5	1.0	Y	A
IAC-054	A	8/13/21	10:18:44	-55.2	13	5	1.0	Y	A
IAC-054	B	8/13/21	10:25:01	-55.2	13	5	1.0	Y	A
IAC-054	C	8/13/21	10:32:28	-55.1	13	5	1.0	Y	A
IAC-055	A	8/13/21	11:16:23	-55.9	13	5	1.0	Y	A
IAC-055	B	8/13/21	11:23:52	-55.8	13	5	1.0	Y	A
IAC-055	C	8/13/21	11:28:26	-55.9	13	5	1.0	Y	A
IAC-056	A	8/13/21	12:34:24	-56.1	13	5	1.0	Y	A
IAC-056	B	8/13/21	12:41:13	-56.1	13	5	1.0	Y	A
IAC-056	C	8/13/21	12:46:29	-56.1	13	5	1.0	Y	A
IAC-057	A	8/13/21	13:36:19	-55.9	13	5	1.0	Y	A
IAC-057	B	8/13/21	13:43:11	-56.0	13	5	1.0	Y	A
IAC-057	C	8/13/21	13:48:43	-55.9	13	5	1.0	Y	A
IAC-051	A	8/13/21	14:29:56	-56.4	13	5	1.0	Y	A
IAC-051	B	8/13/21	14:36:07	-56.4	13	5	1.0	Y	A
IAC-051	C	8/13/21	14:42:26	-56.4	13	5	1.0	Y	A
IAC-050	A	8/13/21	15:23:13	-56.1	13	5	1.0	Y	A
IAC-050	B	8/13/21	15:29:42	-56.1	13	5	1.0	Y	A
IAC-050	C	8/13/21	15:34:44	-56.1	13	5	1.0	Y	A
IAC-049	A	8/13/21	16:18:14	-56.2	13	5	1.0	Y	A
IAC-049	B	8/13/21	16:24:05	-56.3	13	5	1.0	Y	A
IAC-049	C	8/13/21	16:29:22	-56.3	13	5	1.0	Y	A
IAC-048	A	8/13/21	17:02:41	-56.9	13	5	1.0	Y	A
IAC-048	B	8/13/21	17:08:45	-56.8	13	5	1.0	Y	A
IAC-048	C	8/13/21	17:14:03	-56.8	13	5	1.0	Y	A
IAC-020	A	8/13/21	18:12:01	-57.3	13	5	1.0	Y	A
IAC-020	B	8/13/21	18:18:40	-57.3	13	5	1.0	Y	A
IAC-020	C	8/13/21	18:26:04	-57.3	13	5	1.0	Y	A
IAC-008	A	8/14/21	9:05:44	-58.3	13	5	1.0	Y	SPI A, PV A
IAC-008	B	8/14/21	9:12:12	-58.2	13	5	1.0	Y	SPI A, no PV
IAC-008	C	8/14/21	9:17:56	-58.4	13	5	1.0	Y	SPI A, PV A
IAC-002	A	8/14/21	10:04:45	-59.1	13	5	1.0	Y	A
IAC-002	B	8/14/21	10:10:01	-59.1	13	5	1.0	Y	A

SPI AND PV IMAGES COLLECTION FORM

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Station ID	Replicate (A,B,C)	Date (mm/dd/yy)	Time (hh:mm)	Water Depth (m)	Stop Height (in.)	Lead Weight (#/side)	PV Trigger Length (m)	GoPro Video (Y/N)	Comments (A = Acceptable, D = Disturbed, OP = Over Penetration, NS = Not Sampled)
IAC-002	C	8/14/21	10:14:41	-59.1	13	5	1.0	Y	A
IAC-006	A	8/14/21	10:52:22	-59.2	13	5	1.0	Y	A
IAC-006	B	8/14/21	10:57:37	-59.1	13	5	1.0	Y	A
IAC-006	C	8/14/21	11:02:33	-59.2	13	5	1.0	Y	A
IAC-007	A	8/14/21	11:42:44	-60.0	13	5	1.0	Y	A
IAC-007	B	8/14/21	11:49:28	-60.0	13	5	1.0	Y	A
IAC-007	C	8/14/21	11:54:59	-60.1	13	5	1.0	Y	A
IAC-001	A	8/14/21	12:41:12	-60.4	13	5	1.0	Y	A
IAC-001	B	8/14/21	12:46:35	-60.5	13	5	1.0	Y	A
IAC-001	C	8/14/21	12:52:41	-60.5	13	5	1.0	Y	A

ADDENDUM B | SPI/PV ACTUAL STATION LOCATIONS

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-002	A	7/17/21	23:26:32	-36.9	384551.3277	4540191.484	41;00.28477N	070;22.36858W	WTG-002-A-SPI.jpg	WTG-002-A-PV.jpg
WTG-002	B	7/17/21	23:31:36	-36.8	384543.8727	4540197.262	41;00.28782N	070;22.37396W	WTG-002-B-SPI.jpg	WTG-002-B-PV.jpg
WTG-002	C	7/17/21	23:36:11	-36.8	384536.9021	4540189.661	41;00.28366N	070;22.37885W	WTG-002-C-SPI.jpg	WTG-002-C-PV.jpg
WTG-003	A	7/18/21	2:02:11	-38.7	380847.6422	4538337.932	40;59.25127N	070;24.98883W	WTG-003-A-SPI.jpg	WTG-003-A-PV.jpg
WTG-003	B	7/18/21	2:06:27	-41.1	380850.3800	4538329.572	40;59.24677N	070;24.98678W	WTG-003-B-SPI.jpg	WTG-003-B-PV.jpg
WTG-003	C	7/18/21	2:12:52	-40.9	380839.9924	4538322.335	40;59.24277N	070;24.99410W	WTG-003-C-SPI.jpg	WTG-003-C-PV.jpg
WTG-008	A	7/18/21	4:30:42	-40.3	382697.0821	4536486.227	40;58.26680N	070;23.64896W	WTG-008-A-SPI.jpg	WTG-008-A-PV.jpg
WTG-008	B	7/18/21	4:35:28	-40.3	382702.6573	4536477.353	40;58.26206N	070;23.64489W	WTG-008-B-SPI.jpg	WTG-008-B-PV.jpg
WTG-008	C	7/18/21	4:40:28	-40.2	382693.8032	4536471.696	40;58.25892N	070;23.65113W	WTG-008-C-SPI.jpg	WTG-008-C-PV.jpg
WTG-011	A	7/18/21	7:22:54	-41.2	380839.5441	4534636.000	40;57.25092N	070;24.95182W	WTG-011-A-SPI.jpg	WTG-011-A-PV.jpg
WTG-011	B	7/18/21	7:27:28	-41.1	380835.3321	4534626.397	40;57.24570N	070;24.95471W	WTG-011-B-SPI.jpg	WTG-011-B-PV.jpg
WTG-011	C	7/18/21	7:32:31	-40.9	380843.7175	4534618.964	40;57.24176N	070;24.94865W	WTG-011-C-SPI.jpg	WTG-011-C-PV.jpg
WTG-005	A	7/18/21	9:41:54	-37.2	384546.4037	4538341.746	40;59.28524N	070;22.35136W	WTG-005-A-SPI.jpg	WTG-005-A-PV.jpg
WTG-005	B	7/18/21	9:46:19	-37.0	384554.0080	4538333.348	40;59.28076N	070;22.34584W	WTG-005-B-SPI.jpg	WTG-005-B-PV.jpg
WTG-005	C	7/18/21	9:49:33	-37.2	384547.9942	4538325.758	40;59.27661N	070;22.35004W	WTG-005-C-SPI.jpg	WTG-005-C-PV.jpg
WTG-011	D	7/18/21	11:25:36	-41.3	380848.7719	4534631.387	40;57.24851N	070;24.94519W	WTG-011-D-SPI.jpg	WTG-011-D-PV.jpg
WTG-011	E	7/18/21	11:30:31	-41.5	380835.3826	4534631.909	40;57.24868N	070;24.95474W	WTG-011-E-SPI.jpg	WTG-011-E-PV.jpg
WTG-011	F	7/18/21	11:34:48	-41.4	380835.8570	4534621.708	40;57.24317N	070;24.95428W	WTG-011-F-SPI.jpg	WTG-011-F-PV.jpg
WTG-020	A	7/18/21	14:06:50	-45.1	375291.0342	4532789.339	40;56.20344N	070;28.88392W	WTG-020-A-SPI.jpg	WTG-020-A-PV.jpg
WTG-020	B	7/18/21	14:11:31	-45.1	375281.6640	4532784.583	40;56.20078N	070;28.89054W	WTG-020-B-SPI.jpg	WTG-020-B-PV.jpg
WTG-020	C	7/18/21	14:15:56	-45.2	375279.5483	4532776.977	40;56.19665N	070;28.89196W	WTG-020-C-SPI.jpg	WTG-020-C-PV.jpg
WTG-021	A	7/18/21	16:10:06	-45.2	378987.5563	4530934.806	40;55.23472N	070;26.22838W	WTG-021-A-SPI.jpg	WTG-021-A-PV.jpg
WTG-021	B	7/18/21	16:14:18	-45.3	378980.1664	4530925.249	40;55.22949N	070;26.23353W	WTG-021-B-SPI.jpg	WTG-021-B-PV.jpg
WTG-021	C	7/18/21	16:19:08	-45.2	378984.0546	4530912.123	40;55.22243N	070;26.23061W	WTG-021-C-SPI.jpg	WTG-021-C-PV.jpg
WTG-025	A	7/18/21	19:02:11	-40.3	386401.1871	4530935.078	40;55.29868N	070;20.94719W	WTG-025-A-SPI.jpg	WTG-025-A-PV.jpg
WTG-025	B	7/18/21	19:07:59	-40.4	386389.7991	4530927.762	40;55.29463N	070;20.95522W	WTG-025-B-SPI.jpg	WTG-025-B-PV.jpg
WTG-025	C	7/18/21	19:12:57	-40.5	386389.2070	4530916.375	40;55.28848N	070;20.95552W	WTG-025-C-SPI.jpg	WTG-025-C-PV.jpg
WTG-027	A	7/18/21	20:44:44	-38.8	390102.4910	4530932.355	40;55.32756N	070;18.31038W	WTG-027-A-SPI.jpg	WTG-027-A-PV.jpg
WTG-027	B	7/18/21	20:50:27	-38.5	390113.0992	4530927.813	40;55.32519N	070;18.30278W	WTG-027-B-SPI.jpg	WTG-027-B-PV.jpg
WTG-027	C	7/18/21	20:55:28	-38.4	390112.7819	4530917.357	40;55.31954N	070;18.30289W	WTG-027-C-SPI.jpg	WTG-027-C-PV.jpg
WTG-053	A	7/18/21	22:50:04	-44.6	384546.9912	4525379.926	40;52.28138N	070;22.20611W	WTG-053-A-SPI.jpg	WTG-053-A-PV.jpg
WTG-053	B	7/18/21	22:56:06	-44.6	384555.7670	4525370.860	40;52.27655N	070;22.19976W	WTG-053-B-SPI.jpg	WTG-053-B-PV.jpg
WTG-053	C	7/18/21	23:01:28	-44.7	384555.4002	4525359.087	40;52.27019N	070;22.19989W	WTG-053-C-SPI.jpg	WTG-053-C-PV.jpg
WTG-034	A	7/19/21	0:46:54	-42.5	384547.4650	4529082.470	40;54.28205N	070;22.24705W	WTG-034-A-SPI.jpg	WTG-034-A-PV.jpg
WTG-034	B	7/19/21	0:52:23	-42.6	384554.7111	4529072.668	40;54.27682N	070;22.24178W	WTG-034-B-SPI.jpg	WTG-034-B-PV.jpg
WTG-034	C	7/19/21	0:58:01	-42.5	384550.9355	4529063.597	40;54.27188N	070;22.24437W	WTG-034-C-SPI.jpg	WTG-034-C-PV.jpg
WTG-033	A	7/19/21	2:19:27	-43.6	382699.2624	4529079.970	40;54.26493N	070;23.56330W	WTG-033-A-SPI.jpg	WTG-033-A-PV.jpg
WTG-033	B	7/19/21	2:24:42	-43.9	382704.4282	4529069.201	40;54.25915N	070;23.55949W	WTG-033-B-SPI.jpg	WTG-033-B-PV.jpg
WTG-033	C	7/19/21	2:29:48	-43.8	382694.7642	4529061.628	40;54.25498N	070;23.56629W	WTG-033-C-SPI.jpg	WTG-033-C-PV.jpg
WTG-033	D	7/19/21	3:02:03	-43.8	382687.5250	4529067.009	40;54.25782N	070;23.57151W	WTG-033-D-SPI.jpg	WTG-033-D-PV.jpg
WTG-033	E	7/19/21	3:07:31	-44.0	382681.9488	4529075.812	40;54.26253N	070;23.57558W	WTG-033-E-SPI.jpg	WTG-033-E-PV.jpg
WTG-033	F	7/19/21	3:12:40	-44.1	382692.1751	4529081.963	40;54.26594N	070;23.56837W	WTG-033-F-SPI.jpg	WTG-033-F-PV.jpg
WTG-040	A	7/19/21	4:42:42	-47.7	378984.0191	4527226.062	40;53.23073N	070;26.18752W	WTG-040-A-SPI.jpg	WTG-040-A-PV.jpg
WTG-040	B	7/19/21	4:48:31	-47.8	378981.4375	4527216.053	40;53.22530N	070;26.18924W	WTG-040-B-SPI.jpg	WTG-040-B-PV.jpg
WTG-040	C	7/19/21	4:54:12	-48.0	378992.0042	4527212.253	40;53.22334N	070;26.18168W	WTG-040-C-SPI.jpg	WTG-040-C-PV.jpg
WTG-054	A	7/19/21	7:35:12	-48.7	377137.8714	4525377.019	40;52.21514N	070;27.48002W	WTG-054-A-SPI.jpg	WTG-054-A-PV.jpg
WTG-054	B	7/19/21	7:40:30	-48.7	377146.8871	4525372.205	40;52.21262N	070;27.47354W	WTG-054-B-SPI.jpg	WTG-054-B-PV.jpg
WTG-054	C	7/19/21	7:45:10	-48.6	377144.7203	4525361.157	40;52.20663N	070;27.47495W	WTG-054-C-SPI.jpg	WTG-054-C-PV.jpg
WTG-047	A	7/19/21	9:23:52	-49.7	373432.8621	4527229.778	40;53.18238N	070;30.13983W	WTG-047-A-SPI.jpg	WTG-047-A-PV.jpg
WTG-047	B	7/19/21	9:28:55	-49.3	373426.1328	4527219.674	40;53.17686N	070;30.14450W	WTG-047-B-SPI.jpg	WTG-047-B-PV.jpg
WTG-047	C	7/19/21	9:34:33	-49.6	373435.1685	4527210.467	40;53.17197N	070;30.13795W	WTG-047-C-SPI.jpg	WTG-047-C-PV.jpg
WTG-048	A	7/19/21	10:56:07	-49.5	371582.9739	4527226.904	40;53.16354N	070;31.45683W	WTG-048-A-SPI.jpg	WTG-048-A-PV.jpg
WTG-048	B	7/19/21	11:01:55	-49.4	371592.0897	4527219.484	40;53.15962N	070;31.45024W	WTG-048-B-SPI.jpg	WTG-048-B-PV.jpg
WTG-048	C	7/19/21	11:06:40	-49.5	371585.7725	4527211.522	40;53.15526N	070;31.45464W	WTG-048-C-SPI.jpg	WTG-048-C-PV.jpg
WTG-049	A	7/19/21	12:37:54	-50.9	369731.3621	4527232.298	40;53.14890N	070;32.77513W	WTG-049-A-SPI.jpg	WTG-049-A-PV.jpg
WTG-049	B	7/19/21	12:42:54	-50.9	369739.9519	4527226.543	40;53.14588N	070;32.76894W	WTG-049-B-SPI.jpg	WTG-049-B-PV.jpg
WTG-049	C	7/19/21	12:47:48	-50.8	369742.4529	4527217.136	40;53.14082N	070;32.76705W	WTG-049-C-SPI.jpg	WTG-049-C-PV.jpg
WTG-058	A	7/19/21	14:56:57	-52.8	369732.8407	4525380.777	40;52.14853N	070;32.75080W	WTG-058-A-SPI.jpg	WTG-058-A-PV.jpg
WTG-058	B	7/19/21	15:00:58	-53.0	369739.0503	4525372.623	40;52.14418N	070;32.74628W	WTG-058-B-SPI.jpg	WTG-058-B-PV.jpg
WTG-058	C	7/19/21	15:04:54	-53.0	369741.9052	4525363.321	40;52.13918N	070;32.74413W	WTG-058-C-SPI.jpg	WTG-058-C-PV.jpg
WTG-066	A	7/19/21	17:32:04	-52.8	369732.9619	4523528.170	40;51.14754N	070;32.72744W	WTG-066-A-SPI.jpg	WTG-066-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-066	B	7/19/21	17:37:21	-52.6	369721.4593	4523519.096	40;51.14253N	070;32.73551W	WTG-066-B-SPI.jpg	WTG-066-B-PV.jpg
WTG-066	C	7/19/21	17:42:38	-52.7	369726.2442	4523509.573	40;51.13743N	070;32.73198W	WTG-066-C-SPI.jpg	WTG-066-C-PV.jpg
WTG-067	A	7/19/21	19:47:29	-50.4	367886.2746	4523521.819	40;51.12638N	070;34.04141W	WTG-067-A-SPI.jpg	WTG-067-A-PV.jpg
WTG-067	B	7/19/21	19:53:31	-50.3	367877.3728	4523524.603	40;51.12780N	070;34.04778W	WTG-067-B-SPI.jpg	WTG-067-B-PV.jpg
WTG-067	C	7/19/21	19:58:53	-50.3	367868.2933	4523516.960	40;51.12358N	070;34.05414W	WTG-067-C-SPI.jpg	WTG-067-C-PV.jpg
WTG-067	D	7/19/21	20:23:00	-50.3	367871.7661	4523506.498	40;51.11796N	070;34.05154W	WTG-067-D-SPI.jpg	WTG-067-D-PV.jpg
WTG-067	E	7/19/21	20:28:59	-50.3	367883.4668	4523503.985	40;51.11672N	070;34.04318W	WTG-067-E-SPI.jpg	WTG-067-E-PV.jpg
WTG-067	F	7/19/21	20:34:26	-50.2	367874.0596	4523499.498	40;51.11420N	070;34.04982W	WTG-067-F-SPI.jpg	WTG-067-F-PV.jpg
WTG-068	A	7/19/21	22:01:47	-49.7	366033.1822	4523522.189	40;51.10853N	070;35.36001W	WTG-068-A-SPI.jpg	WTG-068-A-PV.jpg
WTG-068	B	7/19/21	22:06:33	-49.7	366023.1205	4523522.725	40;51.10872N	070;35.36717W	WTG-068-B-SPI.jpg	WTG-068-B-PV.jpg
WTG-068	C	7/19/21	22:11:23	-49.6	366018.9604	4523513.812	40;51.10387N	070;35.37002W	WTG-068-C-SPI.jpg	WTG-068-C-PV.jpg
WTG-068	D	7/19/21	22:38:13	-49.6	366039.0984	4523513.181	40;51.10372N	070;35.35568W	WTG-068-D-SPI.jpg	WTG-068-D-PV.jpg
WTG-068	E	7/19/21	22:43:06	-49.7	366033.8722	4523504.910	40;51.09920N	070;35.35929W	WTG-068-E-SPI.jpg	WTG-068-E-PV.jpg
WTG-068	F	7/19/21	22:47:51	-49.8	366024.0865	4523503.555	40;51.09838N	070;35.36624W	WTG-068-F-SPI.jpg	WTG-068-F-PV.jpg
WTG-077	A	7/20/21	0:54:11	-51.0	366024.2385	4521674.336	40;50.11005N	070;35.34252W	WTG-077-A-SPI.jpg	WTG-077-A-PV.jpg
WTG-077	B	7/20/21	0:59:37	-50.7	366020.4896	4521662.840	40;50.10380N	070;35.34503W	WTG-077-B-SPI.jpg	WTG-077-B-PV.jpg
WTG-077	C	7/20/21	1:05:07	-51.1	366026.7377	4521654.439	40;50.09932N	070;35.34048W	WTG-077-C-SPI.jpg	WTG-077-C-PV.jpg
WTG-076	A	7/20/21	2:26:05	-50.5	367869.7143	4521661.354	40;50.12100N	070;34.02951W	WTG-076-A-SPI.jpg	WTG-076-A-PV.jpg
WTG-076	B	7/20/21	2:31:01	-50.5	367878.1545	4521654.093	40;50.11716N	070;34.02341W	WTG-076-B-SPI.jpg	WTG-076-B-PV.jpg
WTG-076	C	7/20/21	2:36:12	-50.6	367887.7024	4521662.827	40;50.12197N	070;34.01673W	WTG-076-C-SPI.jpg	WTG-076-C-PV.jpg
WTG-074	A	7/20/21	4:11:06	-53.6	371572.7251	4521663.223	40;50.15730N	070;31.39521W	WTG-074-A-SPI.jpg	WTG-074-A-PV.jpg
WTG-074	B	7/20/21	4:17:00	-53.6	371582.6199	4521654.358	40;50.15260N	070;31.38806W	WTG-074-B-SPI.jpg	WTG-074-B-PV.jpg
WTG-074	C	7/20/21	4:22:29	-53.6	371592.8231	4521663.322	40;50.15754N	070;31.38092W	WTG-074-C-SPI.jpg	WTG-074-C-PV.jpg
WTG-081	A	7/20/21	5:48:27	-51.3	373434.3125	4519820.664	40;49.17908N	070;30.04840W	WTG-081-A-SPI.jpg	WTG-081-A-PV.jpg
WTG-081	B	7/20/21	5:54:00	-51.3	373444.0874	4519813.465	40;49.17528N	070;30.04136W	WTG-081-B-SPI.jpg	WTG-081-B-PV.jpg
WTG-081	C	7/20/21	5:58:36	-51.2	373437.1496	4519803.066	40;49.16960N	070;30.04616W	WTG-081-C-SPI.jpg	WTG-081-C-PV.jpg
WTG-078	A	7/20/21	7:39:06	-49.4	378990.5661	4519819.490	40;49.22874N	070;26.09645W	WTG-078-A-SPI.jpg	WTG-078-A-PV.jpg
WTG-078	B	7/20/21	7:44:06	-49.3	378998.9238	4519810.563	40;49.22399N	070;26.09040W	WTG-078-B-SPI.jpg	WTG-078-B-PV.jpg
WTG-078	C	7/20/21	7:47:50	-49.3	378990.8484	4519801.400	40;49.21897N	070;26.09604W	WTG-078-C-SPI.jpg	WTG-078-C-PV.jpg
WTG-098	A	7/20/21	9:25:57	-49.7	375285.3510	4516117.009	40;47.19488N	070;28.68743W	WTG-098-A-SPI.jpg	WTG-098-A-PV.jpg
WTG-098	B	7/20/21	9:29:56	-49.7	375294.1137	4516108.054	40;47.19012N	070;28.68109W	WTG-098-B-SPI.jpg	WTG-098-B-PV.jpg
WTG-098	C	7/20/21	9:34:08	-49.6	375287.5807	4516097.877	40;47.18456N	070;28.68562W	WTG-098-C-SPI.jpg	WTG-098-C-PV.jpg
WTG-090	A	7/20/21	11:01:21	-49.9	373432.5963	4517967.182	40;48.17758N	070;30.02705W	WTG-090-A-SPI.jpg	WTG-090-A-PV.jpg
WTG-090	B	7/20/21	11:05:39	-49.8	373425.8838	4517961.183	40;48.17428N	070;30.03175W	WTG-090-B-SPI.jpg	WTG-090-B-PV.jpg
WTG-090	C	7/20/21	11:11:49	-50.0	373434.4856	4517952.216	40;48.16951N	070;30.02552W	WTG-090-C-SPI.jpg	WTG-090-C-PV.jpg
WTG-101	A	7/20/21	13:18:24	-51.8	369730.5647	4516117.937	40;47.14366N	070;32.63624W	WTG-101-A-SPI.jpg	WTG-101-A-PV.jpg
WTG-101	B	7/20/21	13:23:06	-52.0	369721.8701	4516112.815	40;47.14081N	070;32.64236W	WTG-101-B-SPI.jpg	WTG-101-B-PV.jpg
WTG-101	C	7/20/21	13:28:52	-52.1	369721.2209	4516103.022	40;47.13552N	070;32.64270W	WTG-101-C-SPI.jpg	WTG-101-C-PV.jpg
WTG-083	A	7/20/21	15:25:04	-51.8	369731.8173	4519822.272	40;49.14519N	070;32.68175W	WTG-083-A-SPI.jpg	WTG-083-A-PV.jpg
WTG-083	B	7/20/21	15:30:07	-51.7	369723.3297	4519818.117	40;49.14286N	070;32.68774W	WTG-083-B-SPI.jpg	WTG-083-B-PV.jpg
WTG-083	C	7/20/21	15:34:37	-51.6	369721.2926	4519808.373	40;49.13758N	070;32.68906W	WTG-083-C-SPI.jpg	WTG-083-C-PV.jpg
WTG-084	A	7/20/21	17:05:58	-52.1	367885.3329	4519823.349	40;49.12806N	070;33.99502W	WTG-084-A-SPI.jpg	WTG-084-A-PV.jpg
WTG-084	B	7/20/21	17:11:00	-51.9	367875.6134	4519820.346	40;49.12634N	070;34.00189W	WTG-084-B-SPI.jpg	WTG-084-B-PV.jpg
WTG-084	C	7/20/21	17:15:27	-51.9	367870.0581	4519812.232	40;49.12191N	070;34.00574W	WTG-084-C-SPI.jpg	WTG-084-C-PV.jpg
WTG-085	A	7/20/21	19:11:59	-51.8	366030.7910	4519820.107	40;49.10827N	070;35.31394W	WTG-085-A-SPI.jpg	WTG-085-A-PV.jpg
WTG-085	B	7/20/21	19:17:51	-51.8	366021.5970	4519816.496	40;49.10623N	070;35.32043W	WTG-085-B-SPI.jpg	WTG-085-B-PV.jpg
WTG-085	C	7/20/21	19:22:38	-51.7	366017.9842	4519806.715	40;49.10091N	070;35.32287W	WTG-085-C-SPI.jpg	WTG-085-C-PV.jpg
WTG-087	A	7/20/21	21:02:26	-54.1	362325.7928	4519822.722	40;49.07289N	070;37.94893W	WTG-087-A-SPI.jpg	WTG-087-A-PV.jpg
WTG-087	B	7/20/21	21:09:27	-53.6	362316.5446	4519817.321	40;49.06988N	070;37.95544W	WTG-087-B-SPI.jpg	WTG-087-B-PV.jpg
WTG-087	C	7/20/21	21:14:28	-53.6	362314.5592	4519807.778	40;49.06470N	070;37.95672W	WTG-087-C-SPI.jpg	WTG-087-C-PV.jpg
WTG-097	A	7/20/21	22:33:57	-53.6	360474.3186	4517969.073	40;48.05263N	070;39.24077W	WTG-097-A-SPI.jpg	WTG-097-A-PV.jpg
WTG-097	B	7/20/21	22:40:21	-53.5	360464.9288	4517966.217	40;48.05099N	070;39.24741W	WTG-097-B-SPI.jpg	WTG-097-B-PV.jpg
WTG-097	C	7/20/21	22:45:24	-53.5	360461.8275	4517956.818	40;48.04588N	070;39.24949W	WTG-097-C-SPI.jpg	WTG-097-C-PV.jpg
WTG-107	A	7/21/21	1:03:28	-56.2	358606.5685	4516105.278	40;47.02649N	070;40.54339W	WTG-107-A-SPI.jpg	WTG-107-A-PV.jpg
WTG-107	B	7/21/21	1:09:50	-56.2	358619.1537	4516099.880	40;47.02370N	070;40.53437W	WTG-107-B-SPI.jpg	WTG-107-B-PV.jpg
WTG-107	C	7/21/21	1:15:01	-56.2	358628.5158	4516106.882	40;47.02758N	070;40.52781W	WTG-107-C-SPI.jpg	WTG-107-C-PV.jpg
WTG-095	A	7/21/21	3:20:02	-53.1	364175.1139	4517971.516	40;48.09118N	070;36.60953W	WTG-095-A-SPI.jpg	WTG-095-A-PV.jpg
WTG-095	B	7/21/21	3:25:57	-53.2	364186.3032	4517958.768	40;48.08440N	070;36.60141W	WTG-095-B-SPI.jpg	WTG-095-B-PV.jpg
WTG-095	C	7/21/21	3:32:10	-53.2	364175.0305	4517951.041	40;48.08011N	070;36.60933W	WTG-095-C-SPI.jpg	WTG-095-C-PV.jpg
WTG-104	A	7/21/21	4:46:49	-54.3	364174.6762	4516116.151	40;47.08872N	070;36.58563W	WTG-104-A-SPI.jpg	WTG-104-A-PV.jpg
WTG-104	B	7/21/21	4:51:32	-54.2	364182.5775	4516106.777	40;47.08373N	070;36.57989W	WTG-104-B-SPI.jpg	WTG-104-B-PV.jpg
WTG-104	C	7/21/21	4:56:30	-54.3	364176.3851	4516099.487	40;47.07973N	070;36.58419W	WTG-104-C-SPI.jpg	WTG-104-C-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-134	A	7/21/21	6:57:50	-58.0	358607.6906	4510553.379	40;44.02689N	070;40.46727W	WTG-134-A-SPI.jpg	WTG-134-A-PV.jpg
WTG-134	B	7/21/21	7:02:54	-58.0	358616.3214	4510561.458	40;44.03134N	070;40.46125W	WTG-134-B-SPI.jpg	WTG-134-B-PV.jpg
WTG-134	C	7/21/21	7:08:22	-58.0	358628.0307	4510552.400	40;44.02657N	070;40.45281W	WTG-134-C-SPI.jpg	WTG-134-C-PV.jpg
WTG-123	A	7/21/21	8:42:43	-56.4	362308.0862	4512405.855	40;45.06542N	070;37.86341W	WTG-123-A-SPI.jpg	WTG-123-A-PV.jpg
WTG-123	B	7/21/21	8:46:57	-56.3	362312.8196	4512414.322	40;45.07004N	070;37.86016W	WTG-123-B-SPI.jpg	WTG-123-B-PV.jpg
WTG-123	C	7/21/21	8:51:34	-56.3	362322.2809	4512417.329	40;45.07176N	070;37.85348W	WTG-123-C-SPI.jpg	WTG-123-C-PV.jpg
WTG-123	D	7/21/21	9:22:36	-56.2	362332.3641	4512412.737	40;45.06938N	070;37.84625W	WTG-123-D-SPI.jpg	WTG-123-D-PV.jpg
WTG-123	E	7/21/21	9:27:22	-56.1	362337.4339	4512403.292	40;45.06433N	070;37.84253W	WTG-123-E-SPI.jpg	WTG-123-E-PV.jpg
WTG-122	A	7/21/21	10:51:24	-55.3	364173.2222	4512411.454	40;45.08705N	070;36.53836W	WTG-122-A-SPI.jpg	WTG-122-A-PV.jpg
WTG-122	B	7/21/21	10:55:52	-55.3	364181.6301	4512406.699	40;45.08456N	070;36.53232W	WTG-122-B-SPI.jpg	WTG-122-B-PV.jpg
WTG-122	C	7/21/21	10:59:45	-55.4	364180.4136	4512398.098	40;45.07990N	070;36.53307W	WTG-122-C-SPI.jpg	WTG-122-C-PV.jpg
WTG-128	A	7/21/21	13:18:23	-54.3	369737.8820	4510563.123	40;44.14236N	070;32.56161W	WTG-128-A-SPI.jpg	WTG-128-A-PV.jpg
WTG-128	B	7/21/21	13:26:41	-53.7	369728.6653	4510566.215	40;44.14394N	070;32.56819W	WTG-128-B-SPI.jpg	WTG-128-B-PV.jpg
WTG-128	C	7/21/21	13:31:28	-54.1	369719.6313	4510560.747	40;44.14090N	070;32.57454W	WTG-128-C-SPI.jpg	WTG-128-C-PV.jpg
WTG-137	A	7/21/21	15:07:57	-56.2	366019.6046	4508713.377	40;43.10710N	070;35.17905W	WTG-137-A-SPI.jpg	WTG-137-A-PV.jpg
WTG-137	B	7/21/21	15:12:33	-56.1	366013.9502	4508705.245	40;43.10265N	070;35.18296W	WTG-137-B-SPI.jpg	WTG-137-B-PV.jpg
WTG-137	C	7/21/21	15:17:03	-56.2	366012.8614	4508695.643	40;43.09745N	070;35.18361W	WTG-137-C-SPI.jpg	WTG-137-C-PV.jpg
WTG-157	A	7/21/21	20:04:54	-60.9	356787.6555	4503131.012	40;39.99781N	070;41.65829W	WTG-157-A-SPI.jpg	WTG-157-A-PV.jpg
WTG-157	B	7/21/21	20:10:07	-60.8	356781.1536	4503123.125	40;39.99348N	070;41.66279W	WTG-157-B-SPI.jpg	WTG-157-B-PV.jpg
WTG-157	C	7/21/21	20:14:36	-60.8	356771.8214	4503120.490	40;39.99196N	070;41.66938W	WTG-157-C-SPI.jpg	WTG-157-C-PV.jpg
WTG-155	A	7/21/21	21:41:30	-59.2	360482.8827	4503133.999	40;40.03741N	070;39.03634W	WTG-155-A-SPI.jpg	WTG-155-A-PV.jpg
WTG-155	B	7/21/21	21:46:21	-59.2	360473.7770	4503129.907	40;40.03511N	070;39.04275W	WTG-155-B-SPI.jpg	WTG-155-B-PV.jpg
WTG-155	C	7/21/21	21:50:57	-59.3	360463.6883	4503130.010	40;40.03506N	070;39.04991W	WTG-155-C-SPI.jpg	WTG-155-C-PV.jpg
WTG-143	A	7/21/21	23:42:47	-56.0	366032.6307	4506834.266	40;42.09192N	070;35.14570W	WTG-143-A-SPI.jpg	WTG-143-A-PV.jpg
WTG-143	B	7/21/21	23:47:27	-55.9	366022.5371	4506834.117	40;42.09174N	070;35.15287W	WTG-143-B-SPI.jpg	WTG-143-B-PV.jpg
WTG-143	C	7/22/21	1:03:19	-56.1	366014.7581	4506840.406	40;42.09506N	070;35.15847W	WTG-143-C-SPI.jpg	WTG-143-C-PV.jpg
WTG-131	A	7/22/21	1:24:20	-55.7	364161.6555	4510546.442	40;44.07926N	070;36.52229W	WTG-131-A-SPI.jpg	WTG-131-A-PV.jpg
WTG-131	B	7/22/21	1:30:23	-55.7	364171.1202	4510538.493	40;44.07506N	070;36.51546W	WTG-131-B-SPI.jpg	WTG-131-B-PV.jpg
WTG-131	C	7/22/21	1:35:58	-55.6	364183.4657	4510543.286	40;44.07777N	070;36.50675W	WTG-131-C-SPI.jpg	WTG-131-C-PV.jpg
WTG-111	A	7/22/21	3:33:18	-53.9	367892.9820	4514262.853	40;46.12373N	070;33.91897W	WTG-111-A-SPI.jpg	WTG-111-A-PV.jpg
WTG-111	B	7/22/21	3:38:38	-54.0	367894.4929	4514253.578	40;46.11874N	070;33.91778W	WTG-111-B-SPI.jpg	WTG-111-B-PV.jpg
WTG-111	C	7/22/21	3:44:00	-53.9	367890.8791	4514244.078	40;46.11357N	070;33.92023W	WTG-111-C-SPI.jpg	WTG-111-C-PV.jpg
WTG-119	A	7/22/21	5:05:06	-54.4	369740.4343	4512399.996	40;45.13488N	070;32.58273W	WTG-119-A-SPI.jpg	WTG-119-A-PV.jpg
WTG-119	B	7/22/21	5:10:42	-54.5	369732.3037	4512393.933	40;45.13153N	070;32.58843W	WTG-119-B-SPI.jpg	WTG-119-B-PV.jpg
WTG-119	C	7/22/21	5:15:27	-54.5	369723.6147	4512398.987	40;45.13418N	070;32.59467W	WTG-119-C-SPI.jpg	WTG-119-C-PV.jpg
WTG-108	A	7/22/21	7:00:34	-51.5	373429.1988	4514244.760	40;46.16622N	070;29.98420W	WTG-108-A-SPI.jpg	WTG-108-A-PV.jpg
WTG-108	B	7/22/21	7:05:37	-51.2	373441.9814	4514242.681	40;46.16521N	070;29.97509W	WTG-108-B-SPI.jpg	WTG-108-B-PV.jpg
WTG-108	C	7/22/21	7:10:18	-51.5	373444.7611	4514250.451	40;46.16944N	070;29.97321W	WTG-108-C-SPI.jpg	WTG-108-C-PV.jpg
WTG-088	A	7/22/21	8:43:20	-50.2	377140.4132	4517951.769	40;48.20304N	070;27.39033W	WTG-088-A-SPI.jpg	WTG-088-A-PV.jpg
WTG-088	B	7/22/21	8:48:17	-50.4	377129.3551	4517957.136	40;48.20585N	070;27.39826W	WTG-088-B-SPI.jpg	WTG-088-B-PV.jpg
WTG-088	C	7/22/21	8:53:35	-50.3	377138.7576	4517967.988	40;48.21179N	070;27.39170W	WTG-088-C-SPI.jpg	WTG-088-C-PV.jpg
WTG-072	A	7/22/21	10:24:35	-51.8	375299.0833	4521661.693	40;50.19098N	070;28.74419W	WTG-072-A-SPI.jpg	WTG-072-A-PV.jpg
WTG-072	B	7/22/21	10:29:14	-51.7	375288.9249	4521652.753	40;50.18605N	070;28.75131W	WTG-072-B-SPI.jpg	WTG-072-B-PV.jpg
WTG-072	C	7/22/21	10:33:11	-51.7	375278.0341	4521658.962	40;50.18931N	070;28.75913W	WTG-072-C-SPI.jpg	WTG-072-C-PV.jpg
WTG-071	A	7/22/21	12:01:49	-50.2	377138.5234	4521673.865	40;50.21421N	070;27.43569W	WTG-071-A-SPI.jpg	WTG-071-A-PV.jpg
WTG-071	B	7/22/21	12:06:51	-50.0	377147.5107	4521672.038	40;50.21330N	070;27.42927W	WTG-071-B-SPI.jpg	WTG-071-B-PV.jpg
WTG-071	C	7/22/21	12:12:15	-50.1	377127.8711	4521670.234	40;50.21215N	070;27.44322W	WTG-071-C-SPI.jpg	WTG-071-C-PV.jpg
WTG-059	A	7/22/21	13:54:43	-49.2	378992.2724	4523503.909	40;51.21959N	070;26.13819W	WTG-059-A-SPI.jpg	WTG-059-A-PV.jpg
WTG-059	B	7/22/21	13:59:07	-49.1	379001.9167	4523509.223	40;51.22255N	070;26.13139W	WTG-059-B-SPI.jpg	WTG-059-B-PV.jpg
WTG-059	C	7/22/21	14:03:53	-49.1	378999.3152	4523521.053	40;51.22892N	070;26.13337W	WTG-059-C-SPI.jpg	WTG-059-C-PV.jpg
WTG-059	D	7/22/21	14:31:20	-49.3	378980.6916	4523503.007	40;51.21900N	070;26.14642W	WTG-059-D-SPI.jpg	WTG-059-D-PV.jpg
WTG-059	E	7/22/21	14:35:30	-49.2	378975.0683	4523513.850	40;51.22481N	070;26.15055W	WTG-059-E-SPI.jpg	WTG-059-E-PV.jpg
WTG-059	F	7/22/21	14:40:03	-49.3	378979.1817	4523523.128	40;51.22986N	070;26.14773W	WTG-059-F-SPI.jpg	WTG-059-F-PV.jpg
WTG-061	A	7/22/21	16:17:41	-48.2	382696.2273	4523506.373	40;51.25323N	070;23.50234W	WTG-061-A-SPI.jpg	WTG-061-A-PV.jpg
WTG-061	B	7/22/21	16:21:45	-48.1	382702.7112	4523513.281	40;51.25702N	070;23.49781W	WTG-061-B-SPI.jpg	WTG-061-B-PV.jpg
WTG-061	C	7/22/21	16:25:24	-48.2	382701.0922	4523523.062	40;51.26229N	070;23.49907W	WTG-061-C-SPI.jpg	WTG-061-C-PV.jpg
WTG-051	A	7/22/21	17:43:37	-47.9	380843.4413	4525381.588	40;52.25045N	070;24.84242W	WTG-051-A-SPI.jpg	WTG-051-A-PV.jpg
WTG-051	B	7/22/21	17:48:17	-47.9	380833.9952	4525377.636	40;52.24824N	070;24.84909W	WTG-051-B-SPI.jpg	WTG-051-B-PV.jpg
WTG-051	C	7/22/21	17:53:23	-47.9	380832.3397	4525367.686	40;52.24284N	070;24.85016W	WTG-051-C-SPI.jpg	WTG-051-C-PV.jpg
WTG-042	A	7/22/21	19:32:51	-44.7	382696.5312	4527232.381	40;53.26657N	070;23.54430W	WTG-042-A-SPI.jpg	WTG-042-A-PV.jpg
WTG-042	B	7/22/21	19:37:16	-44.7	382688.5136	4527226.128	40;53.26312N	070;23.54994W	WTG-042-B-SPI.jpg	WTG-042-B-PV.jpg
WTG-042	C	7/22/21	19:42:13	-44.6	382685.0051	4527216.786	40;53.25804N	070;23.55233W	WTG-042-C-SPI.jpg	WTG-042-C-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-036	A	7/22/21	21:28:11	-41.5	388246.9012	4529081.348	40;54.31227N	070;19.61229W	WTG-036-A-SPI.jpg	WTG-036-A-PV.jpg
WTG-036	B	7/22/21	21:33:14	-41.5	388239.1352	4529074.366	40;54.30843N	070;19.61775W	WTG-036-B-SPI.jpg	WTG-036-B-PV.jpg
WTG-036	C	7/22/21	21:38:00	-41.6	388241.2595	4529064.554	40;54.30314N	070;19.61613W	WTG-036-C-SPI.jpg	WTG-036-C-PV.jpg
WTG-017	A	7/22/21	23:26:50	-41.8	382708.0445	4532781.247	40;56.26496N	070;23.59904W	WTG-017-A-SPI.jpg	WTG-017-A-PV.jpg
WTG-017	B	7/22/21	23:31:52	-41.6	382707.8708	4532771.372	40;56.25962N	070;23.59905W	WTG-017-B-SPI.jpg	WTG-017-B-PV.jpg
WTG-017	C	7/22/21	23:36:56	-41.8	382702.0253	4532763.434	40;56.25528N	070;23.60312W	WTG-017-C-SPI.jpg	WTG-017-C-PV.jpg
WTG-004	A	7/23/21	1:21:26	-38.0	382677.5883	4538330.286	40;59.26305N	070;23.68385W	WTG-004-A-SPI.jpg	WTG-004-A-PV.jpg
WTG-004	B	7/23/21	1:26:32	-38.1	382683.1265	4538340.856	40;59.26881N	070;23.68002W	WTG-004-B-SPI.jpg	WTG-004-B-PV.jpg
WTG-004	C	7/23/21	1:32:07	-38.0	382692.4152	4538345.367	40;59.27132N	070;23.67345W	WTG-004-C-SPI.jpg	WTG-004-C-PV.jpg
WTG-001	A	7/23/21	2:47:32	-38.6	382692.8503	4540193.341	41;00.26985N	070;23.69419W	WTG-001-A-SPI.jpg	WTG-001-A-PV.jpg
WTG-001	B	7/23/21	2:53:28	-38.7	382704.6416	4540184.590	41;00.26523N	070;23.68568W	WTG-001-B-SPI.jpg	WTG-001-B-PV.jpg
WTG-001	C	7/23/21	2:59:07	-38.5	382695.9905	4540174.214	41;00.25954N	070;23.69173W	WTG-001-C-SPI.jpg	WTG-001-C-PV.jpg
WTG-006	A	7/23/21	4:39:57	-41.1	378987.6811	4536490.174	40;58.23645N	070;26.29341W	WTG-006-A-SPI.jpg	WTG-006-A-PV.jpg
WTG-006	B	7/23/21	4:45:41	-41.2	378980.8347	4536477.716	40;58.22966N	070;26.29814W	WTG-006-B-SPI.jpg	WTG-006-B-PV.jpg
WTG-006	C	7/23/21	4:52:10	-41.3	378992.2778	4536468.036	40;58.22453N	070;26.28987W	WTG-006-C-SPI.jpg	WTG-006-C-PV.jpg
WTG-015	A	7/23/21	6:41:21	-43.5	378990.1470	4532787.894	40;56.23602N	070;26.24824W	WTG-015-A-SPI.jpg	WTG-015-A-PV.jpg
WTG-015	B	7/23/21	6:46:47	-43.6	378981.1009	4532776.147	40;56.22960N	070;26.25455W	WTG-015-B-SPI.jpg	WTG-015-B-PV.jpg
WTG-015	C	7/23/21	6:52:32	-43.6	378989.6784	4532766.129	40;56.22426N	070;26.24832W	WTG-015-C-SPI.jpg	WTG-015-C-PV.jpg
WTG-032	A	7/23/21	8:16:06	-45.3	380843.3488	4529084.054	40;54.25104N	070;24.88509W	WTG-032-A-SPI.jpg	WTG-032-A-PV.jpg
WTG-032	B	7/23/21	8:21:34	-45.1	380852.1277	4529071.307	40;54.24423N	070;24.87869W	WTG-032-B-SPI.jpg	WTG-032-B-PV.jpg
WTG-032	C	7/23/21	8:26:23	-45.1	380845.3890	4529060.575	40;54.23837N	070;24.88336W	WTG-032-C-SPI.jpg	WTG-032-C-PV.jpg
WTG-045	A	7/23/21	10:41:56	-48.4	377137.0687	4527233.287	40;53.21813N	070;27.50260W	WTG-045-A-SPI.jpg	WTG-045-A-PV.jpg
WTG-045	B	7/23/21	10:47:16	-48.3	377130.9885	4527219.234	40;53.21048N	070;27.50676W	WTG-045-B-SPI.jpg	WTG-045-B-PV.jpg
WTG-045	C	7/23/21	10:52:28	-48.3	377141.1659	4527209.464	40;53.20530N	070;27.49940W	WTG-045-C-SPI.jpg	WTG-045-C-PV.jpg
WTG-037	A	7/23/21	12:29:13	-45.6	377150.0511	4529069.485	40;54.21040N	070;27.51515W	WTG-037-A-SPI.jpg	WTG-037-A-PV.jpg
WTG-037	B	7/23/21	12:33:35	-45.7	377146.0260	4529078.294	40;54.21512N	070;27.51812W	WTG-037-B-SPI.jpg	WTG-037-B-PV.jpg
WTG-037	C	7/23/21	12:40:33	-45.5	377136.4663	4529078.745	40;54.21528N	070;27.52494W	WTG-037-C-SPI.jpg	WTG-037-C-PV.jpg
WTG-029	A	7/23/21	14:19:34	-45.7	375294.1286	4530912.860	40;55.18957N	070;28.85907W	WTG-029-A-SPI.jpg	WTG-029-A-PV.jpg
WTG-029	B	7/23/21	14:24:18	-45.7	375300.4946	4530921.352	40;55.19421N	070;28.85464W	WTG-029-B-SPI.jpg	WTG-029-B-PV.jpg
WTG-029	C	7/23/21	14:28:31	-45.7	375297.5888	4530930.758	40;55.19927N	070;28.85682W	WTG-029-C-SPI.jpg	WTG-029-C-PV.jpg
WTG-039	A	7/23/21	16:01:25	-48.1	373441.3497	4529078.696	40;54.18146N	070;30.15639W	WTG-039-A-SPI.jpg	WTG-039-A-PV.jpg
WTG-039	B	7/23/21	16:06:21	-48.3	373431.7921	4529082.266	40;54.18330N	070;30.16324W	WTG-039-B-SPI.jpg	WTG-039-B-PV.jpg
WTG-039	C	7/23/21	16:10:44	-48.2	373424.8803	4529075.463	40;54.17956N	070;30.16808W	WTG-039-C-SPI.jpg	WTG-039-C-PV.jpg
WTG-056	A	7/23/21	17:45:02	-51.6	373440.4190	4525377.976	40;52.18188N	070;30.11183W	WTG-056-A-SPI.jpg	WTG-056-A-PV.jpg
WTG-056	B	7/23/21	17:49:07	-51.6	373431.1306	4525375.230	40;52.18031N	070;30.11841W	WTG-056-B-SPI.jpg	WTG-056-B-PV.jpg
WTG-056	C	7/23/21	17:54:04	-51.6	373426.4435	4525366.267	40;52.17543N	070;30.12163W	WTG-056-C-SPI.jpg	WTG-056-C-PV.jpg
WTG-065	A	7/23/21	19:37:02	-53.0	371569.4129	4523527.702	40;51.16468N	070;31.42064W	WTG-065-A-SPI.jpg	WTG-065-A-PV.jpg
WTG-065	B	7/23/21	19:42:10	-53.0	371568.5639	4523517.945	40;51.15940N	070;31.42113W	WTG-065-B-SPI.jpg	WTG-065-B-PV.jpg
WTG-065	C	7/23/21	19:46:52	-53.0	371569.3595	4523507.764	40;51.15391N	070;31.42043W	WTG-065-C-SPI.jpg	WTG-065-C-PV.jpg
WTG-075	A	7/23/21	21:05:36	-51.8	369743.7195	4521663.644	40;50.14022N	070;32.69638W	WTG-075-A-SPI.jpg	WTG-075-A-PV.jpg
WTG-075	B	7/23/21	21:10:38	-51.7	369740.3622	4521654.474	40;50.13523N	070;32.69865W	WTG-075-B-SPI.jpg	WTG-075-B-PV.jpg
WTG-075	C	7/23/21	21:15:15	-51.5	369731.3102	4521650.874	40;50.13320N	070;32.70505W	WTG-075-C-SPI.jpg	WTG-075-C-PV.jpg
WTG-092	A	7/23/21	22:46:42	-51.6	369719.0568	4517950.055	40;48.13348N	070;32.66736W	WTG-092-A-SPI.jpg	WTG-092-A-PV.jpg
WTG-092	B	7/23/21	22:52:24	-51.7	369728.2096	4517945.555	40;48.13114N	070;32.66080W	WTG-092-B-SPI.jpg	WTG-092-B-PV.jpg
WTG-092	C	7/23/21	22:58:07	-51.6	369737.3047	4517948.508	40;48.13282N	070;32.65437W	WTG-092-C-SPI.jpg	WTG-092-C-PV.jpg
WTG-103	A	7/24/21	0:37:30	-53.0	366030.7701	4516119.294	40;47.10870N	070;35.26628W	WTG-103-A-SPI.jpg	WTG-103-A-PV.jpg
WTG-103	B	7/24/21	0:43:48	-53.0	366039.9633	4516110.266	40;47.10391N	070;35.25963W	WTG-103-B-SPI.jpg	WTG-103-B-PV.jpg
WTG-103	C	7/24/21	0:49:26	-52.9	366036.9504	4516098.653	40;47.09761N	070;35.26162W	WTG-103-C-SPI.jpg	WTG-103-C-PV.jpg
WTG-094	A	7/24/21	2:24:17	-51.9	366013.4698	4517963.142	40;48.10477N	070;35.30232W	WTG-094-A-SPI.jpg	WTG-094-A-PV.jpg
WTG-094	B	7/24/21	2:30:09	-51.9	366015.8314	4517950.912	40;48.09819N	070;35.30049W	WTG-094-B-SPI.jpg	WTG-094-B-PV.jpg
WTG-094	C	7/24/21	2:35:47	-51.9	366026.5152	4517945.547	40;48.09539N	070;35.29282W	WTG-094-C-SPI.jpg	WTG-094-C-PV.jpg
WTG-086	A	7/24/21	3:58:48	-52.0	364188.1998	4519810.350	40;49.08483N	070;36.62425W	WTG-086-A-SPI.jpg	WTG-086-A-PV.jpg
WTG-086	B	7/24/21	4:05:16	-51.9	364184.0995	4519800.702	40;49.07957N	070;36.62704W	WTG-086-B-SPI.jpg	WTG-086-B-PV.jpg
WTG-086	C	7/24/21	4:11:06	-51.9	364171.4844	4519798.361	40;49.07818N	070;36.63598W	WTG-086-C-SPI.jpg	WTG-086-C-PV.jpg
WTG-105	A	7/24/21	5:58:38	-55.3	362310.0697	4516117.420	40;47.07078N	070;37.91106W	WTG-105-A-SPI.jpg	WTG-105-A-PV.jpg
WTG-105	B	7/24/21	6:04:08	-55.3	362309.0602	4516107.607	40;47.06547N	070;37.91165W	WTG-105-B-SPI.jpg	WTG-105-B-PV.jpg
WTG-105	C	7/24/21	6:10:08	-55.3	362312.4913	4516097.867	40;47.06024N	070;37.90908W	WTG-105-C-SPI.jpg	WTG-105-C-PV.jpg
WTG-115	A	7/24/21	8:11:07	-56.8	360477.4213	4514241.733	40;46.03882N	070;39.18861W	WTG-115-A-SPI.jpg	WTG-115-A-PV.jpg
WTG-115	B	7/24/21	8:15:04	-56.9	360467.5806	4514241.914	40;46.03882N	070;39.19560W	WTG-115-B-SPI.jpg	WTG-115-B-PV.jpg
WTG-115	C	7/24/21	8:19:10	-57.0	360458.8347	4514247.089	40;46.04152N	070;39.20189W	WTG-115-C-SPI.jpg	WTG-115-C-PV.jpg
WTG-126	A	7/24/21	9:48:02	-58.8	356780.9819	4512396.213	40;45.00359N	070;41.79002W	WTG-126-A-SPI.jpg	WTG-126-A-PV.jpg
WTG-126	B	7/24/21	9:53:00	-58.9	356776.3274	4512386.997	40;44.99856N	070;41.79320W	WTG-126-B-SPI.jpg	WTG-126-B-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-126	C	7/24/21	9:57:06	-58.9	356766.4187	4512385.422	40;44.99761N	070;41.80021W	WTG-126-C-SPI.jpg	WTG-126-C-PV.jpg
WTG-142	A	7/24/21	11:20:44	-59.3	356773.0527	4508686.512	40;42.99922N	070;41.74474W	WTG-142-A-SPI.jpg	WTG-142-A-PV.jpg
WTG-142	B	7/24/21	11:24:29	-59.2	356761.4773	4508685.903	40;42.99877N	070;41.75295W	WTG-142-B-SPI.jpg	WTG-142-B-PV.jpg
WTG-142	C	7/24/21	11:27:35	-59.2	356754.9573	4508691.275	40;43.00160N	070;41.75765W	WTG-142-C-SPI.jpg	WTG-142-C-PV.jpg
WTG-142	D	7/24/21	12:40:56	-58.9	356760.7519	4508713.244	40;43.01353N	070;41.75384W	WTG-142-D-SPI.jpg	WTG-142-D-PV.jpg
WTG-142	E	7/24/21	12:45:47	-58.9	356769.5055	4508712.931	40;43.01346N	070;41.74762W	WTG-142-E-SPI.jpg	WTG-142-E-PV.jpg
WTG-142	F	7/24/21	12:50:13	-58.9	356777.6666	4508707.223	40;43.01046N	070;41.74174W	WTG-142-F-SPI.jpg	WTG-142-F-PV.jpg
WTG-142	G	7/24/21	13:17:40	-58.8	356770.5729	4508681.182	40;42.99631N	070;41.74642W	WTG-142-G-SPI.jpg	WTG-142-G-PV.jpg
WTG-142	H	7/24/21	13:23:34	-58.7	356780.0672	4508689.005	40;43.00064N	070;41.73979W	WTG-142-H-SPI.jpg	WTG-142-H-PV.jpg
WTG-142	I	7/24/21	13:29:18	-58.8	356780.7681	4508698.153	40;43.00559N	070;41.73942W	WTG-142-I-SPI.jpg	WTG-142-I-PV.jpg
WTG-140	A	7/24/21	15:00:00	-57.5	360455.2983	4508696.099	40;43.04233N	070;39.13014W	WTG-140-A-SPI.jpg	WTG-140-A-PV.jpg
WTG-140	B	7/24/21	15:04:18	-57.4	360461.1622	4508689.672	40;43.03891N	070;39.12589W	WTG-140-B-SPI.jpg	WTG-140-B-PV.jpg
WTG-140	C	7/24/21	15:08:00	-57.6	360470.0694	4508685.074	40;43.03652N	070;39.11950W	WTG-140-C-SPI.jpg	WTG-140-C-PV.jpg
WTG-146	A	7/24/21	16:36:20	-58.0	360455.7923	4506841.393	40;42.04024N	070;39.10502W	WTG-146-A-SPI.jpg	WTG-146-A-PV.jpg
WTG-146	B	7/24/21	16:41:55	-58.3	360461.2042	4506832.185	40;42.03532N	070;39.10105W	WTG-146-B-SPI.jpg	WTG-146-B-PV.jpg
WTG-146	C	7/24/21	16:45:34	-57.9	360470.5212	4506831.303	40;42.03494N	070;39.09443W	WTG-146-C-SPI.jpg	WTG-146-C-PV.jpg
WTG-152	A	7/24/21	18:50:39	-60.0	358602.4960	4504985.206	40;41.01840N	070;40.39561W	WTG-152-A-SPI.jpg	WTG-152-A-PV.jpg
WTG-152	B	7/24/21	18:55:41	-59.9	358612.8523	4504982.839	40;41.01723N	070;40.38823W	WTG-152-B-SPI.jpg	WTG-152-B-PV.jpg
WTG-152	C	7/24/21	19:00:41	-59.9	358622.5274	4504983.179	40;41.01751N	070;40.38137W	WTG-152-C-SPI.jpg	WTG-152-C-PV.jpg
WTG-150	A	7/24/21	20:32:26	-59.0	362314.6458	4505003.492	40;41.06598N	070;37.76116W	WTG-150-A-SPI.jpg	WTG-150-A-PV.jpg
WTG-150	B	7/24/21	20:39:00	-59.0	362324.3920	4505004.142	40;41.06642N	070;37.75425W	WTG-150-B-SPI.jpg	WTG-150-B-PV.jpg
WTG-150	C	7/24/21	20:43:53	-59.0	362332.6689	4504998.920	40;41.06369N	070;37.74831W	WTG-150-C-SPI.jpg	WTG-150-C-PV.jpg
WTG-149	A	7/24/21	21:58:58	-58.4	364161.7628	4504991.190	40;41.07771N	070;36.44998W	WTG-149-A-SPI.jpg	WTG-149-A-PV.jpg
WTG-149	B	7/24/21	22:03:22	-58.4	364168.4477	4504984.621	40;41.07423N	070;36.44515W	WTG-149-B-SPI.jpg	WTG-149-B-PV.jpg
WTG-149	C	7/24/21	22:09:38	-58.4	364178.7487	4504983.526	40;41.07374N	070;36.43783W	WTG-149-C-SPI.jpg	WTG-149-C-PV.jpg
WTG-154	A	7/24/21	23:24:08	-58.9	362329.8365	4503152.115	40;40.06582N	070;37.72603W	WTG-154-A-SPI.jpg	WTG-154-A-PV.jpg
WTG-154	B	7/24/21	23:29:20	-59.0	362336.4858	4503143.783	40;40.06138N	070;37.72120W	WTG-154-B-SPI.jpg	WTG-154-B-PV.jpg
WTG-154	C	7/24/21	23:34:36	-58.9	362331.8353	4503135.423	40;40.05682N	070;37.72439W	WTG-154-C-SPI.jpg	WTG-154-C-PV.jpg
WTG-151	A	7/25/21	1:03:58	-58.6	360468.6606	4504982.831	40;41.03619N	070;39.07108W	WTG-151-A-SPI.jpg	WTG-151-A-PV.jpg
WTG-151	B	7/25/21	1:09:09	-58.6	360459.0129	4504987.936	40;41.03885N	070;39.07800W	WTG-151-B-SPI.jpg	WTG-151-B-PV.jpg
WTG-151	C	7/25/21	1:15:14	-58.6	360457.5473	4504998.749	40;41.04468N	070;39.07918W	WTG-151-C-SPI.jpg	WTG-151-C-PV.jpg
WTG-156	A	7/25/21	2:47:19	-59.1	358616.1909	4503128.349	40;40.01529N	070;40.36081W	WTG-156-A-SPI.jpg	WTG-156-A-PV.jpg
WTG-156	B	7/25/21	2:52:30	-59.1	358606.7032	4503134.037	40;40.01827N	070;40.36762W	WTG-156-B-SPI.jpg	WTG-156-B-PV.jpg
WTG-156	C	7/25/21	2:57:46	-58.8	358605.0006	4503143.393	40;40.02331N	070;40.36895W	WTG-156-C-SPI.jpg	WTG-156-C-PV.jpg
WTG-153	A	7/25/21	4:25:41	-59.8	356780.3006	4504993.658	40;41.00410N	070;41.68899W	WTG-153-A-SPI.jpg	WTG-153-A-PV.jpg
WTG-153	B	7/25/21	4:30:55	-59.9	356776.8338	4504985.425	40;40.99962N	070;41.69134W	WTG-153-B-SPI.jpg	WTG-153-B-PV.jpg
WTG-153	C	7/25/21	4:36:35	-59.8	356767.5698	4504980.849	40;40.99705N	070;41.69785W	WTG-153-C-SPI.jpg	WTG-153-C-PV.jpg
WTG-147	A	7/25/21	6:36:25	-59.2	358614.3654	4506832.395	40;42.01655N	070;40.41216W	WTG-147-A-SPI.jpg	WTG-147-A-PV.jpg
WTG-147	B	7/25/21	6:41:36	-59.2	358623.6255	4506836.706	40;42.01897N	070;40.40564W	WTG-147-B-SPI.jpg	WTG-147-B-PV.jpg
WTG-147	C	7/25/21	6:45:47	-57.4	358631.6203	4506842.542	40;42.02221N	070;40.40005W	WTG-147-C-SPI.jpg	WTG-147-C-PV.jpg
WTG-141	A	7/25/21	8:04:23	-59.0	358602.4637	4508699.473	40;43.02519N	070;40.44588W	WTG-141-A-SPI.jpg	WTG-141-A-PV.jpg
WTG-141	B	7/25/21	8:09:09	-59.0	358606.2749	4508707.984	40;43.02983N	070;40.44328W	WTG-141-B-SPI.jpg	WTG-141-B-PV.jpg
WTG-141	C	7/25/21	8:13:29	-59.0	358614.3169	4508714.920	40;43.03366N	070;40.43767W	WTG-141-C-SPI.jpg	WTG-141-C-PV.jpg
WTG-139	A	7/25/21	9:36:43	-57.8	362310.7403	4508689.660	40;43.05759N	070;37.81249W	WTG-139-A-SPI.jpg	WTG-139-A-PV.jpg
WTG-139	B	7/25/21	9:40:12	-57.8	362307.5740	4508700.567	40;43.06345N	070;37.81488W	WTG-139-B-SPI.jpg	WTG-139-B-PV.jpg
WTG-139	C	7/25/21	9:43:36	-57.8	362312.1073	4508708.848	40;43.06797N	070;37.81177W	WTG-139-C-SPI.jpg	WTG-139-C-PV.jpg
WTG-145	A	7/25/21	11:12:07	-57.8	362334.8791	4506842.358	40;42.05973N	070;37.77101W	WTG-145-A-SPI.jpg	WTG-145-A-PV.jpg
WTG-145	B	7/25/21	11:16:11	-57.7	362335.9862	4506853.527	40;42.06577N	070;37.77037W	WTG-145-B-SPI.jpg	WTG-145-B-PV.jpg
WTG-145	C	7/25/21	11:20:29	-57.7	362329.2675	4506860.117	40;42.06926N	070;37.77523W	WTG-145-C-SPI.jpg	WTG-145-C-PV.jpg
WTG-144	A	7/25/21	13:13:42	-56.6	364184.4992	4506842.589	40;42.07827N	070;36.45789W	WTG-144-A-SPI.jpg	WTG-144-A-PV.jpg
WTG-144	B	7/25/21	13:18:04	-56.6	364176.2057	4506836.763	40;42.07504N	070;36.46370W	WTG-144-B-SPI.jpg	WTG-144-B-PV.jpg
WTG-144	C	7/25/21	13:22:24	-56.5	364166.7316	4506837.321	40;42.07524N	070;36.47044W	WTG-144-C-SPI.jpg	WTG-144-C-PV.jpg
WTG-138	A	7/25/21	14:48:30	-56.1	364189.3028	4508692.375	40;43.07777N	070;36.47853W	WTG-138-A-SPI.jpg	WTG-138-A-PV.jpg
WTG-138	B	7/25/21	14:52:47	-55.9	364179.0590	4508687.259	40;43.07490N	070;36.48573W	WTG-138-B-SPI.jpg	WTG-138-B-PV.jpg
WTG-138	C	7/25/21	14:57:21	-56.2	364170.3398	4508687.038	40;43.07470N	070;36.49192W	WTG-138-C-SPI.jpg	WTG-138-C-PV.jpg
WTG-136	A	7/27/21	1:36:15	-55.9	367864.1609	4508698.780	40;43.11710N	070;33.86897W	WTG-136-A-SPI.jpg	WTG-136-A-PV.jpg
WTG-136	B	7/27/21	1:42:15	-55.8	367866.0876	4508709.174	40;43.12273N	070;33.86773W	WTG-136-B-SPI.jpg	WTG-136-B-PV.jpg
WTG-136	C	7/27/21	1:50:21	-55.7	367874.7895	4508713.975	40;43.12541N	070;33.86161W	WTG-136-C-SPI.jpg	WTG-136-C-PV.jpg
WTG-129	A	7/27/21	3:09:09	-54.8	367866.9375	4510541.884	40;44.11299N	070;33.89032W	WTG-129-A-SPI.jpg	WTG-129-A-PV.jpg
WTG-129	B	7/27/21	3:14:56	-54.8	367863.2682	4510550.767	40;44.11775N	070;33.89304W	WTG-129-B-SPI.jpg	WTG-129-B-PV.jpg
WTG-129	C	7/27/21	3:21:28	-54.8	367865.0972	4510561.493	40;44.12356N	070;33.89188W	WTG-129-C-SPI.jpg	WTG-129-C-PV.jpg
WTG-120	A	7/27/21	4:54:24	-54.4	367866.9586	4512392.034	40;45.11265N	070;33.91375W	WTG-120-A-SPI.jpg	WTG-120-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-120	B	7/27/21	4:59:21	-54.4	367864.1640	4512401.586	40;45.11779N	070;33.91585W	WTG-120-B-SPI.jpg	WTG-120-B-PV.jpg
WTG-120	C	7/27/21	5:04:21	-54.3	367866.5347	4512411.667	40;45.12326N	070;33.91430W	WTG-120-C-SPI.jpg	WTG-120-C-PV.jpg
WTG-121	A	7/27/21	6:40:39	-55.1	366040.9887	4512397.014	40;45.09762N	070;35.21115W	WTG-121-A-SPI.jpg	WTG-121-A-PV.jpg
WTG-121	B	7/27/21	6:45:09	-55.1	366034.0887	4512390.779	40;45.09419N	070;35.21597W	WTG-121-B-SPI.jpg	WTG-121-B-PV.jpg
WTG-121	C	7/27/21	6:56:15	-55.1	366025.6508	4512386.929	40;45.09202N	070;35.22192W	WTG-121-C-SPI.jpg	WTG-121-C-PV.jpg
WTG-130	A	7/27/21	8:12:07	-55.8	366040.7942	4510551.739	40;44.10060N	070;35.18759W	WTG-130-A-SPI.jpg	WTG-130-A-PV.jpg
WTG-130	B	7/27/21	8:16:27	-55.9	366039.6605	4510542.674	40;44.09569N	070;35.18828W	WTG-130-B-SPI.jpg	WTG-130-B-PV.jpg
WTG-130	C	7/27/21	8:20:27	-55.9	366031.4156	4510537.326	40;44.09272N	070;35.19407W	WTG-130-C-SPI.jpg	WTG-130-C-PV.jpg
WTG-132	A	7/27/21	10:00:01	-57.2	362336.9247	4510553.275	40;44.06476N	070;37.81847W	WTG-132-A-SPI.jpg	WTG-132-A-PV.jpg
WTG-132	B	7/27/21	10:04:49	-57.3	362333.7866	4510544.005	40;44.05972N	070;37.82058W	WTG-132-B-SPI.jpg	WTG-132-B-PV.jpg
WTG-132	C	7/27/21	10:10:37	-57.2	362326.6310	4510536.651	40;44.05567N	070;37.82557W	WTG-132-C-SPI.jpg	WTG-132-C-PV.jpg
WTG-133	A	7/27/21	11:33:51	-58.0	360485.2810	4510545.912	40;44.04208N	070;39.13357W	WTG-133-A-SPI.jpg	WTG-133-A-PV.jpg
WTG-133	B	7/27/21	11:38:21	-58.0	360478.2530	4510538.045	40;44.03775N	070;39.13846W	WTG-133-B-SPI.jpg	WTG-133-B-PV.jpg
WTG-133	C	7/27/21	11:43:26	-58.1	360469.2058	4510538.427	40;44.03787N	070;39.14489W	WTG-133-C-SPI.jpg	WTG-133-C-PV.jpg
WTG-124	A	7/27/21	13:13:42	-57.6	360471.3139	4512389.005	40;45.03774N	070;39.16814W	WTG-124-A-SPI.jpg	WTG-124-A-PV.jpg
WTG-124	B	7/27/21	13:18:00	-57.6	360479.1399	4512393.078	40;45.04002N	070;39.16264W	WTG-124-B-SPI.jpg	WTG-124-B-PV.jpg
WTG-124	C	7/27/21	13:22:43	-57.6	360484.3558	4512402.137	40;45.04497N	070;39.15905W	WTG-124-C-SPI.jpg	WTG-124-C-PV.jpg
WTG-125	A	7/27/21	14:59:08	-57.8	358603.4306	4512407.916	40;45.02883N	070;40.49544W	WTG-125-A-SPI.jpg	WTG-125-A-PV.jpg
WTG-125	B	7/27/21	15:03:56	-58.1	358610.0421	4512415.076	40;45.03276N	070;40.49084W	WTG-125-B-SPI.jpg	WTG-125-B-PV.jpg
WTG-125	C	7/27/21	15:09:08	-57.9	358620.3984	4512416.538	40;45.03366N	070;40.48350W	WTG-125-C-SPI.jpg	WTG-125-C-PV.jpg
WTG-135	A	7/27/21	16:28:23	-58.2	356750.5506	4510562.265	40;44.01242N	070;41.78645W	WTG-135-A-SPI.jpg	WTG-135-A-PV.jpg
WTG-135	B	7/27/21	16:32:48	-58.3	356751.6475	4510552.403	40;44.00711N	070;41.78554W	WTG-135-B-SPI.jpg	WTG-135-B-PV.jpg
WTG-135	C	7/27/21	16:37:22	-58.2	356755.5241	4510543.180	40;44.00216N	070;41.78266W	WTG-135-C-SPI.jpg	WTG-135-C-PV.jpg
WTG-148	A	7/27/21	18:26:42	-59.5	356836.9701	4506672.244	40;41.91161N	070;41.67175W	WTG-148-A-SPI.jpg	WTG-148-A-PV.jpg
WTG-148	B	7/27/21	18:33:36	-59.5	356828.3126	4506667.600	40;41.90901N	070;41.67783W	WTG-148-B-SPI.jpg	WTG-148-B-PV.jpg
WTG-148	C	7/27/21	18:40:40	-59.6	356828.1290	4506657.270	40;41.90343N	070;41.67782W	WTG-148-C-SPI.jpg	WTG-148-C-PV.jpg
WTG-127	A	7/27/21	20:31:36	-59.2	354906.7125	4512417.205	40;44.99522N	070;43.12184W	WTG-127-A-SPI.jpg	WTG-127-A-PV.jpg
WTG-127	B	7/27/21	20:36:12	-59.4	354901.5843	4512409.151	40;44.99082N	070;43.12537W	WTG-127-B-SPI.jpg	WTG-127-B-PV.jpg
WTG-127	C	7/27/21	20:41:49	-59.4	354900.6157	4512400.423	40;44.98609N	070;43.12594W	WTG-127-C-SPI.jpg	WTG-127-C-PV.jpg
WTG-117	A	7/27/21	22:29:41	-58.5	356777.2250	4514246.656	40;46.00330N	070;41.81811W	WTG-117-A-SPI.jpg	WTG-117-A-PV.jpg
WTG-117	B	7/27/21	22:35:26	-58.6	356769.2135	4514241.585	40;46.00048N	070;41.82374W	WTG-117-B-SPI.jpg	WTG-117-B-PV.jpg
WTG-117	C	7/27/21	22:42:23	-58.6	356759.1375	4514243.115	40;46.00120N	070;41.83092W	WTG-117-C-SPI.jpg	WTG-117-C-PV.jpg
WTG-117	D	7/27/21	23:03:31	-58.3	356776.5561	4514266.959	40;46.01427N	070;41.81887W	WTG-117-D-SPI.jpg	WTG-117-D-PV.jpg
WTG-117	E	7/27/21	23:08:58	-57.5	356767.4362	4514269.815	40;46.01571N	070;41.82539W	WTG-117-E-SPI.jpg	WTG-117-E-PV.jpg
WTG-117	F	7/27/21	23:16:07	-57.0	356757.8866	4514265.899	40;46.01350N	070;41.83212W	WTG-117-F-SPI.jpg	WTG-117-F-PV.jpg
WTG-117	G	7/28/21	0:06:51	-58.4	356754.3393	4514257.120	40;46.00872N	070;41.83452W	WTG-117-G-SPI.jpg	WTG-117-G-PV.jpg
WTG-117	H	7/28/21	0:12:40	-58.5	356752.9375	4514246.815	40;46.00314N	070;41.83537W	WTG-117-H-SPI.jpg	WTG-117-H-PV.jpg
WTG-117	I	7/28/21	0:20:45	-58.5	356760.7241	4514273.799	40;46.01780N	070;41.83021W	WTG-117-I-SPI.jpg	WTG-117-I-PV.jpg
WTG-116	A	7/28/21	3:25:46	-57.1	358626.8070	4514265.308	40;46.03259N	070;40.50402W	WTG-116-A-SPI.jpg	WTG-116-A-PV.jpg
WTG-116	B	7/28/21	3:31:46	-57.2	358632.9364	4514257.863	40;46.02863N	070;40.49957W	WTG-116-B-SPI.jpg	WTG-116-B-PV.jpg
WTG-116	C	7/28/21	3:35:57	-57.1	358629.9356	4514248.107	40;46.02333N	070;40.50157W	WTG-116-C-SPI.jpg	WTG-116-C-PV.jpg
WTG-116	D	7/28/21	4:15:55	-56.8	358620.8951	4514244.183	40;46.02111N	070;40.50794W	WTG-116-D-SPI.jpg	WTG-116-D-PV.jpg
WTG-116	E	7/28/21	4:21:53	-55.2	358611.0444	4514245.645	40;46.02180N	070;40.51496W	WTG-116-E-SPI.jpg	WTG-116-E-PV.jpg
WTG-106	A	7/28/21	6:08:53	-55.3	360465.3123	4516119.632	40;47.05331N	070;39.22237W	WTG-106-A-SPI.jpg	WTG-106-A-PV.jpg
WTG-106	B	7/28/21	6:13:43	-55.5	360456.7155	4516113.692	40;47.05001N	070;39.22841W	WTG-106-B-SPI.jpg	WTG-106-B-PV.jpg
WTG-106	C	7/28/21	6:18:23	-55.6	360456.0029	4516104.423	40;47.04499N	070;39.22879W	WTG-106-C-SPI.jpg	WTG-106-C-PV.jpg
WTG-096	A	7/28/21	8:29:24	-53.8	362318.1831	4517945.491	40;48.05856N	070;37.92948W	WTG-096-A-SPI.jpg	WTG-096-A-PV.jpg
WTG-096	B	7/28/21	8:33:29	-53.8	362311.8941	4517952.767	40;48.06243N	070;37.93405W	WTG-096-B-SPI.jpg	WTG-096-B-PV.jpg
WTG-096	C	7/28/21	8:38:12	-53.9	362310.8847	4517964.185	40;48.06859N	070;37.93492W	WTG-096-C-SPI.jpg	WTG-096-C-PV.jpg
WTG-114	A	7/28/21	10:14:37	-56.4	362333.6526	4514261.770	40;46.06842N	070;37.86976W	WTG-114-A-SPI.jpg	WTG-114-A-PV.jpg
WTG-114	B	7/28/21	10:18:52	-56.4	362326.0750	4514268.531	40;46.07200N	070;37.87524W	WTG-114-B-SPI.jpg	WTG-114-B-PV.jpg
WTG-114	C	7/28/21	10:23:39	-56.3	362313.8900	4514261.370	40;46.06801N	070;37.88380W	WTG-114-C-SPI.jpg	WTG-114-C-PV.jpg
WTG-113	A	7/28/21	11:47:53	-55.8	364186.0579	4514249.364	40;46.08020N	070;36.55319W	WTG-113-A-SPI.jpg	WTG-113-A-PV.jpg
WTG-113	B	7/28/21	11:52:13	-55.8	364187.5245	4514259.215	40;46.08554N	070;36.55227W	WTG-113-B-SPI.jpg	WTG-113-B-PV.jpg
WTG-113	C	7/28/21	11:56:39	-55.8	364181.5383	4514267.162	40;46.08978N	070;36.55663W	WTG-113-C-SPI.jpg	WTG-113-C-PV.jpg
WTG-112	A	7/28/21	13:39:01	-54.5	366039.0414	4514264.530	40;46.10664N	070;35.23654W	WTG-112-A-SPI.jpg	WTG-112-A-PV.jpg
WTG-112	B	7/28/21	13:43:29	-54.4	366040.9485	4514254.835	40;46.10142N	070;35.23506W	WTG-112-B-SPI.jpg	WTG-112-B-PV.jpg
WTG-112	C	7/28/21	13:49:16	-54.4	366035.9741	4514246.139	40;46.09667N	070;35.23848W	WTG-112-C-SPI.jpg	WTG-112-C-PV.jpg
WTG-110	A	7/28/21	15:28:06	-53.1	369716.4411	4514254.520	40;46.13669N	070;32.62297W	WTG-110-A-SPI.jpg	WTG-110-A-PV.jpg
WTG-110	B	7/28/21	15:32:13	-53.2	369721.4116	4514246.454	40;46.13238N	070;32.61933W	WTG-110-B-SPI.jpg	WTG-110-B-PV.jpg
WTG-110	C	7/28/21	15:37:19	-53.1	369729.8347	4514241.888	40;46.12999N	070;32.61329W	WTG-110-C-SPI.jpg	WTG-110-C-PV.jpg
WTG-118	A	7/28/21	17:11:12	-52.6	371591.4693	4512392.920	40;45.14852N	070;31.26746W	WTG-118-A-SPI.jpg	WTG-118-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-118	B	7/28/21	17:14:38	-52.7	371595.2977	4512401.235	40;45.15305N	070;31.26484W	WTG-118-B-SPI.jpg	WTG-118-B-PV.jpg
WTG-118	C	7/28/21	17:19:55	-52.6	371593.2330	4512412.753	40;45.15925N	070;31.26645W	WTG-118-C-SPI.jpg	WTG-118-C-PV.jpg
WTG-109	A	7/28/21	18:56:31	-51.8	371588.1213	4514243.947	40;46.14865N	070;31.29264W	WTG-109-A-SPI.jpg	WTG-109-A-PV.jpg
WTG-109	B	7/28/21	19:00:48	-51.8	371592.6721	4514251.938	40;46.15301N	070;31.28951W	WTG-109-B-SPI.jpg	WTG-109-B-PV.jpg
WTG-109	C	7/28/21	19:06:36	-51.8	371593.3390	4514261.915	40;46.15841N	070;31.28916W	WTG-109-C-SPI.jpg	WTG-109-C-PV.jpg
WTG-100	A	7/28/21	20:25:13	-51.2	371569.8420	4516110.626	40;47.15709N	070;31.32866W	WTG-100-A-SPI.jpg	WTG-100-A-PV.jpg
WTG-100	B	7/28/21	20:30:54	-51.4	371574.2945	4516119.249	40;47.16179N	070;31.32560W	WTG-100-B-SPI.jpg	WTG-100-B-PV.jpg
WTG-100	C	7/28/21	20:36:17	-51.3	371584.6907	4516119.723	40;47.16214N	070;31.31822W	WTG-100-C-SPI.jpg	WTG-100-C-PV.jpg
WTG-102	A	7/28/21	22:16:01	-53.4	367879.6640	4516095.182	40;47.11364N	070;33.95169W	WTG-102-A-SPI.jpg	WTG-102-A-PV.jpg
WTG-102	B	7/28/21	22:21:25	-53.4	367887.5962	4516100.330	40;47.11649N	070;33.94611W	WTG-102-B-SPI.jpg	WTG-102-B-PV.jpg
WTG-102	C	7/28/21	22:27:12	-53.3	367891.4480	4516108.756	40;47.12108N	070;33.94348W	WTG-102-C-SPI.jpg	WTG-102-C-PV.jpg
WTG-093	A	7/28/21	23:50:43	-53.0	367877.7954	4517944.782	40;48.11298N	070;33.97650W	WTG-093-A-SPI.jpg	WTG-093-A-PV.jpg
WTG-093	B	7/28/21	23:55:46	-53.1	367888.1413	4517946.327	40;48.11391N	070;33.96917W	WTG-093-B-SPI.jpg	WTG-093-B-PV.jpg
WTG-093	C	7/29/21	0:01:01	-53.1	367890.1520	4517956.991	40;48.11969N	070;33.96787W	WTG-093-C-SPI.jpg	WTG-093-C-PV.jpg
WTG-093	A	7/29/21	1:39:41	-53.0	367877.7954	4517944.782	40;48.11298N	070;33.97650W	WTG-093-A-SPI.jpg	WTG-093-A-PV.jpg
WTG-091	A	7/29/21	1:39:41	-51.5	371578.1324	4517946.345	40;48.14905N	070;31.34543W	WTG-091-A-SPI.jpg	WTG-091-A-PV.jpg
WTG-091	B	7/29/21	1:45:22	-51.5	371570.5651	4517952.674	40;48.15240N	070;31.35089W	WTG-091-B-SPI.jpg	WTG-091-B-PV.jpg
WTG-091	C	7/29/21	1:51:06	-51.4	371569.0834	4517961.832	40;48.15733N	070;31.35205W	WTG-091-C-SPI.jpg	WTG-091-C-PV.jpg
WTG-099	A	7/29/21	3:07:49	-50.6	373443.2068	4516097.358	40;47.16736N	070;29.99676W	WTG-099-A-SPI.jpg	WTG-099-A-PV.jpg
WTG-099	B	7/29/21	3:14:46	-50.5	373447.4235	4516106.026	40;47.17208N	070;29.99387W	WTG-099-B-SPI.jpg	WTG-099-B-PV.jpg
WTG-099	C	7/29/21	3:20:06	-50.5	373447.0437	4516116.439	40;47.17771N	070;29.99426W	WTG-099-C-SPI.jpg	WTG-099-C-PV.jpg
WTG-089	A	7/29/21	4:48:05	-50.0	375271.9319	4517961.257	40;48.19127N	070;28.71908W	WTG-089-A-SPI.jpg	WTG-089-A-PV.jpg
WTG-089	B	7/29/21	4:52:54	-50.1	375277.2434	4517969.516	40;48.19578N	070;28.71540W	WTG-089-B-SPI.jpg	WTG-089-B-PV.jpg
WTG-089	C	7/29/21	4:58:39	-49.8	375286.5108	4517973.483	40;48.19801N	070;28.70886W	WTG-089-C-SPI.jpg	WTG-089-C-PV.jpg
WTG-079	A	7/29/21	6:42:40	-51.1	377127.0166	4519821.810	40;49.21338N	070;27.42196W	WTG-079-A-SPI.jpg	WTG-079-A-PV.jpg
WTG-079	B	7/29/21	6:46:52	-51.0	377136.2228	4519825.963	40;49.21570N	070;27.41546W	WTG-079-B-SPI.jpg	WTG-079-B-PV.jpg
WTG-079	C	7/29/21	6:52:08	-51.0	377145.4516	4519822.459	40;49.21389N	070;27.40886W	WTG-079-C-SPI.jpg	WTG-079-C-PV.jpg
WTG-080	A	7/29/21	8:15:06	-52.2	375273.9130	4519822.642	40;49.19705N	070;28.74001W	WTG-080-A-SPI.jpg	WTG-080-A-PV.jpg
WTG-080	B	7/29/21	8:19:46	-52.1	375283.6549	4519824.688	40;49.19825N	070;28.73310W	WTG-080-B-SPI.jpg	WTG-080-B-PV.jpg
WTG-080	C	7/29/21	8:23:53	-52.2	375293.6107	4519823.852	40;49.19789N	070;28.72601W	WTG-080-C-SPI.jpg	WTG-080-C-PV.jpg
WTG-082	A	7/29/21	12:50:37	-51.2	371547.2549	4519844.628	40;49.17444N	070;31.39084W	WTG-082-A-SPI.jpg	WTG-082-A-PV.jpg
WTG-082	B	7/29/21	12:59:09	-51.1	371567.2974	4519815.813	40;49.15906N	070;31.37623W	WTG-082-B-SPI.jpg	WTG-082-B-PV.jpg
WTG-082	C	7/29/21	13:03:40	-51.2	371570.6371	4519806.355	40;49.15398N	070;31.37374W	WTG-082-C-SPI.jpg	WTG-082-C-PV.jpg
WTG-082	D	7/29/21	13:08:13	-51.2	371578.3392	4519800.163	40;49.15071N	070;31.36818W	WTG-082-D-SPI.jpg	WTG-082-D-PV.jpg
WTG-073	A	7/29/21	15:51:56	-52.8	373421.9840	4521655.821	40;50.17055N	070;30.07953W	WTG-073-A-SPI.jpg	WTG-073-A-PV.jpg
WTG-073	B	7/29/21	15:57:15	-52.8	373431.3008	4521651.663	40;50.16839N	070;30.07285W	WTG-073-B-SPI.jpg	WTG-073-B-PV.jpg
WTG-073	C	7/29/21	16:02:17	-52.8	373440.4311	4521653.111	40;50.16926N	070;30.06637W	WTG-073-C-SPI.jpg	WTG-073-C-PV.jpg
WTG-064	A	7/29/21	17:32:36	-51.2	373447.5544	4523512.676	40;51.17409N	070;30.08398W	WTG-064-A-SPI.jpg	WTG-064-A-PV.jpg
WTG-064	B	7/29/21	17:37:17	-51.3	373444.4259	4523504.517	40;51.16965N	070;30.08611W	WTG-064-B-SPI.jpg	WTG-064-B-PV.jpg
WTG-064	C	7/29/21	17:42:27	-51.2	373434.9912	4523501.939	40;51.16817N	070;30.09279W	WTG-064-C-SPI.jpg	WTG-064-C-PV.jpg
WTG-063	A	7/29/21	19:29:19	-50.9	375272.6513	4523509.981	40;51.18942N	070;28.78521W	WTG-063-A-SPI.jpg	WTG-063-A-PV.jpg
WTG-063	B	7/29/21	19:34:20	-50.9	375279.5172	4523503.811	40;51.18615N	070;28.78025W	WTG-063-B-SPI.jpg	WTG-063-B-PV.jpg
WTG-063	C	7/29/21	19:39:28	-51.0	375290.2209	4523503.550	40;51.18610N	070;28.77263W	WTG-063-C-SPI.jpg	WTG-063-C-PV.jpg
WTG-062	A	7/29/21	20:58:51	-50.4	377153.3442	4523511.151	40;51.20709N	070;27.44690W	WTG-062-A-SPI.jpg	WTG-062-A-PV.jpg
WTG-062	B	7/29/21	21:04:55	-50.4	377146.4795	4523503.505	40;51.20290N	070;27.45169W	WTG-062-B-SPI.jpg	WTG-062-B-PV.jpg
WTG-062	C	7/29/21	21:10:24	-50.4	377137.7247	4523501.062	40;51.20150N	070;27.45789W	WTG-062-C-SPI.jpg	WTG-062-C-PV.jpg
WTG-069	A	7/31/21	5:06:07	-49.9	378976.9996	4521663.730	40;50.22514N	070;26.12759W	WTG-069-A-SPI.jpg	WTG-069-A-PV.jpg
WTG-069	B	7/31/21	5:11:32	-49.9	378978.7975	4521653.355	40;50.21955N	070;26.12619W	WTG-069-B-SPI.jpg	WTG-069-B-PV.jpg
WTG-069	C	7/31/21	5:16:46	-50.1	378986.4841	4521649.715	40;50.21765N	070;26.12068W	WTG-069-C-SPI.jpg	WTG-069-C-PV.jpg
WTG-070	A	7/31/21	6:57:51	-48.7	380852.5652	4521671.839	40;50.24599N	070;24.79331W	WTG-070-A-SPI.jpg	WTG-070-A-PV.jpg
WTG-070	B	7/31/21	7:02:54	-48.5	380860.1797	4521664.854	40;50.24229N	070;24.78781W	WTG-070-B-SPI.jpg	WTG-070-B-PV.jpg
WTG-070	C	7/31/21	7:07:28	-48.8	380852.5251	4521657.114	40;50.23804N	070;24.79317W	WTG-070-C-SPI.jpg	WTG-070-C-PV.jpg
WTG-060	A	7/31/21	8:27:28	-48.5	380858.2829	4523518.542	40;51.24390N	070;24.81044W	WTG-060-A-SPI.jpg	WTG-060-A-PV.jpg
WTG-060	B	7/31/21	8:31:32	-48.6	380855.1657	4523509.003	40;51.23872N	070;24.81255W	WTG-060-B-SPI.jpg	WTG-060-B-PV.jpg
WTG-060	C	7/31/21	8:35:22	-48.7	380848.4576	4523502.696	40;51.23525N	070;24.81725W	WTG-060-C-SPI.jpg	WTG-060-C-PV.jpg
WTG-060	D	7/31/21	9:03:00	-48.7	380838.1016	4523501.351	40;51.23443N	070;24.82461W	WTG-060-D-SPI.jpg	WTG-060-D-PV.jpg
WTG-060	E	7/31/21	9:07:39	-48.6	380829.4391	4523507.640	40;51.23776N	070;24.83084W	WTG-060-E-SPI.jpg	WTG-060-E-PV.jpg
WTG-060	F	7/31/21	9:11:24	-48.5	380828.5922	4523517.080	40;51.24285N	070;24.83155W	WTG-060-F-SPI.jpg	WTG-060-F-PV.jpg
WTG-052	A	7/31/21	10:32:24	-46.6	382701.3951	4525351.397	40;52.25023N	070;23.51954W	WTG-052-A-SPI.jpg	WTG-052-A-PV.jpg
WTG-052	B	7/31/21	10:36:51	-46.6	382691.3387	4525353.502	40;52.25128N	070;23.52672W	WTG-052-B-SPI.jpg	WTG-052-B-PV.jpg
WTG-052	C	7/31/21	10:41:01	-46.7	382683.8599	4525359.860	40;52.25465N	070;23.53212W	WTG-052-C-SPI.jpg	WTG-052-C-PV.jpg
WTG-050	A	7/31/21	12:25:32	-48.7	378976.6614	4525365.104	40;52.22513N	070;26.17102W	WTG-050-A-SPI.jpg	WTG-050-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-050	B	7/31/21	12:30:29	-48.7	378979.5550	4525375.593	40;52.23082N	070;26.16908W	WTG-050-B-SPI.jpg	WTG-050-B-PV.jpg
WTG-050	C	7/31/21	12:35:33	-48.7	378985.5884	4525383.645	40;52.23522N	070;26.16488W	WTG-050-C-SPI.jpg	WTG-050-C-PV.jpg
WTG-055	A	7/31/21	14:12:31	-51.0	375287.9885	4525356.464	40;52.18726N	070;28.79650W	WTG-055-A-SPI.jpg	WTG-055-A-PV.jpg
WTG-055	B	7/31/21	14:16:53	-50.9	375278.1959	4525357.368	40;52.18766N	070;28.80348W	WTG-055-B-SPI.jpg	WTG-055-B-PV.jpg
WTG-055	C	7/31/21	14:22:34	-50.9	375273.9556	4525366.378	40;52.19249N	070;28.80661W	WTG-055-C-SPI.jpg	WTG-055-C-PV.jpg
WTG-057	A	7/31/21	16:17:35	-52.0	371585.8117	4525383.047	40;52.16731N	070;31.43195W	WTG-057-A-SPI.jpg	WTG-057-A-PV.jpg
WTG-057	B	7/31/21	16:21:22	-51.8	371576.3305	4525380.309	40;52.16574N	070;31.43867W	WTG-057-B-SPI.jpg	WTG-057-B-PV.jpg
WTG-057	C	7/31/21	16:25:05	-51.9	371568.6719	4525373.851	40;52.16218N	070;31.44404W	WTG-057-C-SPI.jpg	WTG-057-C-PV.jpg
WTG-046	A	7/31/21	18:43:09	-49.6	375296.4053	4527230.521	40;53.19994N	070;28.81307W	WTG-046-A-SPI.jpg	WTG-046-A-PV.jpg
WTG-046	B	7/31/21	18:47:58	-49.2	375287.1208	4527233.357	40;53.20139N	070;28.81971W	WTG-046-B-SPI.jpg	WTG-046-B-PV.jpg
WTG-046	C	7/31/21	18:53:30	-49.2	375277.3611	4527229.782	40;53.19936N	070;28.82662W	WTG-046-C-SPI.jpg	WTG-046-C-PV.jpg
WTG-046	D	7/31/21	19:31:50	-49.4	375289.8063	4527206.273	40;53.18678N	070;28.81748W	WTG-046-D-SPI.jpg	WTG-046-D-PV.jpg
WTG-046	E	7/31/21	19:38:55	-49.3	375279.6387	4527206.853	40;53.18700N	070;28.82472W	WTG-046-E-SPI.jpg	WTG-046-E-PV.jpg
WTG-046	F	7/31/21	19:43:28	-49.3	375273.9170	4527215.080	40;53.19139N	070;28.82889W	WTG-046-F-SPI.jpg	WTG-046-F-PV.jpg
WTG-038	A	7/31/21	21:01:14	-47.9	375290.5726	4529087.202	40;54.20309N	070;28.83959W	WTG-038-A-SPI.jpg	WTG-038-A-PV.jpg
WTG-038	B	7/31/21	21:06:12	-47.7	375281.8838	4529085.638	40;54.20217N	070;28.84576W	WTG-038-B-SPI.jpg	WTG-038-B-PV.jpg
WTG-038	C	7/31/21	21:11:00	-47.8	375274.4015	4529078.759	40;54.19838N	070;28.85101W	WTG-038-C-SPI.jpg	WTG-038-C-PV.jpg
WTG-031	A	7/31/21	22:39:09	-45.4	378978.5990	4529072.106	40;54.22816N	070;26.21297W	WTG-031-A-SPI.jpg	WTG-031-A-PV.jpg
WTG-031	B	7/31/21	22:43:57	-45.3	378980.9695	4529082.497	40;54.23380N	070;26.21140W	WTG-031-B-SPI.jpg	WTG-031-B-PV.jpg
WTG-031	C	7/31/21	22:48:39	-45.3	378989.9127	4529084.314	40;54.23486N	070;26.20505W	WTG-031-C-SPI.jpg	WTG-031-C-PV.jpg
WTG-041	A	8/1/21	0:34:14	-45.9	380833.7863	4527230.318	40;53.24931N	070;24.87055W	WTG-041-A-SPI.jpg	WTG-041-A-PV.jpg
WTG-041	B	8/1/21	0:38:24	-46.0	380844.0253	4527231.873	40;53.25024N	070;24.86328W	WTG-041-B-SPI.jpg	WTG-041-B-PV.jpg
WTG-041	C	8/1/21	0:42:44	-45.9	380852.9400	4527228.638	40;53.24857N	070;24.85690W	WTG-041-C-SPI.jpg	WTG-041-C-PV.jpg
WTG-043	A	8/1/21	2:22:36	-44.6	384557.4652	4527225.990	40;53.27899N	070;22.21923W	WTG-043-A-SPI.jpg	WTG-043-A-PV.jpg
WTG-043	B	8/1/21	2:27:14	-44.6	384550.4701	4527232.912	40;53.28267N	070;22.22428W	WTG-043-B-SPI.jpg	WTG-043-B-PV.jpg
WTG-043	C	8/1/21	2:31:54	-44.6	384540.8208	4527232.867	40;53.28256N	070;22.23115W	WTG-043-C-SPI.jpg	WTG-043-C-PV.jpg
WTG-044	A	8/1/21	3:49:07	-43.2	386393.8886	4527231.251	40;53.29725N	070;20.91171W	WTG-044-A-SPI.jpg	WTG-044-A-PV.jpg
WTG-044	B	8/1/21	3:54:24	-43.3	386403.0959	4527228.105	40;53.29562N	070;20.90512W	WTG-044-B-SPI.jpg	WTG-044-B-PV.jpg
WTG-044	C	8/1/21	3:59:58	-43.2	386411.2418	4527222.642	40;53.29274N	070;20.89926W	WTG-044-C-SPI.jpg	WTG-044-C-PV.jpg
WTG-035	A	8/1/21	5:11:49	-41.5	386384.5809	4529073.524	40;54.29265N	070;20.93856W	WTG-035-A-SPI.jpg	WTG-035-A-PV.jpg
WTG-035	B	8/1/21	5:16:05	-41.6	386388.4343	4529083.131	40;54.29787N	070;20.93593W	WTG-035-B-SPI.jpg	WTG-035-B-PV.jpg
WTG-035	C	8/1/21	5:21:30	-41.7	386398.1094	4529085.927	40;54.29946N	070;20.92907W	WTG-035-C-SPI.jpg	WTG-035-C-PV.jpg
WTG-026	A	8/1/21	7:04:40	-39.3	388237.1210	4530916.671	40;55.30392N	070;19.63909W	WTG-026-A-SPI.jpg	WTG-026-A-PV.jpg
WTG-026	B	8/1/21	7:08:48	-39.3	388236.5095	4530926.219	40;55.30907N	070;19.63963W	WTG-026-B-SPI.jpg	WTG-026-B-PV.jpg
WTG-026	C	8/1/21	7:12:49	-39.3	388240.2937	4530936.111	40;55.31445N	070;19.63704W	WTG-026-C-SPI.jpg	WTG-026-C-PV.jpg
WTG-024	A	8/1/21	8:36:45	-40.5	384532.0606	4530923.953	40;55.27696N	070;22.27859W	WTG-024-A-SPI.jpg	WTG-024-A-PV.jpg
WTG-024	B	8/1/21	8:40:58	-40.4	384536.5672	4530932.944	40;55.28186N	070;22.27548W	WTG-024-B-SPI.jpg	WTG-024-B-PV.jpg
WTG-024	C	8/1/21	8:45:08	-40.6	384546.0003	4530936.510	40;55.28386N	070;22.26880W	WTG-024-C-SPI.jpg	WTG-024-C-PV.jpg
WTG-023	A	8/1/21	9:57:42	-42.1	382682.9300	4530915.813	40;55.25677N	070;23.59575W	WTG-023-A-SPI.jpg	WTG-023-A-PV.jpg
WTG-023	B	8/1/21	10:02:07	-42.0	382680.0521	4530925.104	40;55.26177N	070;23.59791W	WTG-023-B-SPI.jpg	WTG-023-B-PV.jpg
WTG-023	C	8/1/21	10:06:13	-41.9	382683.5972	4530933.801	40;55.26650N	070;23.59548W	WTG-023-C-SPI.jpg	WTG-023-C-PV.jpg
WTG-022	A	8/1/21	11:19:47	-43.3	380854.1199	4530930.588	40;55.24889N	070;24.89869W	WTG-022-A-SPI.jpg	WTG-022-A-PV.jpg
WTG-022	B	8/1/21	11:23:55	-43.3	380856.1843	4530921.138	40;55.24380N	070;24.89711W	WTG-022-B-SPI.jpg	WTG-022-B-PV.jpg
WTG-022	C	8/1/21	11:28:00	-43.5	380851.4538	4530911.906	40;55.23877N	070;24.90037W	WTG-022-C-SPI.jpg	WTG-022-C-PV.jpg
WTG-028	A	8/1/21	13:06:23	-45.9	377133.7764	4530913.360	40;55.20655N	070;27.54865W	WTG-028-A-SPI.jpg	WTG-028-A-PV.jpg
WTG-028	B	8/1/21	13:11:28	-45.8	377126.6196	4530919.507	40;55.20980N	070;27.55382W	WTG-028-B-SPI.jpg	WTG-028-B-PV.jpg
WTG-028	C	8/1/21	13:15:52	-45.8	377130.1161	4530929.008	40;55.21497N	070;27.55144W	WTG-028-C-SPI.jpg	WTG-028-C-PV.jpg
WTG-030	A	8/1/21	14:46:52	-46.6	373444.1715	4530913.336	40;55.17277N	070;30.17683W	WTG-030-A-SPI.jpg	WTG-030-A-PV.jpg
WTG-030	B	8/1/21	14:50:32	-46.6	373447.4266	4530922.213	40;55.17760N	070;30.17462W	WTG-030-B-SPI.jpg	WTG-030-B-PV.jpg
WTG-030	C	8/1/21	14:54:54	-46.5	373446.3398	4530931.675	40;55.18270N	070;30.17551W	WTG-030-C-SPI.jpg	WTG-030-C-PV.jpg
WTG-019	A	8/1/21	16:24:15	-44.0	377151.2487	4532775.162	40;56.21268N	070;27.55834W	WTG-019-A-SPI.jpg	WTG-019-A-PV.jpg
WTG-019	B	8/1/21	16:28:28	-44.0	377149.5564	4532765.239	40;56.20731N	070;27.55942W	WTG-019-B-SPI.jpg	WTG-019-B-PV.jpg
WTG-019	C	8/1/21	16:32:27	-44.1	377142.8051	4532759.228	40;56.20400N	070;27.56416W	WTG-019-C-SPI.jpg	WTG-019-C-PV.jpg
WTG-014	A	8/1/21	17:42:51	-42.9	377124.4855	4534622.878	40;57.21081N	070;27.59939W	WTG-014-A-SPI.jpg	WTG-014-A-PV.jpg
WTG-014	B	8/1/21	17:47:00	-42.9	377128.9610	4534614.182	40;57.20615N	070;27.59610W	WTG-014-B-SPI.jpg	WTG-014-B-PV.jpg
WTG-014	C	8/1/21	17:52:31	-42.9	377138.9201	4534613.058	40;57.20563N	070;27.58899W	WTG-014-C-SPI.jpg	WTG-014-C-PV.jpg
WTG-010	A	8/1/21	19:26:01	-42.1	379005.5950	4534626.844	40;57.22980N	070;26.25878W	WTG-010-A-SPI.jpg	WTG-010-A-PV.jpg
WTG-010	B	8/1/21	19:30:53	-42.1	379003.4739	4534617.385	40;57.22467N	070;26.26018W	WTG-010-B-SPI.jpg	WTG-010-B-PV.jpg
WTG-010	C	8/1/21	19:35:54	-41.9	378994.9087	4534612.365	40;57.22188N	070;26.26623W	WTG-010-C-SPI.jpg	WTG-010-C-PV.jpg
WTG-016	A	8/1/21	20:48:40	-42.1	380853.8189	4532778.605	40;56.24744N	070;24.92021W	WTG-016-A-SPI.jpg	WTG-016-A-PV.jpg
WTG-016	B	8/1/21	20:53:11	-42.2	380854.8248	4532769.237	40;56.24238N	070;24.91939W	WTG-016-B-SPI.jpg	WTG-016-B-PV.jpg
WTG-016	C	8/1/21	20:57:49	-42.3	380847.4104	4532762.623	40;56.23874N	070;24.92459W	WTG-016-C-SPI.jpg	WTG-016-C-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
WTG-018	A	8/1/21	22:17:09	-41.3	384556.2317	4532783.954	40;56.28221N	070;22.28215W	WTG-018-A-SPI.jpg	WTG-018-A-PV.jpg
WTG-018	B	8/1/21	22:21:16	-41.3	384561.1494	4532775.372	40;56.27761N	070;22.27855W	WTG-018-B-SPI.jpg	WTG-018-B-PV.jpg
WTG-018	C	8/1/21	22:25:19	-41.4	384558.5979	4532765.900	40;56.27247N	070;22.28026W	WTG-018-C-SPI.jpg	WTG-018-C-PV.jpg
WTG-013	A	8/1/21	23:28:05	-40.5	384544.2467	4534610.619	40;57.26914N	070;22.31112W	WTG-013-A-SPI.jpg	WTG-013-A-PV.jpg
WTG-013	B	8/1/21	23:32:01	-40.5	384553.1797	4534615.001	40;57.27158N	070;22.30480W	WTG-013-B-SPI.jpg	WTG-013-B-PV.jpg
WTG-013	C	8/1/21	23:36:19	-40.5	384560.5587	4534621.690	40;57.27526N	070;22.29961W	WTG-013-C-SPI.jpg	WTG-013-C-PV.jpg
WTG-009	A	8/2/21	1:08:33	-40.5	384543.1777	4536465.356	40;58.27132N	070;22.33264W	WTG-009-A-SPI.jpg	WTG-009-A-PV.jpg
WTG-009	B	8/2/21	1:13:39	-40.5	384534.6935	4536471.054	40;58.27433N	070;22.33875W	WTG-009-B-SPI.jpg	WTG-009-B-PV.jpg
WTG-009	C	8/2/21	1:18:22	-40.5	384532.7942	4536481.113	40;58.27975N	070;22.34022W	WTG-009-C-SPI.jpg	WTG-009-C-PV.jpg
WTG-012	A	8/2/21	2:35:44	-42.4	382698.7098	4534613.016	40;57.25465N	070;23.62650W	WTG-012-A-SPI.jpg	WTG-012-A-PV.jpg
WTG-012	B	8/2/21	2:40:30	-42.4	382688.6308	4534614.076	40;57.25514N	070;23.63370W	WTG-012-B-SPI.jpg	WTG-012-B-PV.jpg
WTG-012	C	8/2/21	2:44:44	-42.4	382680.8844	4534620.730	40;57.25867N	070;23.63929W	WTG-012-C-SPI.jpg	WTG-012-C-PV.jpg
WTG-007	A	8/2/21	4:05:53	-41.0	380840.9613	4536464.880	40;58.23914N	070;24.97194W	WTG-007-A-SPI.jpg	WTG-007-A-PV.jpg
WTG-007	B	8/2/21	4:10:41	-40.9	380833.2293	4536469.317	40;58.24147N	070;24.97750W	WTG-007-B-SPI.jpg	WTG-007-B-PV.jpg
WTG-007	C	8/2/21	4:14:59	-41.0	380826.7113	4536477.107	40;58.24562N	070;24.98224W	WTG-007-C-SPI.jpg	WTG-007-C-PV.jpg
IAC-186	A	8/2/21	5:08:00	-39.61	382477.6531	4539753.850	41;00.03052N	070;23.84266W	IAC-186-A-SPI.jpg	IAC-186-A-PV.jpg
IAC-186	B	8/2/21	5:13:27	-39.57	382485.9133	4539760.584	41;00.03423N	070;23.83685W	IAC-186-B-SPI.jpg	IAC-186-B-PV.jpg
IAC-186	C	8/2/21	5:19:03	-39.68	382490.6438	4539751.288	41;00.02925N	070;23.83337W	IAC-186-C-SPI.jpg	IAC-186-C-PV.jpg
IAC-187	A	8/2/21	6:34:14	-37.83	384072.6566	4539711.360	41;00.02126N	070;22.70460W	IAC-187-A-SPI.jpg	IAC-187-A-PV.jpg
IAC-187	B	8/2/21	6:38:51	-38.10	384065.0273	4539706.105	41;00.01836N	070;22.70998W	IAC-187-B-SPI.jpg	IAC-187-B-PV.jpg
IAC-187	C	8/2/21	6:43:30	-40.73	384072.2080	4539702.185	41;00.01630N	070;22.70481W	IAC-187-C-SPI.jpg	IAC-187-C-PV.jpg
IAC-188	A	8/2/21	7:13:17	-37.56	383259.2528	4538904.881	40;59.57853N	070;23.27559W	IAC-188-A-SPI.jpg	IAC-188-A-PV.jpg
IAC-188	B	8/2/21	7:18:00	-37.55	383268.3551	4538901.456	40;59.57676N	070;23.26906W	IAC-188-B-SPI.jpg	IAC-188-B-PV.jpg
IAC-188	C	8/2/21	7:22:11	-37.61	383261.6013	4538896.384	40;59.57396N	070;23.27382W	IAC-188-C-SPI.jpg	IAC-188-C-PV.jpg
IAC-185	A	8/2/21	7:51:43	-39.80	382229.7531	4539275.913	40;59.77013N	070;24.01400W	IAC-185-A-SPI.jpg	IAC-185-A-PV.jpg
IAC-185	B	8/2/21	7:55:54	-39.75	382237.1200	4539268.960	40;59.76644N	070;24.00867W	IAC-185-B-SPI.jpg	IAC-185-B-PV.jpg
IAC-185	C	8/2/21	8:00:17	-39.76	382245.4705	4539263.403	40;59.76351N	070;24.00265W	IAC-185-C-SPI.jpg	IAC-185-C-PV.jpg
IAC-184	A	8/2/21	8:29:46	-39.25	381770.2262	4538325.326	40;59.25251N	070;24.33081W	IAC-184-A-SPI.jpg	IAC-184-A-PV.jpg
IAC-184	B	8/2/21	8:33:53	-39.49	381765.7779	4538333.191	40;59.25672N	070;24.33407W	IAC-184-B-SPI.jpg	IAC-184-B-PV.jpg
IAC-184	C	8/2/21	8:38:14	-39.18	381771.0760	4538341.047	40;59.26101N	070;24.33039W	IAC-184-C-SPI.jpg	IAC-184-C-PV.jpg
IAC-177	A	8/2/21	9:07:53	-40.73	380510.7680	4537761.657	40;58.93693N	070;25.22236W	IAC-177-A-SPI.jpg	IAC-177-A-PV.jpg
IAC-177	B	8/2/21	9:12:53	-40.29	380512.3505	4537751.640	40;58.93153N	070;25.22111W	IAC-177-B-SPI.jpg	IAC-177-B-PV.jpg
IAC-177	C	8/2/21	9:17:12	-40.66	380505.3376	4537744.912	40;58.92784N	070;25.22604W	IAC-177-C-SPI.jpg	IAC-177-C-PV.jpg
IAC-183	A	8/2/21	9:46:56	-40.05	381325.3523	4537454.604	40;58.77815N	070;24.63801W	IAC-183-A-SPI.jpg	IAC-183-A-PV.jpg
IAC-183	B	8/2/21	9:53:30	-40.00	381333.1759	4537461.580	40;58.78199N	070;24.63251W	IAC-183-B-SPI.jpg	IAC-183-B-PV.jpg
IAC-183	C	8/2/21	9:58:19	-40.00	381333.3607	4537470.808	40;58.78698N	070;24.63249W	IAC-183-C-SPI.jpg	IAC-183-C-PV.jpg
IAC-189	A	8/2/21	10:37:16	-39.32	382702.0888	4537705.482	40;58.92566N	070;23.65927W	IAC-189-A-SPI.jpg	IAC-189-A-PV.jpg
IAC-189	B	8/2/21	10:41:08	-39.23	382694.9852	4537710.901	40;58.92852N	070;23.66439W	IAC-189-B-SPI.jpg	IAC-189-B-PV.jpg
IAC-189	C	8/2/21	10:45:06	-39.27	382694.8286	4537720.616	40;58.93377N	070;23.66461W	IAC-189-C-SPI.jpg	IAC-189-C-PV.jpg
IAC-190	A	8/2/21	11:15:53	-40.38	382701.0442	4536953.072	40;58.51909N	070;23.65145W	IAC-190-A-SPI.jpg	IAC-190-A-PV.jpg
IAC-190	B	8/2/21	11:20:35	-40.25	382694.6507	4536959.868	40;58.52271N	070;23.65608W	IAC-190-B-SPI.jpg	IAC-190-B-PV.jpg
IAC-190	C	8/2/21	11:25:19	-40.39	382694.2840	4536969.600	40;58.52796N	070;23.65646W	IAC-190-C-SPI.jpg	IAC-190-C-PV.jpg
IAC-199	A	8/2/21	12:58:40	-38.82	384545.8307	4537419.697	40;58.78701N	070;22.34143W	IAC-199-A-SPI.jpg	IAC-199-A-PV.jpg
IAC-199	B	8/2/21	13:03:45	-38.91	384545.7044	4537409.971	40;58.78176N	070;22.34141W	IAC-199-B-SPI.jpg	IAC-199-B-PV.jpg
IAC-199	C	8/2/21	13:07:51	-38.89	384545.7266	4537400.271	40;58.77651N	070;22.34129W	IAC-199-C-SPI.jpg	IAC-199-C-PV.jpg
IAC-200	A	8/2/21	13:49:05	-40.99	384030.6363	4535974.807	40;58.00190N	070;22.69251W	IAC-200-A-SPI.jpg	IAC-200-A-PV.jpg
IAC-200	B	8/2/21	13:52:57	-40.97	384029.6392	4535965.051	40;57.99662N	070;22.69312W	IAC-200-B-SPI.jpg	IAC-200-B-PV.jpg
IAC-200	C	8/2/21	13:56:43	-40.84	384030.0663	4535955.075	40;57.99123N	070;22.69270W	IAC-200-C-SPI.jpg	IAC-200-C-PV.jpg
IAC-201	A	8/2/21	14:31:39	-41.83	383202.4690	4535125.302	40;57.53579N	070;23.27326W	IAC-201-A-SPI.jpg	IAC-201-A-PV.jpg
IAC-201	B	8/2/21	14:35:21	-41.68	383194.1391	4535121.908	40;57.53389N	070;23.27916W	IAC-201-B-SPI.jpg	IAC-201-B-PV.jpg
IAC-201	C	8/2/21	14:39:14	-41.68	383184.7409	4535118.086	40;57.53174N	070;23.28581W	IAC-201-C-SPI.jpg	IAC-201-C-PV.jpg
IAC-191	A	8/2/21	15:13:14	-41.42	382298.2459	4535283.351	40;57.61340N	070;23.91957W	IAC-191-A-SPI.jpg	IAC-191-A-PV.jpg
IAC-191	B	8/2/21	15:17:20	-41.51	382293.2191	4535275.005	40;57.60885N	070;23.92305W	IAC-191-B-SPI.jpg	IAC-191-B-PV.jpg
IAC-191	C	8/2/21	15:21:07	-41.51	382285.5915	4535268.956	40;57.60552N	070;23.92842W	IAC-191-C-SPI.jpg	IAC-191-C-PV.jpg
IAC-182	A	8/2/21	15:59:09	-41.60	380853.9408	4535548.046	40;57.74386N	070;24.95209W	IAC-182-A-SPI.jpg	IAC-182-A-PV.jpg
IAC-182	B	8/2/21	16:03:38	-41.64	380845.2056	4535551.911	40;57.74587N	070;24.95836W	IAC-182-B-SPI.jpg	IAC-182-B-PV.jpg
IAC-182	C	8/2/21	16:07:57	-41.62	380836.6505	4535545.823	40;57.74251N	070;24.96439W	IAC-182-C-SPI.jpg	IAC-182-C-PV.jpg
IAC-176	A	8/2/21	16:49:10	-41.42	379574.3046	4536782.966	40;58.39986N	070;25.87863W	IAC-176-A-SPI.jpg	IAC-176-A-PV.jpg
IAC-176	B	8/2/21	16:53:03	-41.40	379565.4337	4536782.420	40;58.39948N	070;25.88495W	IAC-176-B-SPI.jpg	IAC-176-B-PV.jpg
IAC-176	C	8/2/21	16:56:39	-41.41	379556.8598	4536777.266	40;58.39662N	070;25.89100W	IAC-176-C-SPI.jpg	IAC-176-C-PV.jpg
IAC-175	A	8/2/21	17:25:15	-41.79	379006.4600	4535552.073	40;57.72973N	070;26.26901W	IAC-175-A-SPI.jpg	IAC-175-A-PV.jpg
IAC-175	B	8/2/21	17:28:57	-41.70	378997.7460	4535551.774	40;57.72950N	070;26.27522W	IAC-175-B-SPI.jpg	IAC-175-B-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-175	C	8/2/21	17:32:58	-41.80	378986.9634	4535552.328	40;57.72970N	070;26.28291W	IAC-175-C-SPI.jpg	IAC-175-C-PV.jpg
IAC-165	A	8/2/21	18:29:04	-43.67	377148.7662	4533689.801	40;56.70686N	070;27.57098W	IAC-165-A-SPI.jpg	IAC-165-A-PV.jpg
IAC-165	B	8/2/21	18:35:02	-43.50	377141.6388	4533696.654	40;56.71050N	070;27.57615W	IAC-165-B-SPI.jpg	IAC-165-B-PV.jpg
IAC-165	C	8/2/21	18:40:31	-43.43	377135.9603	4533704.604	40;56.71475N	070;27.58029W	IAC-165-C-SPI.jpg	IAC-165-C-PV.jpg
IAC-174	A	8/2/21	19:16:55	-43.03	378985.7100	4533692.987	40;56.72503N	070;26.26201W	IAC-174-A-SPI.jpg	IAC-174-A-PV.jpg
IAC-174	B	8/2/21	19:22:04	-43.07	378990.2566	4533701.705	40;56.72978N	070;26.25887W	IAC-174-B-SPI.jpg	IAC-174-B-PV.jpg
IAC-174	C	8/2/21	19:26:35	-42.97	378999.0685	4533699.765	40;56.72881N	070;26.25257W	IAC-174-C-SPI.jpg	IAC-174-C-PV.jpg
IAC-181	A	8/2/21	20:03:00	-41.83	380859.8615	4533707.837	40;56.74958N	070;24.92663W	IAC-181-A-SPI.jpg	IAC-181-A-PV.jpg
IAC-181	B	8/2/21	20:07:26	-41.87	380851.0583	4533700.908	40;56.74576N	070;24.93282W	IAC-181-B-SPI.jpg	IAC-181-B-PV.jpg
IAC-181	C	8/2/21	20:12:02	-41.76	380841.8818	4533701.536	40;56.74602N	070;24.93937W	IAC-181-C-SPI.jpg	IAC-181-C-PV.jpg
IAC-192	A	8/2/21	20:48:52	-41.33	381780.9680	4533688.330	40;56.74707N	070;24.27000W	IAC-192-A-SPI.jpg	IAC-192-A-PV.jpg
IAC-192	B	8/2/21	20:54:13	-41.62	381774.0388	4533695.301	40;56.75078N	070;24.27502W	IAC-192-B-SPI.jpg	IAC-192-B-PV.jpg
IAC-192	C	8/2/21	20:59:56	1.26	381766.9747	4533702.519	40;56.75462N	070;24.28014W	IAC-192-C-SPI.jpg	IAC-192-C-PV.jpg
IAC-202	A	8/2/21	21:36:54	-39.96	382683.2667	4533696.017	40;56.75903N	070;23.62709W	IAC-202-A-SPI.jpg	IAC-202-A-PV.jpg
IAC-202	B	8/2/21	21:41:55	-39.98	382693.6150	4533700.230	40;56.76140N	070;23.61976W	IAC-202-B-SPI.jpg	IAC-202-B-PV.jpg
IAC-202	C	8/2/21	21:46:35	-39.97	382690.0425	4533709.689	40;56.76648N	070;23.62241W	IAC-202-C-SPI.jpg	IAC-202-C-PV.jpg
IAC-196	A	8/2/21	22:30:47	-40.83	384557.1562	4533695.925	40;56.77500N	070;22.29168W	IAC-196-A-SPI.jpg	IAC-196-A-PV.jpg
IAC-196	B	8/2/21	22:35:48	-40.97	384548.2436	4533700.260	40;56.77726N	070;22.29808W	IAC-196-B-SPI.jpg	IAC-196-B-PV.jpg
IAC-196	C	8/2/21	22:40:00	-40.97	384537.9782	4533700.859	40;56.77750N	070;22.30541W	IAC-196-C-SPI.jpg	IAC-196-C-PV.jpg
IAC-197	A	8/2/21	23:18:25	-41.40	384109.1703	4532346.955	40;56.04228N	070;22.59580W	IAC-197-A-SPI.jpg	IAC-197-A-PV.jpg
IAC-197	B	8/2/21	23:23:13	-41.25	384106.3211	4532337.935	40;56.03739N	070;22.59773W	IAC-197-B-SPI.jpg	IAC-197-B-PV.jpg
IAC-197	C	8/2/21	23:27:32	-41.32	384104.6212	4532328.125	40;56.03207N	070;22.59883W	IAC-197-C-SPI.jpg	IAC-197-C-PV.jpg
IAC-198	A	8/3/21	0:22:20	-41.65	383330.5165	4531577.404	40;55.61982N	070;23.14190W	IAC-198-A-SPI.jpg	IAC-198-A-PV.jpg
IAC-198	B	8/3/21	0:27:27	-41.78	383328.4613	4531567.289	40;55.61433N	070;23.14325W	IAC-198-B-SPI.jpg	IAC-198-B-PV.jpg
IAC-198	C	8/3/21	0:32:12	-41.75	383336.6504	4531562.341	40;55.61173N	070;23.13736W	IAC-198-C-SPI.jpg	IAC-198-C-PV.jpg
IAC-203	A	8/3/21	1:04:58	-41.58	382070.3116	4531831.008	40;55.74600N	070;24.04260W	IAC-203-A-SPI.jpg	IAC-203-A-PV.jpg
IAC-203	B	8/3/21	1:09:31	-41.50	382061.1918	4531828.900	40;55.74478N	070;24.04907W	IAC-203-B-SPI.jpg	IAC-203-B-PV.jpg
IAC-203	C	8/3/21	1:17:20	-41.54	382065.5750	4531820.185	40;55.74011N	070;24.04585W	IAC-203-C-SPI.jpg	IAC-203-C-PV.jpg
IAC-180	A	8/3/21	1:55:52	-43.49	380395.9682	4531480.748	40;55.54215N	070;25.23142W	IAC-180-A-SPI.jpg	IAC-180-A-PV.jpg
IAC-180	B	8/3/21	2:01:41	-43.51	380405.3611	4531477.422	40;55.54043N	070;25.22469W	IAC-180-B-SPI.jpg	IAC-180-B-PV.jpg
IAC-180	C	8/3/21	2:07:25	-43.53	380407.1380	4531467.947	40;55.53533N	070;25.22332W	IAC-180-C-SPI.jpg	IAC-180-C-PV.jpg
IAC-172	A	8/3/21	2:42:07	-44.40	379500.4958	4530925.106	40;55.23402N	070;25.86288W	IAC-172-A-SPI.jpg	IAC-172-A-PV.jpg
IAC-172	B	8/3/21	2:47:43	-44.44	379493.2731	4530918.191	40;55.23022N	070;25.86794W	IAC-172-B-SPI.jpg	IAC-172-B-PV.jpg
IAC-172	C	8/3/21	2:52:14	-44.30	379502.6896	4530915.905	40;55.22907N	070;25.86121W	IAC-172-C-SPI.jpg	IAC-172-C-PV.jpg
IAC-173	A	8/3/21	3:23:54	-44.09	379258.7964	4531856.896	40;55.73536N	070;26.04594W	IAC-173-A-SPI.jpg	IAC-173-A-PV.jpg
IAC-173	B	8/3/21	3:29:34	-44.14	379248.7297	4531854.931	40;55.73421N	070;26.05309W	IAC-173-B-SPI.jpg	IAC-173-B-PV.jpg
IAC-173	C	8/3/21	3:34:26	-44.14	379245.4568	4531845.274	40;55.72896N	070;26.05531W	IAC-173-C-SPI.jpg	IAC-173-C-PV.jpg
IAC-168	A	8/3/21	4:17:14	-45.20	378073.4273	4530927.537	40;55.22265N	070;26.87947W	IAC-168-A-SPI.jpg	IAC-168-A-PV.jpg
IAC-168	B	8/3/21	4:21:51	-45.18	378064.9924	4530922.104	40;55.21963N	070;26.88541W	IAC-168-B-SPI.jpg	IAC-168-B-PV.jpg
IAC-168	C	8/3/21	4:26:26	-45.12	378055.8041	4530926.379	40;55.22186N	070;26.89201W	IAC-168-C-SPI.jpg	IAC-168-C-PV.jpg
IAC-167	A	8/3/21	5:02:02	-45.67	377136.4988	4531417.056	40;55.47873N	070;27.55270W	IAC-167-A-SPI.jpg	IAC-167-A-PV.jpg
IAC-167	B	8/3/21	5:06:05	-45.77	377137.9919	4531407.830	40;55.47376N	070;27.55152W	IAC-167-B-SPI.jpg	IAC-167-B-PV.jpg
IAC-167	C	8/3/21	5:10:30	-45.71	377139.0832	4531397.518	40;55.46820N	070;27.55062W	IAC-167-C-SPI.jpg	IAC-167-C-PV.jpg
IAC-166	A	8/3/21	6:18:01	-44.19	377126.5440	4532292.760	40;55.95181N	070;27.57020W	IAC-166-A-SPI.jpg	IAC-166-A-PV.jpg
IAC-166	B	8/3/21	6:23:04	-44.22	377135.8904	4532293.044	40;55.95204N	070;27.56354W	IAC-166-B-SPI.jpg	IAC-166-B-PV.jpg
IAC-166	C	8/3/21	6:27:56	-44.02	377139.0299	4532301.836	40;55.95682N	070;27.56141W	IAC-166-C-SPI.jpg	IAC-166-C-PV.jpg
IAC-164	A	8/3/21	7:08:25	-45.20	375288.6378	4532290.706	40;55.93400N	070;28.87961W	IAC-164-A-SPI.jpg	IAC-164-A-PV.jpg
IAC-164	B	8/3/21	7:13:30	-45.41	375280.9858	4532284.119	40;55.93037N	070;28.88498W	IAC-164-B-SPI.jpg	IAC-164-B-PV.jpg
IAC-164	C	8/3/21	7:18:07	-45.32	375286.5768	4532276.848	40;55.92649N	070;28.88091W	IAC-164-C-SPI.jpg	IAC-164-C-PV.jpg
IAC-163	A	8/3/21	7:43:46	-45.92	375286.2283	4531476.213	40;55.49389N	070;28.87150W	IAC-163-A-SPI.jpg	IAC-163-A-PV.jpg
IAC-163	B	8/3/21	7:48:15	-45.98	375286.3234	4531466.357	40;55.48856N	070;28.87131W	IAC-163-B-SPI.jpg	IAC-163-B-PV.jpg
IAC-163	C	8/3/21	7:52:53	-45.96	375278.6351	4531460.166	40;55.48515N	070;28.87671W	IAC-163-C-SPI.jpg	IAC-163-C-PV.jpg
IAC-162	A	8/3/21	8:20:13	-46.13	374837.4243	4530931.573	40;55.19549N	070;29.18462W	IAC-162-A-SPI.jpg	IAC-162-A-PV.jpg
IAC-162	B	8/3/21	8:24:14	-46.19	374835.8611	4530921.830	40;55.19021N	070;29.18561W	IAC-162-B-SPI.jpg	IAC-162-B-PV.jpg
IAC-162	C	8/3/21	8:28:46	-46.24	374827.1888	4530918.553	40;55.18836N	070;29.19175W	IAC-162-C-SPI.jpg	IAC-162-C-PV.jpg
IAC-161	A	8/3/21	8:58:02	-46.06	373993.8455	4530931.916	40;55.18791N	070;29.78552W	IAC-161-A-SPI.jpg	IAC-161-A-PV.jpg
IAC-161	B	8/3/21	9:02:57	-46.28	373990.4220	4530923.416	40;55.18328N	070;29.78786W	IAC-161-B-SPI.jpg	IAC-161-B-PV.jpg
IAC-161	C	8/3/21	9:06:55	-46.20	373990.0876	4530912.714	40;55.17750N	070;29.78796W	IAC-161-C-SPI.jpg	IAC-161-C-PV.jpg
IAC-160	A	8/3/21	9:36:16	-46.59	373940.0435	4530428.851	40;54.91559N	070;29.81771W	IAC-160-A-SPI.jpg	IAC-160-A-PV.jpg
IAC-160	B	8/3/21	9:40:57	-46.58	373938.4399	4530419.195	40;54.91036N	070;29.81874W	IAC-160-B-SPI.jpg	IAC-160-B-PV.jpg
IAC-160	C	8/3/21	9:45:26	-46.69	373938.3934	4530408.733	40;54.90471N	070;29.81864W	IAC-160-C-SPI.jpg	IAC-160-C-PV.jpg
IAC-159	A	8/3/21	10:19:49	-47.31	374827.8659	4529535.652	40;54.44116N	070;29.17453W	IAC-159-A-SPI.jpg	IAC-159-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-159	B	8/3/21	10:24:15	-47.31	374829.1625	4529526.385	40;54.43617N	070;29.17350W	IAC-159-B-SPI.jpg	IAC-159-B-PV.jpg
IAC-159	C	8/3/21	10:28:55	-47.24	374837.3303	4529521.175	40;54.43343N	070;29.16762W	IAC-159-C-SPI.jpg	IAC-159-C-PV.jpg
IAC-158	A	8/3/21	11:04:31	-47.00	376210.9290	4529072.194	40;54.20337N	070;28.18398W	IAC-158-A-SPI.jpg	IAC-158-A-PV.jpg
IAC-158	B	8/3/21	11:09:07	-46.98	376203.1781	4529078.895	40;54.20692N	070;28.18958W	IAC-158-B-SPI.jpg	IAC-158-B-PV.jpg
IAC-158	C	8/3/21	11:13:53	-47.01	376212.7260	4529080.656	40;54.20796N	070;28.18280W	IAC-158-C-SPI.jpg	IAC-158-C-PV.jpg
IAC-169	A	8/3/21	12:19:04	-45.42	378578.8754	4529108.214	40;54.24412N	070;26.49806W	IAC-169-A-SPI.jpg	IAC-169-A-PV.jpg
IAC-169	B	8/3/21	12:23:46	-45.59	378573.2606	4529099.997	40;54.23963N	070;26.50196W	IAC-169-B-SPI.jpg	IAC-169-B-PV.jpg
IAC-169	C	8/3/21	12:28:18	-45.58	378574.5088	4529090.338	40;54.23442N	070;26.50096W	IAC-169-C-SPI.jpg	IAC-169-C-PV.jpg
IAC-171	A	8/3/21	13:07:19	-44.68	379234.4357	4530010.890	40;54.73769N	070;26.04173W	IAC-171-A-SPI.jpg	IAC-171-A-PV.jpg
IAC-171	B	8/3/21	13:10:48	-44.73	379240.4588	4530003.662	40;54.73384N	070;26.03735W	IAC-171-B-SPI.jpg	IAC-171-B-PV.jpg
IAC-171	C	8/3/21	13:14:25	-44.73	379246.9190	4529996.256	40;54.72989N	070;26.03267W	IAC-171-C-SPI.jpg	IAC-171-C-PV.jpg
IAC-179	A	8/3/21	13:42:19	-44.50	379819.3202	4529730.225	40;54.59120N	070;25.62188W	IAC-179-A-SPI.jpg	IAC-179-A-PV.jpg
IAC-179	B	8/3/21	13:47:00	-44.64	379825.1986	4529721.437	40;54.58651N	070;25.61759W	IAC-179-B-SPI.jpg	IAC-179-B-PV.jpg
IAC-179	C	8/3/21	13:51:13	-44.53	379825.7245	4529711.118	40;54.58094N	070;25.61710W	IAC-179-C-SPI.jpg	IAC-179-C-PV.jpg
IAC-193	A	8/3/21	14:16:50	-45.04	380088.6764	4529424.186	40;54.42821N	070;25.42649W	IAC-193-A-SPI.jpg	IAC-193-A-PV.jpg
IAC-193	B	8/3/21	14:20:35	-45.17	380086.5107	4529414.871	40;54.42316N	070;25.42792W	IAC-193-B-SPI.jpg	IAC-193-B-PV.jpg
IAC-193	C	8/3/21	14:25:00	-45.15	380084.6985	4529403.983	40;54.41726N	070;25.42909W	IAC-193-C-SPI.jpg	IAC-193-C-PV.jpg
IAC-204	A	8/3/21	14:57:41	-43.70	381111.4478	4530408.177	40;54.96886N	070;24.70937W	IAC-204-A-SPI.jpg	IAC-204-A-PV.jpg
IAC-204	B	8/3/21	15:02:20	-43.65	381108.6006	4530398.196	40;54.96344N	070;24.71129W	IAC-204-B-SPI.jpg	IAC-204-B-PV.jpg
IAC-204	C	8/3/21	15:06:29	-43.71	381104.4371	4530389.393	40;54.95865N	070;24.71415W	IAC-204-C-SPI.jpg	IAC-204-C-PV.jpg
IAC-195	A	8/3/21	15:36:08	-43.31	381774.5343	4529997.245	40;54.75258N	070;24.23235W	IAC-195-A-SPI.jpg	IAC-195-A-PV.jpg
IAC-195	B	8/3/21	15:40:32	-43.53	381765.2420	4529997.558	40;54.75267N	070;24.23898W	IAC-195-B-SPI.jpg	IAC-195-B-PV.jpg
IAC-195	C	8/3/21	15:44:27	-43.40	381764.4218	4529987.086	40;54.74700N	070;24.23944W	IAC-195-C-SPI.jpg	IAC-195-C-PV.jpg
IAC-213	A	8/3/21	16:17:50	-43.99	383478.7766	4528710.832	40;54.07215N	070;23.00398W	IAC-213-A-SPI.jpg	IAC-213-A-PV.jpg
IAC-213	B	8/3/21	16:23:06	-43.92	383468.3683	4528710.034	40;54.07163N	070;23.01138W	IAC-213-B-SPI.jpg	IAC-213-B-PV.jpg
IAC-213	C	8/3/21	16:26:35	-43.94	383466.9956	4528701.570	40;54.06704N	070;23.01227W	IAC-213-C-SPI.jpg	IAC-213-C-PV.jpg
IAC-208	A	8/3/21	16:53:54	-42.98	383263.8532	4529627.938	40;54.56586N	070;23.16739W	IAC-208-A-SPI.jpg	IAC-208-A-PV.jpg
IAC-208	B	8/3/21	16:57:53	-43.14	383254.8541	4529628.375	40;54.56602N	070;23.17380W	IAC-208-B-SPI.jpg	IAC-208-B-PV.jpg
IAC-208	C	8/3/21	17:03:36	-43.20	383244.2554	4529628.378	40;54.56593N	070;23.18135W	IAC-208-C-SPI.jpg	IAC-208-C-PV.jpg
IAC-207	A	8/3/21	17:29:08	-41.97	384093.9954	4530466.046	40;55.02581N	070;22.58552W	IAC-207-A-SPI.jpg	IAC-207-A-PV.jpg
IAC-207	B	8/3/21	17:33:23	-41.85	384086.6370	4530461.247	40;55.02316N	070;22.59070W	IAC-207-B-SPI.jpg	IAC-207-B-PV.jpg
IAC-207	C	8/3/21	17:36:56	-42.01	384082.7564	4530452.744	40;55.01853N	070;22.59337W	IAC-207-C-SPI.jpg	IAC-207-C-PV.jpg
IAC-206	A	8/3/21	19:05:05	-40.98	385483.1588	4530921.368	40;55.28359N	070;21.60102W	IAC-206-A-SPI.jpg	IAC-206-A-PV.jpg
IAC-206	B	8/3/21	19:10:05	-40.95	385473.4829	4530922.415	40;55.28407N	070;21.60792W	IAC-206-B-SPI.jpg	IAC-206-B-PV.jpg
IAC-206	C	8/3/21	19:14:14	-40.84	385474.7672	4530931.784	40;55.28915N	070;21.60711W	IAC-206-C-SPI.jpg	IAC-206-C-PV.jpg
IAC-205	A	8/3/21	19:52:48	-40.20	387308.8320	4530930.300	40;55.30364N	070;20.30054W	IAC-205-A-SPI.jpg	IAC-205-A-PV.jpg
IAC-205	B	8/3/21	19:57:36	-40.22	387317.2541	4530926.606	40;55.30171N	070;20.29450W	IAC-205-B-SPI.jpg	IAC-205-B-PV.jpg
IAC-205	C	8/3/21	20:03:17	-40.29	387326.8845	4530923.093	40;55.29989N	070;20.28760W	IAC-205-C-SPI.jpg	IAC-205-C-PV.jpg
IAC-210	A	8/3/21	20:44:02	-39.79	389161.6737	4529999.386	40;54.81580N	070;18.97062W	IAC-210-A-SPI.jpg	IAC-210-A-PV.jpg
IAC-210	B	8/3/21	20:48:37	-39.75	389171.2096	4529997.754	40;54.81500N	070;18.96381W	IAC-210-B-SPI.jpg	IAC-210-B-PV.jpg
IAC-210	C	8/3/21	20:53:17	-39.74	389181.1559	4529996.957	40;54.81465N	070;18.95671W	IAC-210-C-SPI.jpg	IAC-210-C-PV.jpg
IAC-211	A	8/3/21	21:36:40	-41.10	387339.8336	4529067.515	40;54.29733N	070;20.25816W	IAC-211-A-SPI.jpg	IAC-211-A-PV.jpg
IAC-211	B	8/3/21	21:40:39	-41.14	387330.0159	4529069.658	40;54.29840N	070;20.26518W	IAC-211-B-SPI.jpg	IAC-211-B-PV.jpg
IAC-211	C	8/3/21	21:44:59	-41.10	387320.4178	4529072.799	40;54.30002N	070;20.27205W	IAC-211-C-SPI.jpg	IAC-211-C-PV.jpg
IAC-212	A	8/3/21	22:23:01	-41.77	385478.9714	4529059.089	40;54.27727N	070;21.58338W	IAC-212-A-SPI.jpg	IAC-212-A-PV.jpg
IAC-212	B	8/3/21	22:28:12	-41.77	385474.1627	4529067.395	40;54.28172N	070;21.58690W	IAC-212-B-SPI.jpg	IAC-212-B-PV.jpg
IAC-212	C	8/3/21	22:34:34	-41.87	385470.3540	4529076.696	40;54.28671N	070;21.58971W	IAC-212-C-SPI.jpg	IAC-212-C-PV.jpg
IAC-212	D	8/3/21	23:10:43	-41.94	385469.5971	4529055.304	40;54.27515N	070;21.59001W	IAC-212-D-SPI.jpg	IAC-212-D-PV.jpg
IAC-212	E	8/3/21	23:15:23	-41.89	385460.4619	4529060.177	40;54.27770N	070;21.59657W	IAC-212-E-SPI.jpg	IAC-212-E-PV.jpg
IAC-212	F	8/3/21	23:20:26	-41.81	385458.7422	4529069.983	40;54.28299N	070;21.59791W	IAC-212-F-SPI.jpg	IAC-212-F-PV.jpg
IAC-146	A	8/4/21	0:43:36	-43.61	385466.8764	4527214.730	40;53.28057N	070;21.57158W	IAC-146-A-SPI.jpg	IAC-146-A-PV.jpg
IAC-146	B	8/4/21	0:48:27	-43.56	385464.2970	4527223.879	40;53.28549N	070;21.57352W	IAC-146-B-SPI.jpg	IAC-146-B-PV.jpg
IAC-146	C	8/4/21	0:53:32	-43.61	385472.7077	4527219.529	40;53.28321N	070;21.56749W	IAC-146-C-SPI.jpg	IAC-146-C-PV.jpg
IAC-147	A	8/4/21	1:29:09	-43.75	383612.0446	4527217.556	40;53.26640N	070;22.89228W	IAC-147-A-SPI.jpg	IAC-147-A-PV.jpg
IAC-147	B	8/4/21	1:35:09	-43.82	383606.9925	4527209.109	40;53.26179N	070;22.89578W	IAC-147-B-SPI.jpg	IAC-147-B-PV.jpg
IAC-147	C	8/4/21	1:41:16	-43.75	383606.3906	4527198.561	40;53.25609N	070;22.89609W	IAC-147-C-SPI.jpg	IAC-147-C-PV.jpg
IAC-148	A	8/4/21	2:24:23	-44.81	381757.6361	4527227.299	40;53.25572N	070;24.21274W	IAC-148-A-SPI.jpg	IAC-148-A-PV.jpg
IAC-148	B	8/4/21	2:29:24	-44.84	381761.3648	4527218.379	40;53.25093N	070;24.20998W	IAC-148-B-SPI.jpg	IAC-148-B-PV.jpg
IAC-148	C	8/4/21	2:34:02	-44.84	381755.2681	4527210.229	40;53.24647N	070;24.21423W	IAC-148-C-SPI.jpg	IAC-148-C-PV.jpg
IAC-215	A	8/4/21	3:09:59	-45.12	382187.9734	4528298.227	40;53.83811N	070;23.91853W	IAC-215-A-SPI.jpg	IAC-215-A-PV.jpg
IAC-215	B	8/4/21	3:15:32	-45.20	382186.0461	4528289.229	40;53.83323N	070;23.91980W	IAC-215-B-SPI.jpg	IAC-215-B-PV.jpg
IAC-215	C	8/4/21	3:19:44	-45.08	382194.7301	4528286.452	40;53.83181N	070;23.91358W	IAC-215-C-SPI.jpg	IAC-215-C-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-209	A	8/4/21	3:55:18	-45.49	381159.3436	4528304.707	40;53.83269N	070;24.65109W	IAC-209-A-SPI.jpg	IAC-209-A-PV.jpg
IAC-209	B	8/4/21	4:00:33	-45.36	381167.4216	4528298.231	40;53.82926N	070;24.64527W	IAC-209-B-SPI.jpg	IAC-209-B-PV.jpg
IAC-209	C	8/4/21	4:05:37	-45.54	381158.8467	4528293.241	40;53.82649N	070;24.65131W	IAC-209-C-SPI.jpg	IAC-209-C-PV.jpg
IAC-214	A	8/4/21	4:37:40	-45.98	380587.1034	4527762.924	40;53.53494N	070;25.05233W	IAC-214-A-SPI.jpg	IAC-214-A-PV.jpg
IAC-214	B	8/4/21	4:42:51	-45.89	380579.7368	4527756.582	40;53.53145N	070;25.05751W	IAC-214-B-SPI.jpg	IAC-214-B-PV.jpg
IAC-214	C	8/4/21	4:47:20	-45.91	380578.4128	4527746.521	40;53.52600N	070;25.05833W	IAC-214-C-SPI.jpg	IAC-214-C-PV.jpg
IAC-149	A	8/4/21	5:17:07	-46.32	379903.6952	4527230.575	40;53.24130N	070;25.53278W	IAC-149-A-SPI.jpg	IAC-149-A-PV.jpg
IAC-149	B	8/4/21	5:22:46	-46.30	379913.7632	4527227.557	40;53.23975N	070;25.52557W	IAC-149-B-SPI.jpg	IAC-149-B-PV.jpg
IAC-149	C	8/4/21	5:27:07	-46.32	379917.1089	4527218.350	40;53.23481N	070;25.52308W	IAC-149-C-SPI.jpg	IAC-149-C-PV.jpg
IAC-194	A	8/4/21	6:26:18	-46.05	379926.5879	4528139.277	40;53.73250N	070;25.52702W	IAC-194-A-SPI.jpg	IAC-194-A-PV.jpg
IAC-194	B	8/4/21	6:30:57	-46.05	379917.8948	4528143.194	40;53.73454N	070;25.53325W	IAC-194-B-SPI.jpg	IAC-194-B-PV.jpg
IAC-194	C	8/4/21	6:35:38	-45.84	379908.5713	4528149.879	40;53.73807N	070;25.53997W	IAC-194-C-SPI.jpg	IAC-194-C-PV.jpg
IAC-178	A	8/4/21	7:07:58	-45.93	379464.1233	4528618.122	40;53.98716N	070;25.86190W	IAC-178-A-SPI.jpg	IAC-178-A-PV.jpg
IAC-178	B	8/4/21	7:12:52	-45.82	379455.7058	4528623.285	40;53.98988N	070;25.86796W	IAC-178-B-SPI.jpg	IAC-178-B-PV.jpg
IAC-178	C	8/4/21	7:17:46	-45.80	379451.3786	4528614.668	40;53.98518N	070;25.87094W	IAC-178-C-SPI.jpg	IAC-178-C-PV.jpg
IAC-170	A	8/4/21	7:46:23	-46.54	378984.7806	4528153.983	40;53.73213N	070;26.19783W	IAC-170-A-SPI.jpg	IAC-170-A-PV.jpg
IAC-170	B	8/4/21	7:51:04	-46.60	378990.1302	4528145.847	40;53.72778N	070;26.19392W	IAC-170-B-SPI.jpg	IAC-170-B-PV.jpg
IAC-170	C	8/4/21	7:55:04	-46.52	378990.0030	4528136.010	40;53.72246N	070;26.19390W	IAC-170-C-SPI.jpg	IAC-170-C-PV.jpg
IAC-157	A	8/4/21	8:26:28	-47.04	378057.2136	4528152.459	40;53.72304N	070;26.85830W	IAC-157-A-SPI.jpg	IAC-157-A-PV.jpg
IAC-157	B	8/4/21	8:31:08	-46.91	378063.5516	4528146.117	40;53.71967N	070;26.85372W	IAC-157-B-SPI.jpg	IAC-157-B-PV.jpg
IAC-157	C	8/4/21	8:35:26	-46.90	378063.8258	4528135.814	40;53.71411N	070;26.85340W	IAC-157-C-SPI.jpg	IAC-157-C-PV.jpg
IAC-150	A	8/4/21	9:05:52	-47.98	378296.9770	4526987.908	40;53.09594N	070;26.67389W	IAC-150-A-SPI.jpg	IAC-150-A-PV.jpg
IAC-150	B	8/4/21	9:10:29	-47.95	378289.5965	4526981.655	40;53.09250N	070;26.67907W	IAC-150-B-SPI.jpg	IAC-150-B-PV.jpg
IAC-150	C	8/4/21	9:15:14	-47.80	378298.4004	4526980.722	40;53.09207N	070;26.67279W	IAC-150-C-SPI.jpg	IAC-150-C-PV.jpg
IAC-151	A	8/4/21	9:56:04	-48.53	376199.0399	4527212.149	40;53.19823N	070;28.17020W	IAC-151-A-SPI.jpg	IAC-151-A-PV.jpg
IAC-151	B	8/4/21	10:00:49	-48.64	376208.4006	4527208.758	40;53.19648N	070;28.16350W	IAC-151-B-SPI.jpg	IAC-151-B-PV.jpg
IAC-151	C	8/4/21	10:05:10	-48.58	376212.0520	4527218.824	40;53.20196N	070;28.16102W	IAC-151-C-SPI.jpg	IAC-151-C-PV.jpg
IAC-152	A	8/4/21	10:43:52	-49.31	374354.4332	4527215.087	40;53.18296N	070;29.48353W	IAC-152-A-SPI.jpg	IAC-152-A-PV.jpg
IAC-152	B	8/4/21	10:49:24	-49.39	374362.4446	4527210.182	40;53.18038N	070;29.47777W	IAC-152-B-SPI.jpg	IAC-152-B-PV.jpg
IAC-152	C	8/4/21	10:53:38	-49.38	374367.1740	4527218.876	40;53.18512N	070;29.47451W	IAC-152-C-SPI.jpg	IAC-152-C-PV.jpg
IAC-156	A	8/4/21	11:30:09	-48.29	372994.4282	4528642.211	40;53.94147N	070;30.46931W	IAC-156-A-SPI.jpg	IAC-156-A-PV.jpg
IAC-156	B	8/4/21	11:34:57	-48.37	373003.0566	4528638.074	40;53.93931N	070;30.46311W	IAC-156-B-SPI.jpg	IAC-156-B-PV.jpg
IAC-156	C	8/4/21	11:39:40	-48.43	373003.2365	4528628.492	40;53.93414N	070;30.46286W	IAC-156-C-SPI.jpg	IAC-156-C-PV.jpg
IAC-155	A	8/4/21	12:32:07	-48.19	372519.4523	4528137.186	40;53.66416N	070;30.80131W	IAC-155-A-SPI.jpg	IAC-155-A-PV.jpg
IAC-155	B	8/4/21	12:36:50	-48.30	372511.2814	4528143.390	40;53.66744N	070;30.80720W	IAC-155-B-SPI.jpg	IAC-155-B-PV.jpg
IAC-155	C	8/4/21	12:43:19	-48.22	372503.1322	4528149.227	40;53.67052N	070;30.81308W	IAC-155-C-SPI.jpg	IAC-155-C-PV.jpg
IAC-154	A	8/4/21	13:14:28	-48.93	372068.0728	4527691.100	40;53.41891N	070;31.11720W	IAC-154-A-SPI.jpg	IAC-154-A-PV.jpg
IAC-154	B	8/4/21	13:20:04	-48.94	372060.1563	4527695.721	40;53.42133N	070;31.12289W	IAC-154-B-SPI.jpg	IAC-154-B-PV.jpg
IAC-154	C	8/4/21	13:23:37	-48.89	372051.4845	4527694.455	40;53.42057N	070;31.12905W	IAC-154-C-SPI.jpg	IAC-154-C-PV.jpg
IAC-153	A	8/4/21	13:58:01	-49.80	372503.0094	4527218.911	40;53.16785N	070;30.80171W	IAC-153-A-SPI.jpg	IAC-153-A-PV.jpg
IAC-153	B	8/4/21	14:01:48	-49.84	372511.7679	4527218.872	40;53.16791N	070;30.79547W	IAC-153-B-SPI.jpg	IAC-153-B-PV.jpg
IAC-153	C	8/4/21	14:06:25	-49.75	372523.3231	4527217.659	40;53.16736N	070;30.78723W	IAC-153-C-SPI.jpg	IAC-153-C-PV.jpg
IAC-119	A	8/4/21	14:53:39	-50.23	370286.6558	4526662.998	40;52.84660N	070;32.37267W	IAC-119-A-SPI.jpg	IAC-119-A-PV.jpg
IAC-119	B	8/4/21	14:58:01	-50.44	370293.3366	4526656.822	40;52.84332N	070;32.36783W	IAC-119-B-SPI.jpg	IAC-119-B-PV.jpg
IAC-119	C	8/4/21	15:01:28	-50.51	370297.1015	4526647.514	40;52.83833N	070;32.36504W	IAC-119-C-SPI.jpg	IAC-119-C-PV.jpg
IAC-119	D	8/4/21	15:18:59	-50.31	370293.6779	4526670.635	40;52.85079N	070;32.36776W	IAC-119-D-SPI.jpg	IAC-119-D-PV.jpg
IAC-119	E	8/4/21	15:23:09	-50.46	370301.2061	4526665.514	40;52.84809N	070;32.36234W	IAC-119-E-SPI.jpg	IAC-119-E-PV.jpg
IAC-119	F	8/4/21	15:27:27	-50.38	370307.7957	4526656.810	40;52.84345N	070;32.35754W	IAC-119-F-SPI.jpg	IAC-119-F-PV.jpg
IAC-118	A	8/4/21	16:01:25	-51.03	369730.5197	4526283.378	40;52.63619N	070;32.76380W	IAC-118-A-SPI.jpg	IAC-118-A-PV.jpg
IAC-118	B	8/4/21	16:06:11	-51.12	369730.8174	4526293.077	40;52.64143N	070;32.76371W	IAC-118-B-SPI.jpg	IAC-118-B-PV.jpg
IAC-118	C	8/4/21	16:10:05	-51.08	369723.9469	4526299.201	40;52.64467N	070;32.76868W	IAC-118-C-SPI.jpg	IAC-118-C-PV.jpg
IAC-120	A	8/4/21	16:46:37	-51.53	370961.9066	4525976.424	40;52.48203N	070;31.88341W	IAC-120-A-SPI.jpg	IAC-120-A-PV.jpg
IAC-120	B	8/4/21	16:50:25	-51.38	370969.2210	4525971.060	40;52.47920N	070;31.87814W	IAC-120-B-SPI.jpg	IAC-120-B-PV.jpg
IAC-120	C	8/4/21	16:54:12	-51.53	370977.7200	4525976.754	40;52.48236N	070;31.87216W	IAC-120-C-SPI.jpg	IAC-120-C-PV.jpg
IAC-116	A	8/4/21	17:33:35	-52.85	369433.5464	4525069.293	40;51.97737N	070;32.95990W	IAC-116-A-SPI.jpg	IAC-116-A-PV.jpg
IAC-116	B	8/4/21	17:39:19	-52.70	369440.2748	4525076.783	40;51.98148N	070;32.95521W	IAC-116-B-SPI.jpg	IAC-116-B-PV.jpg
IAC-116	C	8/4/21	17:43:13	-52.88	369449.9206	4525076.752	40;51.98156N	070;32.94834W	IAC-116-C-SPI.jpg	IAC-116-C-PV.jpg
IAC-117	A	8/4/21	18:53:08	-52.01	368812.3275	4524434.658	40;51.62852N	070;33.39401W	IAC-117-A-SPI.jpg	IAC-117-A-PV.jpg
IAC-117	B	8/4/21	18:58:23	-52.35	368805.4303	4524440.185	40;51.63144N	070;33.39898W	IAC-117-B-SPI.jpg	IAC-117-B-PV.jpg
IAC-117	C	8/4/21	19:02:19	-52.09	368794.7420	4524438.972	40;51.63068N	070;33.40658W	IAC-117-C-SPI.jpg	IAC-117-C-PV.jpg
IAC-126	A	8/6/21	22:21:53	-51.65	369730.2636	4523031.576	40;50.87920N	070;32.72312W	IAC-126-A-SPI.jpg	IAC-126-A-PV.jpg
IAC-126	B	8/6/21	22:26:24	-51.70	369729.9436	4523022.118	40;50.87409N	070;32.72323W	IAC-126-B-SPI.jpg	IAC-126-B-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-126	C	8/6/21	22:30:34	-51.71	369731.1185	4523012.062	40;50.86867N	070;32.72227W	IAC-126-C-SPI.jpg	IAC-126-C-PV.jpg
IAC-125	A	8/6/21	23:00:55	-51.50	369745.6658	4522204.169	40;50.43229N	070;32.70178W	IAC-125-A-SPI.jpg	IAC-125-A-PV.jpg
IAC-125	B	8/6/21	23:05:47	-51.39	369737.1071	4522206.633	40;50.43354N	070;32.70790W	IAC-125-B-SPI.jpg	IAC-125-B-PV.jpg
IAC-125	C	8/6/21	23:10:35	-51.52	369726.6252	4522207.727	40;50.43403N	070;32.71537W	IAC-125-C-SPI.jpg	IAC-125-C-PV.jpg
IAC-127	A	8/6/21	23:47:14	-51.61	370295.1898	4523524.658	40;51.15100N	070;32.32732W	IAC-127-A-SPI.jpg	IAC-127-A-PV.jpg
IAC-127	B	8/6/21	23:51:56	-51.55	370288.4734	4523518.409	40;51.14756N	070;32.33202W	IAC-127-B-SPI.jpg	IAC-127-B-PV.jpg
IAC-127	C	8/6/21	23:55:52	-51.42	370280.4049	4523512.252	40;51.14415N	070;32.33769W	IAC-127-C-SPI.jpg	IAC-127-C-PV.jpg
IAC-128	A	8/7/21	0:42:21	-52.16	371072.4172	4523523.183	40;51.15756N	070;31.77424W	IAC-128-A-SPI.jpg	IAC-128-A-PV.jpg
IAC-128	B	8/7/21	0:47:17	-52.12	371074.5727	4523513.653	40;51.15243N	070;31.77259W	IAC-128-B-SPI.jpg	IAC-128-B-PV.jpg
IAC-128	C	8/7/21	0:52:48	-52.09	371068.6000	4523505.336	40;51.14788N	070;31.77674W	IAC-128-C-SPI.jpg	IAC-128-C-PV.jpg
IAC-129	A	8/7/21	1:28:01	-51.09	372493.3456	4523507.444	40;51.16239N	070;30.76293W	IAC-129-A-SPI.jpg	IAC-129-A-PV.jpg
IAC-129	B	8/7/21	1:33:09	-51.19	372496.5111	4523516.871	40;51.16751N	070;30.76079W	IAC-129-B-SPI.jpg	IAC-129-B-PV.jpg
IAC-129	C	8/7/21	1:38:12	-51.18	372506.2474	4523515.103	40;51.16665N	070;30.75384W	IAC-129-C-SPI.jpg	IAC-129-C-PV.jpg
IAC-121	A	8/7/21	7:16:48	-51.68	372516.6701	4525380.258	40;52.17452N	070;30.76936W	IAC-121-A-SPI.jpg	IAC-121-A-PV.jpg
IAC-121	B	8/7/21	7:21:08	-51.63	372507.4762	4525377.049	40;52.17270N	070;30.77586W	IAC-121-B-SPI.jpg	IAC-121-B-PV.jpg
IAC-121	C	8/7/21	7:25:06	-51.61	372507.7442	4525367.984	40;52.16781N	070;30.77556W	IAC-121-C-SPI.jpg	IAC-121-C-PV.jpg
IAC-130	A	8/7/21	8:05:13	-51.44	373991.2302	4524085.787	40;51.48878N	070;29.70407W	IAC-130-A-SPI.jpg	IAC-130-A-PV.jpg
IAC-130	B	8/7/21	8:10:19	-51.51	373984.9017	4524077.436	40;51.48421N	070;29.70847W	IAC-130-B-SPI.jpg	IAC-130-B-PV.jpg
IAC-130	C	8/7/21	8:14:47	-51.50	373992.0548	4524071.264	40;51.48094N	070;29.70330W	IAC-130-C-SPI.jpg	IAC-130-C-PV.jpg
IAC-131	A	8/7/21	8:46:11	-51.10	374743.1564	4524829.067	40;51.89731N	070;29.17793W	IAC-131-A-SPI.jpg	IAC-131-A-PV.jpg
IAC-131	B	8/7/21	8:51:16	-51.12	374733.4545	4524826.891	40;51.89604N	070;29.18481W	IAC-131-B-SPI.jpg	IAC-131-B-PV.jpg
IAC-131	C	8/7/21	8:56:10	-51.06	374743.1656	4524821.238	40;51.89308N	070;29.17783W	IAC-131-C-SPI.jpg	IAC-131-C-PV.jpg
IAC-131	D	8/7/21	9:25:43	-50.88	374745.9007	4524812.501	40;51.88838N	070;29.17578W	IAC-131-D-SPI.jpg	IAC-131-D-PV.jpg
IAC-131	E	8/7/21	9:30:22	-50.95	374736.9637	4524814.187	40;51.88921N	070;29.18216W	IAC-131-E-SPI.jpg	IAC-131-E-PV.jpg
IAC-131	F	8/7/21	9:34:42	-50.91	374729.3744	4524820.590	40;51.89260N	070;29.18764W	IAC-131-F-SPI.jpg	IAC-131-F-PV.jpg
IAC-122	A	8/7/21	10:06:06	-50.84	374147.4036	4525616.855	40;52.31749N	070;29.61151W	IAC-122-A-SPI.jpg	IAC-122-A-PV.jpg
IAC-122	B	8/7/21	10:10:36	-50.81	374138.7214	4525611.541	40;52.31454N	070;29.61763W	IAC-122-B-SPI.jpg	IAC-122-B-PV.jpg
IAC-122	C	8/7/21	10:15:00	-50.82	374142.9855	4525603.648	40;52.31031N	070;29.61450W	IAC-122-C-SPI.jpg	IAC-122-C-PV.jpg
IAC-123	A	8/7/21	10:45:35	-50.18	374953.2098	4525876.488	40;52.46518N	070;29.04107W	IAC-123-A-SPI.jpg	IAC-123-A-PV.jpg
IAC-123	B	8/7/21	10:50:24	-50.18	374943.2577	4525878.526	40;52.46619N	070;29.04818W	IAC-123-B-SPI.jpg	IAC-123-B-PV.jpg
IAC-123	C	8/7/21	10:54:41	-50.21	374940.4452	4525868.144	40;52.46056N	070;29.05005W	IAC-123-C-SPI.jpg	IAC-123-C-PV.jpg
IAC-123	D	8/7/21	11:14:00	-50.25	374928.5333	4525873.909	40;52.46356N	070;29.05860W	IAC-123-D-SPI.jpg	IAC-123-D-PV.jpg
IAC-123	E	8/7/21	11:18:06	-50.01	374929.8227	4525863.878	40;52.45815N	070;29.05756W	IAC-123-E-SPI.jpg	IAC-123-E-PV.jpg
IAC-123	F	8/7/21	11:22:24	-50.10	374937.7374	4525858.311	40;52.45522N	070;29.05186W	IAC-123-F-SPI.jpg	IAC-123-F-PV.jpg
IAC-132	A	8/7/21	12:35:18	-49.32	376131.7049	4525784.519	40;52.42623N	070;28.20107W	IAC-132-A-SPI.jpg	IAC-132-A-PV.jpg
IAC-132	B	8/7/21	12:40:19	-49.41	376124.9148	4525779.587	40;52.42351N	070;28.20585W	IAC-132-B-SPI.jpg	IAC-132-B-PV.jpg
IAC-132	C	8/7/21	12:45:01	-49.25	376115.0385	4525781.296	40;52.42434N	070;28.21290W	IAC-132-C-SPI.jpg	IAC-132-C-PV.jpg
IAC-124	A	8/7/21	13:22:44	-48.94	376456.9746	4526368.959	40;52.74497N	070;27.97650W	IAC-124-A-SPI.jpg	IAC-124-A-PV.jpg
IAC-124	B	8/7/21	13:27:11	-48.92	376446.8823	4526370.877	40;52.74591N	070;27.98371W	IAC-124-B-SPI.jpg	IAC-124-B-PV.jpg
IAC-124	C	8/7/21	13:30:50	-48.99	376439.3773	4526364.988	40;52.74266N	070;27.98898W	IAC-124-C-SPI.jpg	IAC-124-C-PV.jpg
IAC-133	A	8/7/21	14:13:20	-48.41	377554.5161	4526515.759	40;52.83418N	070;27.19691W	IAC-133-A-SPI.jpg	IAC-133-A-PV.jpg
IAC-133	B	8/7/21	14:17:36	-48.36	377560.9278	4526507.588	40;52.82982N	070;27.19224W	IAC-133-B-SPI.jpg	IAC-133-B-PV.jpg
IAC-133	C	8/7/21	14:22:09	-48.35	377564.8874	4526498.281	40;52.82483N	070;27.18932W	IAC-133-C-SPI.jpg	IAC-133-C-PV.jpg
IAC-140	A	8/7/21	14:58:36	-48.33	378076.0966	4526289.500	40;52.71660N	070;26.82292W	IAC-140-A-SPI.jpg	IAC-140-A-PV.jpg
IAC-140	B	8/7/21	15:03:04	-48.41	378067.0212	4526291.801	40;52.71776N	070;26.82941W	IAC-140-B-SPI.jpg	IAC-140-B-PV.jpg
IAC-140	C	8/7/21	15:07:25	-48.08	378057.7424	4526287.464	40;52.71533N	070;26.83597W	IAC-140-C-SPI.jpg	IAC-140-C-PV.jpg
IAC-115	A	8/7/21	15:38:18	-48.46	378337.6679	4525896.688	40;52.50668N	070;26.63210W	IAC-115-A-SPI.jpg	IAC-115-A-PV.jpg
IAC-115	B	8/7/21	15:42:36	-48.52	378333.6403	4525906.117	40;52.51174N	070;26.63508W	IAC-115-B-SPI.jpg	IAC-115-B-PV.jpg
IAC-115	C	8/7/21	15:46:52	-48.54	378341.2175	4525912.219	40;52.51510N	070;26.62976W	IAC-115-C-SPI.jpg	IAC-115-C-PV.jpg
IAC-096	A	8/7/21	16:18:08	-47.86	378998.8942	4525856.097	40;52.49062N	070;26.16093W	IAC-096-A-SPI.jpg	IAC-096-A-PV.jpg
IAC-096	B	8/7/21	16:21:36	-47.95	378992.5520	4525851.502	40;52.48809N	070;26.16539W	IAC-096-B-SPI.jpg	IAC-096-B-PV.jpg
IAC-096	C	8/7/21	16:24:25	-47.80	378983.7144	4525845.421	40;52.48472N	070;26.17161W	IAC-096-C-SPI.jpg	IAC-096-C-PV.jpg
IAC-145	A	8/7/21	16:52:10	-47.48	379925.2729	4526300.923	40;52.73916N	070;25.50664W	IAC-145-A-SPI.jpg	IAC-145-A-PV.jpg
IAC-145	B	8/7/21	16:54:57	-47.58	379920.1883	4526295.289	40;52.73607N	070;25.51019W	IAC-145-B-SPI.jpg	IAC-145-B-PV.jpg
IAC-145	C	8/7/21	16:57:59	-47.65	379911.1634	4526288.165	40;52.73214N	070;25.51653W	IAC-145-C-SPI.jpg	IAC-145-C-PV.jpg
IAC-141	A	8/7/21	17:47:55	-45.98	383630.6123	4525366.032	40;52.26609N	070;22.85826W	IAC-141-A-SPI.jpg	IAC-141-A-PV.jpg
IAC-141	B	8/7/21	17:51:43	-46.03	383621.5145	4525366.476	40;52.26625N	070;22.86474W	IAC-141-B-SPI.jpg	IAC-141-B-PV.jpg
IAC-141	C	8/7/21	17:55:30	-46.04	383611.8288	4525365.380	40;52.26558N	070;22.87163W	IAC-141-C-SPI.jpg	IAC-141-C-PV.jpg
IAC-142	A	8/7/21	18:36:48	-47.84	382706.1377	4524454.847	40;51.76582N	070;23.50602W	IAC-142-A-SPI.jpg	IAC-142-A-PV.jpg
IAC-142	B	8/7/21	18:42:12	-47.81	382700.3155	4524446.842	40;51.76145N	070;23.51007W	IAC-142-B-SPI.jpg	IAC-142-B-PV.jpg
IAC-142	C	8/7/21	18:47:26	-47.86	382693.8454	4524439.425	40;51.75738N	070;23.51459W	IAC-142-C-SPI.jpg	IAC-142-C-PV.jpg
IAC-143	A	8/7/21	19:18:22	-48.87	381782.4058	4523520.890	40;51.25320N	070;24.15282W	IAC-143-A-SPI.jpg	IAC-143-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-143	B	8/7/21	19:22:50	-48.89	381773.3223	4523516.666	40;51.25084N	070;24.15924W	IAC-143-B-SPI.jpg	IAC-143-B-PV.jpg
IAC-143	C	8/7/21	19:27:04	-48.86	381764.0591	4523511.899	40;51.24818N	070;24.16578W	IAC-143-C-SPI.jpg	IAC-143-C-PV.jpg
IAC-144	A	8/7/21	19:57:10	-48.23	380857.7841	4524449.327	40;51.74684N	070;24.82149W	IAC-144-A-SPI.jpg	IAC-144-A-PV.jpg
IAC-144	B	8/7/21	20:01:14	-48.20	380849.6643	4524444.959	40;51.74441N	070;24.82722W	IAC-144-B-SPI.jpg	IAC-144-B-PV.jpg
IAC-144	C	8/7/21	20:05:20	-48.29	380840.7219	4524440.947	40;51.74216N	070;24.83354W	IAC-144-C-SPI.jpg	IAC-144-C-PV.jpg
IAC-095	A	8/7/21	20:38:15	-49.80	379003.2252	4524455.424	40;51.73383N	070;26.14149W	IAC-095-A-SPI.jpg	IAC-095-A-PV.jpg
IAC-095	B	8/7/21	20:43:14	-49.80	378996.8013	4524448.016	40;51.72977N	070;26.14598W	IAC-095-B-SPI.jpg	IAC-095-B-PV.jpg
IAC-095	C	8/7/21	20:48:19	-49.71	378990.4856	4524440.350	40;51.72557N	070;26.15039W	IAC-095-C-SPI.jpg	IAC-095-C-PV.jpg
IAC-218	A	8/7/21	21:17:02	-50.00	378077.4345	4524453.934	40;51.72479N	070;26.80038W	IAC-218-A-SPI.jpg	IAC-218-A-PV.jpg
IAC-218	B	8/7/21	21:21:47	-50.15	378070.4502	4524447.137	40;51.72105N	070;26.80527W	IAC-218-B-SPI.jpg	IAC-218-B-PV.jpg
IAC-218	C	8/7/21	21:26:57	-50.07	378063.6124	4524439.565	40;51.71690N	070;26.81005W	IAC-218-C-SPI.jpg	IAC-218-C-PV.jpg
IAC-114	A	8/7/21	21:53:39	-50.02	377601.2690	4524404.394	40;51.69376N	070;27.13869W	IAC-114-A-SPI.jpg	IAC-114-A-PV.jpg
IAC-114	B	8/7/21	21:58:56	-49.95	377592.5858	4524408.124	40;51.69570N	070;27.14491W	IAC-114-B-SPI.jpg	IAC-114-B-PV.jpg
IAC-114	C	8/7/21	22:03:23	-49.97	377583.8334	4524412.206	40;51.69783N	070;27.15119W	IAC-114-C-SPI.jpg	IAC-114-C-PV.jpg
IAC-139	A	8/7/21	22:37:27	-49.47	376216.2992	4524439.160	40;51.70006N	070;28.12479W	IAC-139-A-SPI.jpg	IAC-139-A-PV.jpg
IAC-139	B	8/7/21	22:42:41	-49.42	376207.3627	4524443.731	40;51.70245N	070;28.13120W	IAC-139-B-SPI.jpg	IAC-139-B-PV.jpg
IAC-139	C	8/7/21	22:46:41	-49.52	376201.1001	4524436.435	40;51.69845N	070;28.13557W	IAC-139-C-SPI.jpg	IAC-139-C-PV.jpg
IAC-138	A	8/7/21	23:18:39	-51.66	374765.8871	4522993.378	40;50.90565N	070;29.13959W	IAC-138-A-SPI.jpg	IAC-138-A-PV.jpg
IAC-138	B	8/7/21	23:22:43	-51.56	374758.7904	4522986.843	40;50.90205N	070;29.14456W	IAC-138-B-SPI.jpg	IAC-138-B-PV.jpg
IAC-138	C	8/7/21	23:26:32	-51.73	374752.4866	4522980.446	40;50.89854N	070;29.14897W	IAC-138-C-SPI.jpg	IAC-138-C-PV.jpg
IAC-112	A	8/8/21	0:20:48	-50.86	375890.4687	4522271.163	40;50.52567N	070;28.33074W	IAC-112-A-SPI.jpg	IAC-112-A-PV.jpg
IAC-112	B	8/8/21	0:25:37	-50.85	375881.0409	4522268.650	40;50.52423N	070;28.33742W	IAC-112-B-SPI.jpg	IAC-112-B-PV.jpg
IAC-112	C	8/8/21	0:29:22	-50.79	375881.6164	4522260.150	40;50.51964N	070;28.33691W	IAC-112-C-SPI.jpg	IAC-112-C-PV.jpg
IAC-113	A	8/8/21	1:10:18	-50.09	376601.7633	4522994.029	40;50.92270N	070;27.83326W	IAC-113-A-SPI.jpg	IAC-113-A-PV.jpg
IAC-113	B	8/8/21	1:15:32	-49.75	376604.4727	4522984.907	40;50.91780N	070;27.83122W	IAC-113-B-SPI.jpg	IAC-113-B-PV.jpg
IAC-113	C	8/8/21	1:19:43	-50.24	376604.6906	4522974.907	40;50.91240N	070;27.83095W	IAC-113-C-SPI.jpg	IAC-113-C-PV.jpg
IAC-091	A	8/8/21	1:54:37	-50.17	377472.3187	4522654.515	40;50.74709N	070;27.20979W	IAC-091-A-SPI.jpg	IAC-091-A-PV.jpg
IAC-091	B	8/8/21	1:59:57	-50.29	377463.3277	4522651.452	40;50.74535N	070;27.21615W	IAC-091-B-SPI.jpg	IAC-091-B-PV.jpg
IAC-091	C	8/8/21	2:04:11	-49.36	377464.9900	4522642.088	40;50.74031N	070;27.21486W	IAC-091-C-SPI.jpg	IAC-091-C-PV.jpg
IAC-094	A	8/8/21	2:43:56	-48.83	379899.1923	4522585.311	40;50.73124N	070;25.48216W	IAC-094-A-SPI.jpg	IAC-094-A-PV.jpg
IAC-094	B	8/8/21	2:49:29	-49.01	379908.2676	4522588.643	40;50.73312N	070;25.47574W	IAC-094-B-SPI.jpg	IAC-094-B-PV.jpg
IAC-094	C	8/8/21	2:54:30	-49.04	379909.4668	4522598.954	40;50.73870N	070;25.47501W	IAC-094-C-SPI.jpg	IAC-094-C-PV.jpg
IAC-093	A	8/8/21	3:23:03	-49.16	379900.9880	4521673.306	40;50.23846N	070;25.47033W	IAC-093-A-SPI.jpg	IAC-093-A-PV.jpg
IAC-093	B	8/8/21	3:27:21	-49.22	379906.2695	4521665.413	40;50.23424N	070;25.46648W	IAC-093-B-SPI.jpg	IAC-093-B-PV.jpg
IAC-093	C	8/8/21	3:31:20	-49.19	379906.2458	4521656.078	40;50.22920N	070;25.46639W	IAC-093-C-SPI.jpg	IAC-093-C-PV.jpg
IAC-092	A	8/8/21	4:09:50	-48.72	378985.3088	4520751.418	40;49.73225N	070;26.11105W	IAC-092-A-SPI.jpg	IAC-092-A-PV.jpg
IAC-092	B	8/8/21	4:14:56	-48.82	378993.9486	4520746.651	40;49.72975N	070;26.10485W	IAC-092-B-SPI.jpg	IAC-092-B-PV.jpg
IAC-092	C	8/8/21	4:18:46	-48.70	378991.2395	4520738.353	40;49.72524N	070;26.10668W	IAC-092-C-SPI.jpg	IAC-092-C-PV.jpg
IAC-090	A	8/8/21	5:00:42	-51.00	377123.2123	4520734.135	40;49.70630N	070;27.43546W	IAC-090-A-SPI.jpg	IAC-090-A-PV.jpg
IAC-090	B	8/8/21	5:05:20	-51.04	377130.9662	4520739.690	40;49.70937N	070;27.43001W	IAC-090-B-SPI.jpg	IAC-090-B-PV.jpg
IAC-090	C	8/8/21	5:10:02	-51.01	377140.6010	4520736.157	40;49.70755N	070;27.42312W	IAC-090-C-SPI.jpg	IAC-090-C-PV.jpg
IAC-089	A	8/8/21	5:51:50	-51.77	377133.6245	4518899.318	40;48.71498N	070;27.40636W	IAC-089-A-SPI.jpg	IAC-089-A-PV.jpg
IAC-089	B	8/8/21	5:56:11	-51.76	377141.4925	4518893.674	40;48.71200N	070;27.40069W	IAC-089-B-SPI.jpg	IAC-089-B-PV.jpg
IAC-089	C	8/8/21	6:00:23	-51.65	377137.8061	4518884.416	40;48.70696N	070;27.40321W	IAC-089-C-SPI.jpg	IAC-089-C-PV.jpg
IAC-088	A	8/8/21	6:47:05	-50.12	376219.2616	4517972.091	40;48.20572N	070;28.04559W	IAC-088-A-SPI.jpg	IAC-088-A-PV.jpg
IAC-088	B	8/8/21	6:53:24	-50.12	376209.6582	4517969.577	40;48.20428N	070;28.05239W	IAC-088-B-SPI.jpg	IAC-088-B-PV.jpg
IAC-088	C	8/8/21	6:57:13	-50.15	376211.7368	4517960.264	40;48.19927N	070;28.05080W	IAC-088-C-SPI.jpg	IAC-088-C-PV.jpg
IAC-087	A	8/8/21	7:28:50	-50.37	375280.7245	4517042.889	40;47.69512N	070;28.70182W	IAC-087-A-SPI.jpg	IAC-087-A-PV.jpg
IAC-087	B	8/8/21	7:32:55	-50.44	375285.2264	4517034.701	40;47.69074N	070;28.69852W	IAC-087-B-SPI.jpg	IAC-087-B-PV.jpg
IAC-087	C	8/8/21	7:37:26	-50.40	375291.0951	4517026.669	40;47.68645N	070;28.69425W	IAC-087-C-SPI.jpg	IAC-087-C-PV.jpg
IAC-109	A	8/8/21	8:21:26	-51.03	373448.1563	4518887.568	40;48.67504N	070;30.02719W	IAC-109-A-SPI.jpg	IAC-109-A-PV.jpg
IAC-109	B	8/8/21	8:25:53	-50.97	373441.7765	4518894.015	40;48.67846N	070;30.03180W	IAC-109-B-SPI.jpg	IAC-109-B-PV.jpg
IAC-109	C	8/8/21	8:29:42	-51.07	373435.7368	4518886.929	40;48.67458N	070;30.03601W	IAC-109-C-SPI.jpg	IAC-109-C-PV.jpg
IAC-110	A	8/8/21	9:03:58	-52.94	374361.8753	4519804.085	40;49.17868N	070;29.38847W	IAC-110-A-SPI.jpg	IAC-110-A-PV.jpg
IAC-110	B	8/8/21	9:08:03	-52.94	374360.2087	4519813.386	40;49.18369N	070;29.38977W	IAC-110-B-SPI.jpg	IAC-110-B-PV.jpg
IAC-110	C	8/8/21	9:12:47	-53.02	374360.4355	4519823.322	40;49.18906N	070;29.38973W	IAC-110-C-SPI.jpg	IAC-110-C-PV.jpg
IAC-111	A	8/8/21	9:48:14	-52.50	375294.5068	4520728.544	40;49.68673N	070;28.73624W	IAC-111-A-SPI.jpg	IAC-111-A-PV.jpg
IAC-111	B	8/8/21	9:53:09	-52.36	375299.1576	4520737.660	40;49.69169N	070;28.73304W	IAC-111-B-SPI.jpg	IAC-111-B-PV.jpg
IAC-111	C	8/8/21	9:57:14	-52.31	375289.6035	4520736.673	40;49.69107N	070;28.73982W	IAC-111-C-SPI.jpg	IAC-111-C-PV.jpg
IAC-111	D	8/8/21	10:33:31	-52.16	375291.2530	4520745.656	40;49.69594N	070;28.73876W	IAC-111-D-SPI.jpg	IAC-111-D-PV.jpg
IAC-111	E	8/8/21	10:37:29	-52.05	375281.4412	4520745.598	40;49.69582N	070;28.74573W	IAC-111-E-SPI.jpg	IAC-111-E-PV.jpg
IAC-111	F	8/8/21	10:41:42	-52.29	375275.8601	4520737.452	40;49.69137N	070;28.74961W	IAC-111-F-SPI.jpg	IAC-111-F-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-137	A	8/8/21	11:24:24	-52.33	373903.8761	4522117.042	40;50.42421N	070;29.74231W	IAC-137-A-SPI.jpg	IAC-137-A-PV.jpg
IAC-137	B	8/8/21	11:28:22	-52.36	373896.5058	4522122.677	40;50.42719N	070;29.74762W	IAC-137-B-SPI.jpg	IAC-137-B-PV.jpg
IAC-137	C	8/8/21	11:32:48	-52.36	373896.0745	4522132.723	40;50.43261N	070;29.74805W	IAC-137-C-SPI.jpg	IAC-137-C-PV.jpg
IAC-136	A	8/8/21	12:20:13	-52.47	372501.5360	4521652.459	40;50.16018N	070;30.73431W	IAC-136-A-SPI.jpg	IAC-136-A-PV.jpg
IAC-136	B	8/8/21	12:25:15	-52.60	372507.3038	4521660.058	40;50.16434N	070;30.73030W	IAC-136-B-SPI.jpg	IAC-136-B-PV.jpg
IAC-136	C	8/8/21	12:30:22	-52.49	372511.0997	4521668.958	40;50.16918N	070;30.72771W	IAC-136-C-SPI.jpg	IAC-136-C-PV.jpg
IAC-135	A	8/8/21	13:05:22	-52.80	371598.7355	4521127.239	40;49.86794N	070;31.37008W	IAC-135-A-SPI.jpg	IAC-135-A-PV.jpg
IAC-135	B	8/8/21	13:09:08	-52.65	371589.5584	4521127.203	40;49.86784N	070;31.37661W	IAC-135-B-SPI.jpg	IAC-135-B-PV.jpg
IAC-135	C	8/8/21	13:13:00	-52.74	371580.5935	4521130.302	40;49.86943N	070;31.38302W	IAC-135-C-SPI.jpg	IAC-135-C-PV.jpg
IAC-134	A	8/8/21	13:53:53	-51.04	371581.7766	4520261.433	40;49.39997N	070;31.37144W	IAC-134-A-SPI.jpg	IAC-134-A-PV.jpg
IAC-134	B	8/8/21	13:58:21	-51.11	371583.2372	4520270.599	40;49.40494N	070;31.37051W	IAC-134-B-SPI.jpg	IAC-134-B-PV.jpg
IAC-134	C	8/8/21	14:02:35	-51.12	371575.9558	4520278.674	40;49.40923N	070;31.37579W	IAC-134-C-SPI.jpg	IAC-134-C-PV.jpg
IAC-102	A	8/8/21	14:36:40	-50.97	369718.8450	4519269.446	40;48.84637N	070;32.68405W	IAC-102-A-SPI.jpg	IAC-102-A-PV.jpg
IAC-102	B	8/8/21	14:41:52	-51.16	369726.8114	4519264.652	40;48.84385N	070;32.67832W	IAC-102-B-SPI.jpg	IAC-102-B-PV.jpg
IAC-102	C	8/8/21	14:47:20	-51.13	369732.1623	4519256.840	40;48.83968N	070;32.67442W	IAC-102-C-SPI.jpg	IAC-102-C-PV.jpg
IAC-101	A	8/8/21	15:15:42	-51.26	369714.2187	4518423.156	40;48.38906N	070;32.67673W	IAC-101-A-SPI.jpg	IAC-101-A-PV.jpg
IAC-101	B	8/8/21	15:20:06	-51.27	369724.2681	4518425.410	40;48.39037N	070;32.66961W	IAC-101-B-SPI.jpg	IAC-101-B-PV.jpg
IAC-101	C	8/8/21	15:23:59	-51.34	369733.5596	4518425.262	40;48.39038N	070;32.66301W	IAC-101-C-SPI.jpg	IAC-101-C-PV.jpg
IAC-100	A	8/8/21	16:05:56	-52.34	368809.7868	4517038.457	40;47.63224N	070;33.30239W	IAC-100-A-SPI.jpg	IAC-100-A-PV.jpg
IAC-100	B	8/8/21	16:10:20	-52.31	368803.0441	4517030.320	40;47.62778N	070;33.30708W	IAC-100-B-SPI.jpg	IAC-100-B-PV.jpg
IAC-100	C	8/8/21	16:14:04	-52.36	368793.3862	4517032.286	40;47.62875N	070;33.31398W	IAC-100-C-SPI.jpg	IAC-100-C-PV.jpg
IAC-104	A	8/8/21	13:27:16	-52.22	367883.8112	4518405.282	40;48.36185N	070;33.97808W	IAC-104-A-SPI.jpg	IAC-104-A-PV.jpg
IAC-104	B	8/8/21	13:49:42	-52.35	367874.9954	4518408.448	40;48.36348N	070;33.98438W	IAC-104-B-SPI.jpg	IAC-104-B-PV.jpg
IAC-104	C	8/8/21	13:51:26	-52.34	367866.6515	4518413.621	40;48.36619N	070;33.99038W	IAC-104-C-SPI.jpg	IAC-104-C-PV.jpg
IAC-105	A	8/8/21	17:24:20	-51.69	367882.6246	4519229.164	40;48.80699N	070;33.98939W	IAC-105-A-SPI.jpg	IAC-105-A-PV.jpg
IAC-105	B	8/8/21	17:28:35	-51.70	367874.1400	4519224.052	40;48.80415N	070;33.99536W	IAC-105-B-SPI.jpg	IAC-105-B-PV.jpg
IAC-105	C	8/8/21	17:32:39	-51.75	367867.1835	4519230.045	40;48.80732N	070;34.00038W	IAC-105-C-SPI.jpg	IAC-105-C-PV.jpg
IAC-106	A	8/8/21	18:24:15	-50.96	367891.2213	4520344.247	40;49.40956N	070;33.99745W	IAC-106-A-SPI.jpg	IAC-106-A-PV.jpg
IAC-106	B	8/8/21	18:29:46	-51.02	367882.6538	4520337.806	40;49.40600N	070;34.00347W	IAC-106-B-SPI.jpg	IAC-106-B-PV.jpg
IAC-106	C	8/8/21	18:34:14	-50.90	367875.8257	4520330.421	40;49.40194N	070;34.00823W	IAC-106-C-SPI.jpg	IAC-106-C-PV.jpg
IAC-107	A	8/8/21	19:10:46	-50.25	367877.4953	4521063.261	40;49.79792N	070;34.01636W	IAC-107-A-SPI.jpg	IAC-107-A-PV.jpg
IAC-107	B	8/8/21	19:15:38	-50.37	367877.9127	4521054.110	40;49.79298N	070;34.01595W	IAC-107-B-SPI.jpg	IAC-107-B-PV.jpg
IAC-107	C	8/8/21	19:20:24	-48.01	367868.8994	4521056.128	40;49.79398N	070;34.02239W	IAC-107-C-SPI.jpg	IAC-107-C-PV.jpg
IAC-063	A	8/8/21	20:04:00	-50.26	366040.5595	4523032.528	40;50.84404N	070;35.34843W	IAC-063-A-SPI.jpg	IAC-063-A-PV.jpg
IAC-063	B	8/8/21	20:09:22	-50.38	366029.7047	4523030.784	40;50.84299N	070;35.35614W	IAC-063-B-SPI.jpg	IAC-063-B-PV.jpg
IAC-063	C	8/8/21	20:14:04	-50.15	366024.0641	4523039.328	40;50.84755N	070;35.36026W	IAC-063-C-SPI.jpg	IAC-063-C-PV.jpg
IAC-062	A	8/8/21	20:45:51	-53.35	365787.2191	4517263.117	40;47.72433N	070;35.45416W	IAC-062-A-SPI.jpg	IAC-062-A-PV.jpg
IAC-062	B	8/8/21	20:50:40	-52.88	365790.0316	4517273.505	40;47.72997N	070;35.45229W	IAC-062-B-SPI.jpg	IAC-062-B-PV.jpg
IAC-062	C	8/8/21	20:54:34	-53.32	365794.3398	4517264.261	40;47.72502N	070;35.44911W	IAC-062-C-SPI.jpg	IAC-062-C-PV.jpg
IAC-065	A	8/8/21	21:26:55	-50.59	366027.9447	4521145.759	40;49.82449N	070;35.33306W	IAC-065-A-SPI.jpg	IAC-065-A-PV.jpg
IAC-065	B	8/8/21	21:31:04	-50.65	366026.9886	4521136.076	40;49.81925N	070;35.33361W	IAC-065-B-SPI.jpg	IAC-065-B-PV.jpg
IAC-065	C	8/8/21	21:35:25	-50.71	366029.8126	4521127.141	40;49.81445N	070;35.33149W	IAC-065-C-SPI.jpg	IAC-065-C-PV.jpg
IAC-066	A	8/8/21	22:13:52	-51.06	366024.2536	4520362.483	40;49.40125N	070;35.32558W	IAC-066-A-SPI.jpg	IAC-066-A-PV.jpg
IAC-066	B	8/8/21	22:17:58	-51.13	366028.3135	4520353.511	40;49.39644N	070;35.32258W	IAC-066-B-SPI.jpg	IAC-066-B-PV.jpg
IAC-066	C	8/8/21	22:22:39	-51.05	366031.0067	4520343.772	40;49.39121N	070;35.32054W	IAC-066-C-SPI.jpg	IAC-066-C-PV.jpg
IAC-067	A	8/8/21	23:05:42	-51.62	366012.9764	4518893.689	40;48.60755N	070;35.31467W	IAC-067-A-SPI.jpg	IAC-067-A-PV.jpg
IAC-067	B	8/8/21	23:10:09	-51.63	366020.2277	4518888.851	40;48.60500N	070;35.30945W	IAC-067-B-SPI.jpg	IAC-067-B-PV.jpg
IAC-067	C	8/8/21	23:14:46	-51.72	366028.6457	4518882.515	40;48.60166N	070;35.30338W	IAC-067-C-SPI.jpg	IAC-067-C-PV.jpg
IAC-103	A	8/9/21	0:24:19	-53.07	366934.8442	4517030.426	40;47.60981N	070;34.63527W	IAC-103-A-SPI.jpg	IAC-103-A-PV.jpg
IAC-103	B	8/9/21	0:29:08	-53.07	366943.0426	4517035.790	40;47.61279N	070;34.62951W	IAC-103-B-SPI.jpg	IAC-103-B-PV.jpg
IAC-103	C	8/9/21	0:33:20	-53.06	366952.1576	4517033.197	40;47.61147N	070;34.62300W	IAC-103-C-SPI.jpg	IAC-103-C-PV.jpg
IAC-062	A	8/9/21	1:14:49	-53.35	365787.2191	4517263.117	40;47.72433N	070;35.45416W	IAC-062-A-SPI.jpg	IAC-062-A-PV.jpg
IAC-062	B	8/9/21	1:19:55	-52.88	365790.0316	4517273.505	40;47.72997N	070;35.45229W	IAC-062-B-SPI.jpg	IAC-062-B-PV.jpg
IAC-062	C	8/9/21	1:24:34	-53.32	365794.3398	4517264.261	40;47.72502N	070;35.44911W	IAC-062-C-SPI.jpg	IAC-062-C-PV.jpg
IAC-061	A	8/9/21	2:15:50	-53.00	365428.2832	4516214.787	40;47.15439N	070;35.69579W	IAC-061-A-SPI.jpg	IAC-061-A-PV.jpg
IAC-061	B	8/9/21	2:20:11	-52.97	365437.5643	4516213.559	40;47.15382N	070;35.68918W	IAC-061-B-SPI.jpg	IAC-061-B-PV.jpg
IAC-061	C	8/9/21	2:24:05	-52.98	365442.3143	4516205.471	40;47.14949N	070;35.68569W	IAC-061-C-SPI.jpg	IAC-061-C-PV.jpg
IAC-108	A	8/9/21	2:58:31	-52.94	365661.9115	4515414.103	40;46.72407N	070;35.51938W	IAC-108-A-SPI.jpg	IAC-108-A-PV.jpg
IAC-108	B	8/9/21	3:03:21	-52.95	365669.9463	4515413.577	40;46.72386N	070;35.51366W	IAC-108-B-SPI.jpg	IAC-108-B-PV.jpg
IAC-108	C	8/9/21	3:06:59	-52.85	365677.9697	4515407.420	40;46.72062N	070;35.50788W	IAC-108-C-SPI.jpg	IAC-108-C-PV.jpg
IAC-108	D	8/9/21	4:35:14	-53.14	365684.3434	4515410.544	40;46.72237N	070;35.50339W	IAC-108-D-SPI.jpg	IAC-108-D-PV.jpg
IAC-108	E	8/9/21	4:39:30	-53.06	365685.9815	4515401.665	40;46.71759N	070;35.50211W	IAC-108-E-SPI.jpg	IAC-108-E-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-108	F	8/9/21	4:44:09	-52.98	365677.6167	4515394.950	40;46.71388N	070;35.50797W	IAC-108-F-SPI.jpg	IAC-108-F-PV.jpg
IAC-072	A	8/9/21	5:24:14	-54.22	364171.1899	4515198.999	40;46.59315N	070;36.57614W	IAC-072-A-SPI.jpg	IAC-072-A-PV.jpg
IAC-072	B	8/9/21	5:28:21	-54.24	364171.6959	4515189.433	40;46.58798N	070;36.57565W	IAC-072-B-SPI.jpg	IAC-072-B-PV.jpg
IAC-072	C	8/9/21	5:32:20	-54.17	364175.6103	4515179.461	40;46.58263N	070;36.57274W	IAC-072-C-SPI.jpg	IAC-072-C-PV.jpg
IAC-071	A	8/9/21	9:14:52	-54.57	364179.9103	4516696.891	40;47.40255N	070;36.58948W	IAC-071-A-SPI.jpg	IAC-071-A-PV.jpg
IAC-071	B	8/9/21	9:19:11	-54.62	364171.7321	4516690.602	40;47.39907N	070;36.59521W	IAC-071-B-SPI.jpg	IAC-071-B-PV.jpg
IAC-071	C	8/9/21	9:23:51	-54.58	364177.0778	4516682.360	40;47.39467N	070;36.59131W	IAC-071-C-SPI.jpg	IAC-071-C-PV.jpg
IAC-070	A	8/9/21	10:03:13	-53.80	364170.7158	4517505.312	40;47.83924N	070;36.60657W	IAC-070-A-SPI.jpg	IAC-070-A-PV.jpg
IAC-070	B	8/9/21	10:07:13	-53.76	364167.6017	4517496.154	40;47.83427N	070;36.60867W	IAC-070-B-SPI.jpg	IAC-070-B-PV.jpg
IAC-070	C	8/9/21	10:11:44	-53.83	364174.8223	4517489.879	40;47.83095N	070;36.60345W	IAC-070-C-SPI.jpg	IAC-070-C-PV.jpg
IAC-068	A	8/9/21	10:47:00	-52.74	364168.1474	4518506.049	40;48.37992N	070;36.62147W	IAC-068-A-SPI.jpg	IAC-068-A-PV.jpg
IAC-068	B	8/9/21	10:50:53	-52.65	364175.0644	4518499.461	40;48.37642N	070;36.61647W	IAC-068-B-SPI.jpg	IAC-068-B-PV.jpg
IAC-068	C	8/9/21	10:55:11	-52.62	364175.7295	4518488.969	40;48.37076N	070;36.61586W	IAC-068-C-SPI.jpg	IAC-068-C-PV.jpg
IAC-069	A	8/9/21	11:25:18	-52.86	364163.7970	4519350.924	40;48.83636N	070;36.63560W	IAC-069-A-SPI.jpg	IAC-069-A-PV.jpg
IAC-069	B	8/9/21	11:29:33	-52.90	364172.8159	4519349.084	40;48.83545N	070;36.62917W	IAC-069-B-SPI.jpg	IAC-069-B-PV.jpg
IAC-069	C	8/9/21	11:33:35	-52.90	364174.3320	4519340.442	40;48.83080N	070;36.62797W	IAC-069-C-SPI.jpg	IAC-069-C-PV.jpg
IAC-047	A	8/9/21	12:32:38	-53.24	362309.7634	4519266.541	40;48.77223N	070;37.95296W	IAC-047-A-SPI.jpg	IAC-047-A-PV.jpg
IAC-047	B	8/9/21	12:37:35	-53.27	362317.4402	4519273.608	40;48.77613N	070;37.94760W	IAC-047-B-SPI.jpg	IAC-047-B-PV.jpg
IAC-047	C	8/9/21	12:42:43	-53.24	362326.4158	4519278.850	40;48.77905N	070;37.94128W	IAC-047-C-SPI.jpg	IAC-047-C-PV.jpg
IAC-046	A	8/9/21	13:20:31	-53.09	362309.6489	4518376.663	40;48.29144N	070;37.94126W	IAC-046-A-SPI.jpg	IAC-046-A-PV.jpg
IAC-046	B	8/9/21	13:24:37	-53.04	362318.7915	4518379.738	40;48.29319N	070;37.93480W	IAC-046-B-SPI.jpg	IAC-046-B-PV.jpg
IAC-046	C	8/9/21	13:28:33	-53.09	362328.6821	4518379.350	40;48.29308N	070;37.92776W	IAC-046-C-SPI.jpg	IAC-046-C-PV.jpg
IAC-045	A	8/9/21	14:06:43	-53.51	362005.8125	4517971.663	40;48.06956N	070;38.15192W	IAC-045-A-SPI.jpg	IAC-045-A-PV.jpg
IAC-045	B	8/9/21	14:11:50	-53.46	362010.2856	4517962.397	40;48.06460N	070;38.14862W	IAC-045-B-SPI.jpg	IAC-045-B-PV.jpg
IAC-045	C	8/9/21	14:15:58	-53.45	362015.1447	4517955.475	40;48.06090N	070;38.14507W	IAC-045-C-SPI.jpg	IAC-045-C-PV.jpg
IAC-044	A	8/9/21	14:56:52	-53.26	361121.0482	4517956.989	40;48.05268N	070;38.78079W	IAC-044-A-SPI.jpg	IAC-044-A-PV.jpg
IAC-044	B	8/9/21	15:00:37	-53.39	361111.3529	4517958.152	40;48.05321N	070;38.78770W	IAC-044-B-SPI.jpg	IAC-044-B-PV.jpg
IAC-044	C	8/9/21	15:04:44	-53.25	361100.8357	4517959.162	40;48.05365N	070;38.79519W	IAC-044-C-SPI.jpg	IAC-044-C-PV.jpg
IAC-034	A	8/9/21	15:37:11	-54.52	360466.1717	4517440.698	40;47.76707N	070;39.23948W	IAC-034-A-SPI.jpg	IAC-034-A-PV.jpg
IAC-034	B	8/9/21	15:42:01	-54.60	360469.0533	4517432.066	40;47.76244N	070;39.23731W	IAC-034-B-SPI.jpg	IAC-034-B-PV.jpg
IAC-034	C	8/9/21	15:46:34	-54.60	360470.9507	4517422.459	40;47.75727N	070;39.23584W	IAC-034-C-SPI.jpg	IAC-034-C-PV.jpg
IAC-033	A	8/9/21	16:19:38	-55.13	360468.9712	4516540.399	40;47.28068N	070;39.22541W	IAC-033-A-SPI.jpg	IAC-033-A-PV.jpg
IAC-033	B	8/9/21	16:24:11	-55.05	360470.3779	4516530.201	40;47.27518N	070;39.22428W	IAC-033-B-SPI.jpg	IAC-033-B-PV.jpg
IAC-033	C	8/9/21	16:28:20	-55.08	360468.9414	4516519.921	40;47.26962N	070;39.22516W	IAC-033-C-SPI.jpg	IAC-033-C-PV.jpg
IAC-035	A	8/9/21	17:00:56	-55.05	361380.7442	4516117.624	40;47.06152N	070;38.57164W	IAC-035-A-SPI.jpg	IAC-035-A-PV.jpg
IAC-035	B	8/9/21	17:06:10	-55.02	361388.3009	4516112.142	40;47.05863N	070;38.56620W	IAC-035-B-SPI.jpg	IAC-035-B-PV.jpg
IAC-035	C	8/9/21	17:10:20	-55.07	361397.3392	4516106.893	40;47.05589N	070;38.55971W	IAC-035-C-SPI.jpg	IAC-035-C-PV.jpg
IAC-037	A	8/9/21	17:45:12	-54.90	362595.7056	4515572.040	40;46.77899N	070;37.70082W	IAC-037-A-SPI.jpg	IAC-037-A-PV.jpg
IAC-037	B	8/9/21	17:49:14	-54.88	362596.7430	4515562.240	40;46.77370N	070;37.69996W	IAC-037-B-SPI.jpg	IAC-037-B-PV.jpg
IAC-037	C	8/9/21	17:53:04	-54.83	362599.3782	4515553.799	40;46.76917N	070;37.69797W	IAC-037-C-SPI.jpg	IAC-037-C-PV.jpg
IAC-060	A	8/9/21	18:46:03	-54.73	364778.1167	4514199.664	40;46.05921N	070;36.13179W	IAC-060-A-SPI.jpg	IAC-060-A-PV.jpg
IAC-060	B	8/9/21	18:51:07	-54.79	364769.6134	4514193.452	40;46.05577N	070;36.13775W	IAC-060-B-SPI.jpg	IAC-060-B-PV.jpg
IAC-060	C	8/9/21	18:55:48	-54.74	364775.3620	4514185.296	40;46.05142N	070;36.13356W	IAC-060-C-SPI.jpg	IAC-060-C-PV.jpg
IAC-043	A	8/9/21	19:25:31	-54.68	365010.6496	4514050.424	40;45.98086N	070;35.96461W	IAC-043-A-SPI.jpg	IAC-043-A-PV.jpg
IAC-043	B	8/9/21	19:30:02	-54.64	365001.2897	4514051.927	40;45.98158N	070;35.97128W	IAC-043-B-SPI.jpg	IAC-043-B-PV.jpg
IAC-043	C	8/9/21	19:33:45	-54.68	365004.5444	4514042.046	40;45.97628N	070;35.96884W	IAC-043-C-SPI.jpg	IAC-043-C-PV.jpg
IAC-098	A	8/9/21	20:11:13	-54.54	366632.7417	4514871.557	40;46.44041N	070;34.82239W	IAC-098-A-SPI.jpg	IAC-098-A-PV.jpg
IAC-098	B	8/9/21	20:15:13	-54.55	366630.6547	4514862.624	40;46.43557N	070;34.82376W	IAC-098-B-SPI.jpg	IAC-098-B-PV.jpg
IAC-098	C	8/9/21	20:18:54	-54.61	366628.1446	4514852.766	40;46.43022N	070;34.82541W	IAC-098-C-SPI.jpg	IAC-098-C-PV.jpg
IAC-099	A	8/9/21	20:53:22	-53.94	367395.7782	4515609.397	40;46.84648N	070;34.28947W	IAC-099-A-SPI.jpg	IAC-099-A-PV.jpg
IAC-099	B	8/9/21	20:58:24	-53.96	367387.0032	4515613.011	40;46.84835N	070;34.29575W	IAC-099-B-SPI.jpg	IAC-099-B-PV.jpg
IAC-099	C	8/9/21	21:03:10	-54.11	367385.1031	4515623.696	40;46.85411N	070;34.29724W	IAC-099-C-SPI.jpg	IAC-099-C-PV.jpg
IAC-083	A	8/9/21	21:38:09	-53.72	368375.0645	4514738.304	40;46.38527N	070;33.58237W	IAC-083-A-SPI.jpg	IAC-083-A-PV.jpg
IAC-083	B	8/9/21	21:43:04	-53.74	368365.6826	4514738.374	40;46.38522N	070;33.58904W	IAC-083-B-SPI.jpg	IAC-083-B-PV.jpg
IAC-083	C	8/9/21	21:47:55	-53.72	368355.9415	4514739.615	40;46.38579N	070;33.59598W	IAC-083-C-SPI.jpg	IAC-083-C-PV.jpg
IAC-084	A	8/9/21	22:32:22	-52.58	369305.4956	4515666.846	40;46.89588N	070;32.93274W	IAC-084-A-SPI.jpg	IAC-084-A-PV.jpg
IAC-084	B	8/9/21	22:37:22	-52.56	369295.4620	4515669.067	40;46.89699N	070;32.93990W	IAC-084-B-SPI.jpg	IAC-084-B-PV.jpg
IAC-084	C	8/9/21	22:42:27	-52.66	369285.4085	4515667.861	40;46.89624N	070;32.94704W	IAC-084-C-SPI.jpg	IAC-084-C-PV.jpg
IAC-085	A	8/9/21	23:24:18	-51.83	370662.1440	4516122.694	40;47.15507N	070;31.97407W	IAC-085-A-SPI.jpg	IAC-085-A-PV.jpg
IAC-085	B	8/9/21	23:28:04	-51.86	370659.1195	4516113.931	40;47.15030N	070;31.97611W	IAC-085-B-SPI.jpg	IAC-085-B-PV.jpg
IAC-085	C	8/9/21	23:32:26	-51.85	370655.3868	4516104.886	40;47.14538N	070;31.97865W	IAC-085-C-SPI.jpg	IAC-085-C-PV.jpg
IAC-086	A	8/10/21	0:22:50	-51.51	371586.2957	4517035.835	40;47.65715N	070;31.32838W	IAC-086-A-SPI.jpg	IAC-086-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-086	B	8/10/21	0:27:13	-51.51	371576.5181	4517033.728	40;47.65592N	070;31.33531W	IAC-086-B-SPI.jpg	IAC-086-B-PV.jpg
IAC-086	C	8/10/21	0:31:38	-51.53	371583.1772	4517026.882	40;47.65229N	070;31.33049W	IAC-086-C-SPI.jpg	IAC-086-C-PV.jpg
IAC-077	A	8/10/21	1:13:23	-50.75	373443.3519	4515173.434	40;46.66814N	070;29.98542W	IAC-077-A-SPI.jpg	IAC-077-A-PV.jpg
IAC-077	B	8/10/21	1:17:56	-50.84	373435.5012	4515179.809	40;46.67151N	070;29.99108W	IAC-077-B-SPI.jpg	IAC-077-B-PV.jpg
IAC-077	C	8/10/21	1:22:06	-50.69	373435.8655	4515189.686	40;46.67685N	070;29.99094W	IAC-077-C-SPI.jpg	IAC-077-C-PV.jpg
IAC-078	A	8/10/21	1:56:58	-51.28	372513.4740	4514240.545	40;46.15545N	070;30.63496W	IAC-078-A-SPI.jpg	IAC-078-A-PV.jpg
IAC-078	B	8/10/21	2:01:44	-51.26	372517.9963	4514249.583	40;46.16038N	070;30.63185W	IAC-078-B-SPI.jpg	IAC-078-B-PV.jpg
IAC-078	C	8/10/21	2:05:46	-51.24	372509.4122	4514253.973	40;46.16267N	070;30.63801W	IAC-078-C-SPI.jpg	IAC-078-C-PV.jpg
IAC-079	A	8/10/21	2:56:46	-52.15	370665.8304	4514245.663	40;46.14090N	070;31.94813W	IAC-079-A-SPI.jpg	IAC-079-A-PV.jpg
IAC-079	B	8/10/21	3:02:02	-52.17	370669.7217	4514254.696	40;46.14582N	070;31.94548W	IAC-079-B-SPI.jpg	IAC-079-B-PV.jpg
IAC-079	C	8/10/21	3:05:43	-52.18	370660.8581	4514254.394	40;46.14557N	070;31.95178W	IAC-079-C-SPI.jpg	IAC-079-C-PV.jpg
IAC-073	A	8/10/21	3:47:32	-52.92	370652.8458	4512389.186	40;45.13768N	070;31.93432W	IAC-073-A-SPI.jpg	IAC-073-A-PV.jpg
IAC-073	B	8/10/21	3:54:02	-52.96	370661.3165	4512393.727	40;45.14021N	070;31.92836W	IAC-073-B-SPI.jpg	IAC-073-B-PV.jpg
IAC-073	C	8/10/21	3:58:33	-53.06	370656.8621	4512402.737	40;45.14504N	070;31.93163W	IAC-073-C-SPI.jpg	IAC-073-C-PV.jpg
IAC-073	D	8/10/21	8:31:32	-53.97	370652.0155	4512416.593	40;45.15248N	070;31.93525W	IAC-073-D-SPI.jpg	IAC-073-D-PV.jpg
IAC-073	E	8/10/21	8:36:32	-53.81	370661.0945	4512413.348	40;45.15081N	070;31.92876W	IAC-073-E-SPI.jpg	IAC-073-E-PV.jpg
IAC-073	F	8/10/21	8:40:59	-53.88	370667.4159	4512406.207	40;45.14702N	070;31.92418W	IAC-073-F-SPI.jpg	IAC-073-F-PV.jpg
IAC-073	G	8/10/21	9:22:08	-53.94	370645.4679	4512409.253	40;45.14845N	070;31.93981W	IAC-073-G-SPI.jpg	IAC-073-G-PV.jpg
IAC-073	H	8/10/21	9:26:39	-53.89	370641.4560	4512400.619	40;45.14375N	070;31.94255W	IAC-073-H-SPI.jpg	IAC-073-H-PV.jpg
IAC-073	I	8/10/21	9:31:14	-53.86	370649.7106	4512394.665	40;45.14061N	070;31.93661W	IAC-073-I-SPI.jpg	IAC-073-I-PV.jpg
IAC-074	A	8/10/21	10:00:55	-54.91	368797.7964	4512414.104	40;45.13352N	070;33.25266W	IAC-074-A-SPI.jpg	IAC-074-A-PV.jpg
IAC-074	B	8/10/21	10:05:36	-54.82	368805.5054	4512409.895	40;45.13132N	070;33.24713W	IAC-074-B-SPI.jpg	IAC-074-B-PV.jpg
IAC-074	C	8/10/21	10:10:14	-54.84	368803.7993	4512400.182	40;45.12605N	070;33.24822W	IAC-074-C-SPI.jpg	IAC-074-C-PV.jpg
IAC-080	A	8/10/21	10:42:16	-54.11	368590.2961	4513869.947	40;45.91815N	070;33.41845W	IAC-080-A-SPI.jpg	IAC-080-A-PV.jpg
IAC-080	B	8/10/21	10:46:46	-54.12	368580.8756	4513871.165	40;45.91871N	070;33.42516W	IAC-080-B-SPI.jpg	IAC-080-B-PV.jpg
IAC-080	C	8/10/21	10:50:54	-54.18	368571.0238	4513871.163	40;45.91862N	070;33.43216W	IAC-080-C-SPI.jpg	IAC-080-C-PV.jpg
IAC-081	A	8/10/21	11:32:34	-54.92	366959.8309	4513337.543	40;45.61475N	070;34.57032W	IAC-081-A-SPI.jpg	IAC-081-A-PV.jpg
IAC-081	B	8/10/21	11:37:03	-54.87	366953.4736	4513328.957	40;45.61005N	070;34.57473W	IAC-081-B-SPI.jpg	IAC-081-B-PV.jpg
IAC-081	C	8/10/21	11:41:51	-54.88	366953.4877	4513318.427	40;45.60436N	070;34.57459W	IAC-081-C-SPI.jpg	IAC-081-C-PV.jpg
IAC-075	A	8/10/21	12:27:34	-54.89	366940.7557	4512408.267	40;45.11247N	070;34.57202W	IAC-075-A-SPI.jpg	IAC-075-A-PV.jpg
IAC-075	B	8/10/21	12:31:46	-54.97	366949.5258	4512405.225	40;45.11091N	070;34.56575W	IAC-075-B-SPI.jpg	IAC-075-B-PV.jpg
IAC-075	C	8/10/21	12:35:43	-54.95	366956.5444	4512398.345	40;45.10726N	070;34.56067W	IAC-075-C-SPI.jpg	IAC-075-C-PV.jpg
IAC-082	A	8/10/21	13:09:49	-54.51	366036.6622	4513316.179	40;45.59421N	070;35.22604W	IAC-082-A-SPI.jpg	IAC-082-A-PV.jpg
IAC-082	B	8/10/21	13:13:34	-54.45	366030.3786	4513322.534	40;45.59759N	070;35.23058W	IAC-082-B-SPI.jpg	IAC-082-B-PV.jpg
IAC-082	C	8/10/21	13:17:42	-54.55	366023.9748	4513331.404	40;45.60232N	070;35.23525W	IAC-082-C-SPI.jpg	IAC-082-C-PV.jpg
IAC-097	A	8/10/21	13:47:19	-54.81	365104.8071	4513323.037	40;45.58878N	070;35.88828W	IAC-097-A-SPI.jpg	IAC-097-A-PV.jpg
IAC-097	B	8/10/21	13:51:05	-54.59	365098.6424	4513329.180	40;45.59204N	070;35.89274W	IAC-097-B-SPI.jpg	IAC-097-B-PV.jpg
IAC-097	C	8/10/21	13:54:54	-54.68	365092.6479	4513337.285	40;45.59636N	070;35.89710W	IAC-097-C-SPI.jpg	IAC-097-C-PV.jpg
IAC-041	A	8/10/21	14:24:23	-55.11	364186.8813	4513335.897	40;45.58666N	070;36.54070W	IAC-041-A-SPI.jpg	IAC-041-A-PV.jpg
IAC-041	B	8/10/21	14:28:59	-54.78	364180.0524	4513330.254	40;45.58355N	070;36.54547W	IAC-041-B-SPI.jpg	IAC-041-B-PV.jpg
IAC-041	C	8/10/21	14:33:32	-55.11	364169.6412	4513327.438	40;45.58192N	070;36.55284W	IAC-041-C-SPI.jpg	IAC-041-C-PV.jpg
IAC-042	A	8/10/21	15:02:17	-55.24	364317.7383	4512849.343	40;45.32507N	070;36.44138W	IAC-042-A-SPI.jpg	IAC-042-A-PV.jpg
IAC-042	B	8/10/21	15:06:01	-55.39	364318.5788	4512840.423	40;45.32026N	070;36.44067W	IAC-042-B-SPI.jpg	IAC-042-B-PV.jpg
IAC-042	C	8/10/21	15:10:08	-55.36	364318.3900	4512830.202	40;45.31474N	070;36.44067W	IAC-042-C-SPI.jpg	IAC-042-C-PV.jpg
IAC-076	A	8/10/21	15:42:55	-54.79	365094.3998	4512417.060	40;45.09917N	070;35.88395W	IAC-076-A-SPI.jpg	IAC-076-A-PV.jpg
IAC-076	B	8/10/21	15:47:32	-54.86	365098.1975	4512407.389	40;45.09398N	070;35.88112W	IAC-076-B-SPI.jpg	IAC-076-B-PV.jpg
IAC-076	C	8/10/21	15:51:06	-54.79	365102.7013	4512398.962	40;45.08948N	070;35.87782W	IAC-076-C-SPI.jpg	IAC-076-C-PV.jpg
IAC-059	A	8/10/21	16:18:25	-55.41	364688.5186	4511897.839	40;44.81463N	070;36.16558W	IAC-059-A-SPI.jpg	IAC-059-A-PV.jpg
IAC-059	B	8/10/21	16:22:30	-55.46	364691.7873	4511888.672	40;44.80971N	070;36.16314W	IAC-059-B-SPI.jpg	IAC-059-B-PV.jpg
IAC-059	C	8/10/21	16:26:15	-55.52	364695.4029	4511880.690	40;44.80544N	070;36.16047W	IAC-059-C-SPI.jpg	IAC-059-C-PV.jpg
IAC-053	A	8/10/21	16:55:08	-55.63	364174.1649	4511492.498	40;44.59054N	070;36.52572W	IAC-053-A-SPI.jpg	IAC-053-A-PV.jpg
IAC-053	B	8/10/21	16:59:17	-55.76	364175.2751	4511482.072	40;44.58492N	070;36.52479W	IAC-053-B-SPI.jpg	IAC-053-B-PV.jpg
IAC-053	C	8/10/21	17:04:29	-55.67	364174.3359	4511473.415	40;44.58023N	070;36.52535W	IAC-053-C-SPI.jpg	IAC-053-C-PV.jpg
IAC-028	A	8/10/21	17:34:10	-56.25	363251.6139	4510565.818	40;44.08069N	070;37.16894W	IAC-028-A-SPI.jpg	IAC-028-A-PV.jpg
IAC-028	B	8/10/21	17:38:01	-55.98	363250.6825	4510557.052	40;44.07594N	070;37.16949W	IAC-028-B-SPI.jpg	IAC-028-B-PV.jpg
IAC-028	C	8/10/21	17:42:14	-56.29	363246.5782	4510546.562	40;44.07023N	070;37.17226W	IAC-028-C-SPI.jpg	IAC-028-C-PV.jpg
IAC-019	A	8/10/21	18:41:50	-56.29	363242.3910	4511478.724	40;44.57384N	070;37.18746W	IAC-019-A-SPI.jpg	IAC-019-A-PV.jpg
IAC-019	B	8/10/21	18:46:43	-56.25	363252.2078	4511477.144	40;44.57308N	070;37.18046W	IAC-019-B-SPI.jpg	IAC-019-B-PV.jpg
IAC-019	C	8/10/21	18:50:53	-56.29	363252.5138	4511486.773	40;44.57829N	070;37.18037W	IAC-019-C-SPI.jpg	IAC-019-C-PV.jpg
IAC-018	A	8/10/21	19:21:51	-56.53	362926.7658	4511781.942	40;44.73452N	070;37.41566W	IAC-018-A-SPI.jpg	IAC-018-A-PV.jpg
IAC-018	B	8/10/21	19:26:32	-56.52	362935.9374	4511781.270	40;44.73425N	070;37.40913W	IAC-018-B-SPI.jpg	IAC-018-B-PV.jpg
IAC-018	C	8/10/21	19:30:15	-56.53	362939.8991	4511790.235	40;44.73913N	070;37.40644W	IAC-018-C-SPI.jpg	IAC-018-C-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-017	A	8/11/21	20:00:16	-56.69	363232.5416	4512398.450	40;45.07067N	070;37.20652W	IAC-017-A-SPI.jpg	IAC-017-A-PV.jpg
IAC-017	B	8/11/21	20:04:36	-56.85	363241.2161	4512400.794	40;45.07202N	070;37.20038W	IAC-017-B-SPI.jpg	IAC-017-B-PV.jpg
IAC-017	C	8/11/21	20:09:15	-56.61	363251.0486	4512402.760	40;45.07318N	070;37.19342W	IAC-017-C-SPI.jpg	IAC-017-C-PV.jpg
IAC-040	A	8/11/21	20:43:20	-56.48	363493.6661	4513097.534	40;45.45099N	070;37.03015W	IAC-040-A-SPI.jpg	IAC-040-A-PV.jpg
IAC-040	B	8/11/21	20:47:59	-56.69	363483.2296	4513094.905	40;45.44946N	070;37.03753W	IAC-040-B-SPI.jpg	IAC-040-B-PV.jpg
IAC-040	C	8/11/21	20:53:07	-56.47	363486.4706	4513104.625	40;45.45475N	070;37.03535W	IAC-040-C-SPI.jpg	IAC-040-C-PV.jpg
IAC-039	A	8/11/21	21:26:48	-56.48	363543.1723	4513705.763	40;45.78011N	070;37.00294W	IAC-039-A-SPI.jpg	IAC-039-A-PV.jpg
IAC-039	B	8/11/21	21:30:51	-56.39	363535.7204	4513698.653	40;45.77619N	070;37.00814W	IAC-039-B-SPI.jpg	IAC-039-B-PV.jpg
IAC-039	C	8/11/21	21:35:03	-56.57	363528.6927	4513691.826	40;45.77243N	070;37.01304W	IAC-039-C-SPI.jpg	IAC-039-C-PV.jpg
IAC-038	A	8/11/21	22:07:14	-56.66	362922.6047	4513667.701	40;45.75335N	070;37.44341W	IAC-038-A-SPI.jpg	IAC-038-A-PV.jpg
IAC-038	B	8/11/21	22:12:24	-56.72	362913.3194	4513668.017	40;45.75343N	070;37.45001W	IAC-038-B-SPI.jpg	IAC-038-B-PV.jpg
IAC-038	C	8/11/21	22:17:12	-56.65	362902.9367	4513667.251	40;45.75291N	070;37.45738W	IAC-038-C-SPI.jpg	IAC-038-C-PV.jpg
IAC-036	A	8/11/21	22:56:18	-56.56	361412.4108	4514259.121	40;46.05770N	070;38.52440W	IAC-036-A-SPI.jpg	IAC-036-A-PV.jpg
IAC-036	B	8/11/21	23:00:50	-56.56	361402.8203	4514256.125	40;46.05599N	070;38.53118W	IAC-036-B-SPI.jpg	IAC-036-B-PV.jpg
IAC-036	C	8/11/21	23:05:16	-56.55	361392.8975	4514254.004	40;46.05474N	070;38.53820W	IAC-036-C-SPI.jpg	IAC-036-C-PV.jpg
IAC-032	A	8/11/21	23:45:00	-56.88	359562.8062	4514251.818	40;46.03493N	070;39.83870W	IAC-032-A-SPI.jpg	IAC-032-A-PV.jpg
IAC-032	B	8/11/21	23:49:35	-56.73	359553.0659	4514253.749	40;46.03587N	070;39.84564W	IAC-032-B-SPI.jpg	IAC-032-B-PV.jpg
IAC-032	C	8/11/21	23:53:48	-56.64	359543.2067	4514254.857	40;46.03637N	070;39.85266W	IAC-032-C-SPI.jpg	IAC-032-C-PV.jpg
IAC-031	A	8/11/21	0:48:22	-57.22	358496.1451	4515594.531	40;46.74940N	070;40.61493W	IAC-031-A-SPI.jpg	IAC-031-A-PV.jpg
IAC-031	B	8/11/21	0:52:53	-57.04	358502.0381	4515586.319	40;46.74502N	070;40.61063W	IAC-031-B-SPI.jpg	IAC-031-B-PV.jpg
IAC-031	C	8/11/21	0:56:30	-56.96	358495.8354	4515580.867	40;46.74201N	070;40.61497W	IAC-031-C-SPI.jpg	IAC-031-C-PV.jpg
IAC-030	A	8/11/21	1:36:13	-57.36	357506.9225	4514593.692	40;46.19841N	070;41.30433W	IAC-030-A-SPI.jpg	IAC-030-A-PV.jpg
IAC-030	B	8/11/21	1:40:56	-57.44	357510.7805	4514583.983	40;46.19320N	070;41.30145W	IAC-030-B-SPI.jpg	IAC-030-B-PV.jpg
IAC-030	C	8/11/21	1:44:50	-57.34	357501.8854	4514580.722	40;46.19135N	070;41.30773W	IAC-030-C-SPI.jpg	IAC-030-C-PV.jpg
IAC-039	A	8/11/21	2:15:29	-56.48	363543.1723	4513705.763	40;45.78011N	070;37.00294W	IAC-039-A-SPI.jpg	IAC-039-A-PV.jpg
IAC-039	B	8/11/21	2:20:10	-56.39	363535.7204	4513698.653	40;45.77619N	070;37.00814W	IAC-039-B-SPI.jpg	IAC-039-B-PV.jpg
IAC-039	C	8/11/21	2:23:54	-56.57	363528.6927	4513691.826	40;45.77243N	070;37.01304W	IAC-039-C-SPI.jpg	IAC-039-C-PV.jpg
IAC-010	A	8/11/21	3:01:35	-58.25	355836.8476	4512412.174	40;45.00232N	070;42.46098W	IAC-010-A-SPI.jpg	IAC-010-A-PV.jpg
IAC-010	B	8/11/21	3:06:29	-58.26	355840.8640	4512402.853	40;44.99732N	070;42.45800W	IAC-010-B-SPI.jpg	IAC-010-B-PV.jpg
IAC-010	C	8/11/21	3:11:26	-58.19	355842.1072	4512393.842	40;44.99247N	070;42.45699W	IAC-010-C-SPI.jpg	IAC-010-C-PV.jpg
IAC-010	D	8/11/21	3:32:09	-58.16	355827.6524	4512401.381	40;44.99639N	070;42.46736W	IAC-010-D-SPI.jpg	IAC-010-D-PV.jpg
IAC-010	E	8/11/21	3:37:40	-58.17	355830.6695	4512391.909	40;44.99130N	070;42.46509W	IAC-010-E-SPI.jpg	IAC-010-E-PV.jpg
IAC-010	F	8/11/21	3:42:48	-58.14	355839.0461	4512386.996	40;44.98874N	070;42.45907W	IAC-010-F-SPI.jpg	IAC-010-F-PV.jpg
IAC-011	A	8/11/21	4:21:09	-57.92	357707.9980	4512405.603	40;45.01831N	070;41.13156W	IAC-011-A-SPI.jpg	IAC-011-A-PV.jpg
IAC-011	B	8/11/21	4:26:40	-57.93	357699.6406	4512411.738	40;45.02154N	070;41.13758W	IAC-011-B-SPI.jpg	IAC-011-B-PV.jpg
IAC-011	C	8/11/21	4:30:22	-57.87	357693.3836	4512404.512	40;45.01757N	070;41.14193W	IAC-011-C-SPI.jpg	IAC-011-C-PV.jpg
IAC-012	A	8/11/21	5:11:41	-57.55	359532.6337	4512401.470	40;45.03489N	070;39.83520W	IAC-012-A-SPI.jpg	IAC-012-A-PV.jpg
IAC-012	B	8/11/21	5:16:00	-57.54	359542.5203	4512402.509	40;45.03556N	070;39.82819W	IAC-012-B-SPI.jpg	IAC-012-B-PV.jpg
IAC-012	C	8/11/21	5:19:52	-57.51	359543.0150	4512393.708	40;45.03081N	070;39.82772W	IAC-012-C-SPI.jpg	IAC-012-C-PV.jpg
IAC-013	A	8/11/21	6:22:06	-56.66	361397.5080	4512411.980	40;45.05955N	070;38.51043W	IAC-013-A-SPI.jpg	IAC-013-A-PV.jpg
IAC-013	B	8/11/21	6:26:45	-56.79	361398.1342	4512401.898	40;45.05411N	070;38.50985W	IAC-013-B-SPI.jpg	IAC-013-B-PV.jpg
IAC-013	C	8/11/21	6:30:34	-56.69	361397.4111	4512393.346	40;45.04948N	070;38.51025W	IAC-013-C-SPI.jpg	IAC-013-C-PV.jpg
IAC-016	A	8/11/21	7:05:25	-57.05	361288.1511	4510974.700	40;44.28189N	070;38.56901W	IAC-016-A-SPI.jpg	IAC-016-A-PV.jpg
IAC-016	B	8/11/21	7:10:11	-57.15	361298.7385	4510971.812	40;44.28044N	070;38.56145W	IAC-016-B-SPI.jpg	IAC-016-B-PV.jpg
IAC-016	C	8/11/21	7:14:48	-57.13	361296.0825	4510963.459	40;44.27590N	070;38.56322W	IAC-016-C-SPI.jpg	IAC-016-C-PV.jpg
IAC-015	A	8/11/21	9:29:22	-58.64	359542.2822	4510561.749	40;44.04101N	070;39.80357W	IAC-015-A-SPI.jpg	IAC-015-A-PV.jpg
IAC-015	B	8/11/21	9:33:38	-58.56	359542.8632	4510551.018	40;44.03522N	070;39.80301W	IAC-015-B-SPI.jpg	IAC-015-B-PV.jpg
IAC-015	C	8/11/21	9:38:38	-58.63	359542.4322	4510541.248	40;44.02994N	070;39.80319W	IAC-015-C-SPI.jpg	IAC-015-C-PV.jpg
IAC-014	A	8/11/21	10:15:55	-59.13	358621.5815	4509636.484	40;43.53164N	070;40.44499W	IAC-014-A-SPI.jpg	IAC-014-A-PV.jpg
IAC-014	B	8/11/21	10:21:37	-58.97	358607.8775	4509630.406	40;43.52822N	070;40.45464W	IAC-014-B-SPI.jpg	IAC-014-B-PV.jpg
IAC-014	C	8/11/21	10:27:27	-59.11	358620.6401	4509622.642	40;43.52415N	070;40.44547W	IAC-014-C-SPI.jpg	IAC-014-C-PV.jpg
IAC-015	D	8/11/21	11:12:55	-58.66	359554.3338	4510561.877	40;44.04120N	070;39.79501W	IAC-015-D-SPI.jpg	IAC-015-D-PV.jpg
IAC-015	E	8/11/21	11:20:50	-58.63	359559.6648	4510546.591	40;44.03300N	070;39.79102W	IAC-015-E-SPI.jpg	IAC-015-E-PV.jpg
IAC-015	F	8/11/21	11:25:41	-58.67	359549.9027	4510536.567	40;44.02748N	070;39.79782W	IAC-015-F-SPI.jpg	IAC-015-F-PV.jpg
IAC-216	A	8/11/21	12:44:25	-58.85	356773.5991	4509636.515	40;43.51250N	070;41.75738W	IAC-216-A-SPI.jpg	IAC-216-A-PV.jpg
IAC-216	B	8/11/21	12:50:13	-58.76	356765.4843	4509624.726	40;43.50604N	070;41.76298W	IAC-216-B-SPI.jpg	IAC-216-B-PV.jpg
IAC-216	C	8/11/21	12:55:32	-58.86	356759.3358	4509610.484	40;43.49828N	070;41.76715W	IAC-216-C-SPI.jpg	IAC-216-C-PV.jpg
IAC-009	A	8/11/21	13:37:36	-58.54	357700.1100	4508711.907	40;43.02258N	070;41.08680W	IAC-009-A-SPI.jpg	IAC-009-A-PV.jpg
IAC-009	B	8/11/21	13:43:44	-58.63	357694.3572	4508697.840	40;43.01492N	070;41.09069W	IAC-009-B-SPI.jpg	IAC-009-B-PV.jpg
IAC-009	C	8/11/21	13:49:06	-58.50	357684.6680	4508685.596	40;43.00821N	070;41.09740W	IAC-009-C-SPI.jpg	IAC-009-C-PV.jpg
IAC-004	A	8/11/21	14:27:21	-59.11	357700.2600	4506859.978	40;42.02201N	070;41.06147W	IAC-004-A-SPI.jpg	IAC-004-A-PV.jpg
IAC-004	B	8/11/21	14:32:25	-59.09	357693.4466	4506846.492	40;42.01465N	070;41.06612W	IAC-004-B-SPI.jpg	IAC-004-B-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-004	C	8/11/21	14:37:18	-59.00	357683.1373	4506836.633	40;42.00922N	070;41.07331W	IAC-004-C-SPI.jpg	IAC-004-C-PV.jpg
IAC-003	A	8/11/21	15:14:41	-59.45	356775.9067	4505932.051	40;41.51106N	070;41.70496W	IAC-003-A-SPI.jpg	IAC-003-A-PV.jpg
IAC-003	B	8/11/21	15:20:05	-59.45	356766.8354	4505919.963	40;41.50443N	070;41.71123W	IAC-003-B-SPI.jpg	IAC-003-B-PV.jpg
IAC-003	C	8/11/21	15:25:14	-59.52	356758.2999	4505907.651	40;41.49769N	070;41.71712W	IAC-003-C-SPI.jpg	IAC-003-C-PV.jpg
IAC-023	A	8/11/21	16:12:12	-58.70	359251.9396	4505629.084	40;41.37295N	070;39.94334W	IAC-023-A-SPI.jpg	IAC-023-A-PV.jpg
IAC-023	B	8/11/21	16:17:38	-58.46	359241.5283	4505617.860	40;41.36678N	070;39.95058W	IAC-023-B-SPI.jpg	IAC-023-B-PV.jpg
IAC-023	C	8/11/21	16:22:48	-58.65	359231.9093	4505606.236	40;41.36040N	070;39.95725W	IAC-023-C-SPI.jpg	IAC-023-C-PV.jpg
IAC-024	A	8/11/21	17:00:12	-58.05	359976.6328	4506355.965	40;41.77309N	070;39.43868W	IAC-024-A-SPI.jpg	IAC-024-A-PV.jpg
IAC-024	B	8/11/21	17:04:43	-58.07	359968.5187	4506343.931	40;41.76650N	070;39.44428W	IAC-024-B-SPI.jpg	IAC-024-B-PV.jpg
IAC-024	C	8/11/21	17:08:47	-58.26	359957.9324	4506334.023	40;41.76104N	070;39.45166W	IAC-024-C-SPI.jpg	IAC-024-C-PV.jpg
IAC-005	A	8/11/21	17:42:23	-58.27	359550.7385	4507786.827	40;42.54183N	070;39.76024W	IAC-005-A-SPI.jpg	IAC-005-A-PV.jpg
IAC-005	B	8/11/21	17:47:30	-58.25	359544.3446	4507772.629	40;42.53409N	070;39.76459W	IAC-005-B-SPI.jpg	IAC-005-B-PV.jpg
IAC-005	C	8/11/21	17:52:38	-58.29	359534.5921	4507762.802	40;42.52868N	070;39.77138W	IAC-005-C-SPI.jpg	IAC-005-C-PV.jpg
IAC-025	A	8/11/21	18:51:37	-57.94	361107.2035	4507467.342	40;42.38504N	070;38.65088W	IAC-025-A-SPI.jpg	IAC-025-A-PV.jpg
IAC-025	B	8/11/21	18:57:19	-58.09	361092.4364	4507468.762	40;42.38566N	070;38.66139W	IAC-025-B-SPI.jpg	IAC-025-B-PV.jpg
IAC-025	C	8/11/21	19:02:32	-58.04	361085.9425	4507455.594	40;42.37848N	070;38.66582W	IAC-025-C-SPI.jpg	IAC-025-C-PV.jpg
IAC-021	A	8/11/21	19:40:27	-57.50	362684.4134	4507956.790	40;42.66536N	070;37.53751W	IAC-021-A-SPI.jpg	IAC-021-A-PV.jpg
IAC-021	B	8/11/21	19:45:29	-57.54	362684.8831	4507942.010	40;42.65738N	070;37.53698W	IAC-021-B-SPI.jpg	IAC-021-B-PV.jpg
IAC-021	C	8/11/21	19:50:28	-57.43	362687.8421	4507927.718	40;42.64968N	070;37.53469W	IAC-021-C-SPI.jpg	IAC-021-C-PV.jpg
IAC-026	A	8/12/21	22:40:28	-57.83	362007.2934	4508398.342	40;42.89714N	070;38.02412W	IAC-026-A-SPI.jpg	IAC-026-A-PV.jpg
IAC-026	B	8/12/21	22:46:46	-58.09	362005.7107	4508383.837	40;42.88929N	070;38.02506W	IAC-026-B-SPI.jpg	IAC-026-B-PV.jpg
IAC-026	C	8/12/21	22:51:37	-57.97	361997.4725	4508369.893	40;42.88167N	070;38.03072W	IAC-026-C-SPI.jpg	IAC-026-C-PV.jpg
IAC-217	A	8/13/21	4:44:56	-56.80	361468.7944	4509697.608	40;43.59371N	070;38.42374W	IAC-217-A-SPI.jpg	IAC-217-A-PV.jpg
IAC-217	B	8/13/21	4:53:55	-56.89	361484.2239	4509691.853	40;43.59075N	070;38.41270W	IAC-217-B-SPI.jpg	IAC-217-B-PV.jpg
IAC-217	C	8/13/21	5:03:17	-56.84	361468.5380	4509711.263	40;43.60108N	070;38.42410W	IAC-217-C-SPI.jpg	IAC-217-C-PV.jpg
IAC-027	A	8/13/21	6:16:07	-56.38	362807.8300	4509658.716	40;43.58615N	070;37.47223W	IAC-027-A-SPI.jpg	IAC-027-A-PV.jpg
IAC-027	B	8/13/21	6:23:10	-56.25	362810.3195	4509674.380	40;43.59463N	070;37.47067W	IAC-027-B-SPI.jpg	IAC-027-B-PV.jpg
IAC-027	C	8/13/21	6:27:30	-56.37	362812.6446	4509688.687	40;43.60239N	070;37.46921W	IAC-027-C-SPI.jpg	IAC-027-C-PV.jpg
IAC-022	A	8/13/21	7:03:29	-56.13	363244.5456	4509610.163	40;43.56427N	070;37.16144W	IAC-022-A-SPI.jpg	IAC-022-A-PV.jpg
IAC-022	B	8/13/21	7:08:36	-56.22	363247.7096	4509624.189	40;43.57188N	070;37.15938W	IAC-022-B-SPI.jpg	IAC-022-B-PV.jpg
IAC-022	C	8/13/21	7:14:09	-56.20	363260.3739	4509632.911	40;43.57672N	070;37.15050W	IAC-022-C-SPI.jpg	IAC-022-C-PV.jpg
IAC-052	A	8/13/21	7:57:53	-56.12	364174.4634	4509623.319	40;43.58062N	070;36.50117W	IAC-052-A-SPI.jpg	IAC-052-A-PV.jpg
IAC-052	B	8/13/21	8:04:46	-56.12	364175.0709	4509638.038	40;43.58857N	070;36.50093W	IAC-052-B-SPI.jpg	IAC-052-B-PV.jpg
IAC-052	C	8/13/21	8:16:24	-53.17	364189.8314	4509625.382	40;43.58188N	070;36.49029W	IAC-052-C-SPI.jpg	IAC-052-C-PV.jpg
IAC-058	A	8/13/21	9:03:02	-55.71	365602.7814	4510956.401	40;44.31496N	070;35.50393W	IAC-058-A-SPI.jpg	IAC-058-A-PV.jpg
IAC-058	B	8/13/21	9:09:05	-55.72	365611.2894	4510968.156	40;44.32139N	070;35.49803W	IAC-058-B-SPI.jpg	IAC-058-B-PV.jpg
IAC-058	C	8/13/21	9:15:42	-55.71	365627.0851	4510962.932	40;44.31872N	070;35.48675W	IAC-058-C-SPI.jpg	IAC-058-C-PV.jpg
IAC-054	A	8/13/21	10:18:44	-55.19	368797.3161	4510548.221	40;44.12534N	070;33.22953W	IAC-054-A-SPI.jpg	IAC-054-A-PV.jpg
IAC-054	B	8/13/21	10:25:01	-55.18	368812.1667	4510554.757	40;44.12901N	070;33.21907W	IAC-054-B-SPI.jpg	IAC-054-B-PV.jpg
IAC-054	C	8/13/21	10:32:28	-55.12	368815.8142	4510540.334	40;44.12126N	070;33.21629W	IAC-054-C-SPI.jpg	IAC-054-C-PV.jpg
IAC-055	A	8/13/21	11:16:23	-55.90	367881.6074	4509641.545	40;43.62666N	070;33.86851W	IAC-055-A-SPI.jpg	IAC-055-A-PV.jpg
IAC-055	B	8/13/21	11:23:52	-55.78	367877.3489	4509625.733	40;43.61807N	070;33.87133W	IAC-055-B-SPI.jpg	IAC-055-B-PV.jpg
IAC-055	C	8/13/21	11:28:26	-55.89	367880.1379	4509610.439	40;43.60984N	070;33.86916W	IAC-055-C-SPI.jpg	IAC-055-C-PV.jpg
IAC-056	A	8/13/21	12:34:24	-56.12	366968.5475	4508705.908	40;43.11230N	070;34.50507W	IAC-056-A-SPI.jpg	IAC-056-A-PV.jpg
IAC-056	B	8/13/21	12:41:13	-56.12	366953.1820	4508698.363	40;43.10807N	070;34.51589W	IAC-056-B-SPI.jpg	IAC-056-B-PV.jpg
IAC-056	C	8/13/21	12:46:29	-56.06	366952.7899	4508683.397	40;43.09998N	070;34.51597W	IAC-056-C-SPI.jpg	IAC-056-C-PV.jpg
IAC-057	A	8/13/21	13:36:19	-55.88	366034.8846	4509641.275	40;43.60861N	070;35.18010W	IAC-057-A-SPI.jpg	IAC-057-A-PV.jpg
IAC-057	B	8/13/21	13:43:11	-55.97	366026.4397	4509625.081	40;43.59977N	070;35.18589W	IAC-057-B-SPI.jpg	IAC-057-B-PV.jpg
IAC-057	C	8/13/21	13:48:43	-55.86	366017.0614	4509613.549	40;43.59345N	070;35.19240W	IAC-057-C-SPI.jpg	IAC-057-C-PV.jpg
IAC-051	A	8/13/21	14:29:56	-56.40	364605.5758	4508287.748	40;42.86326N	070;36.17768W	IAC-051-A-SPI.jpg	IAC-051-A-PV.jpg
IAC-051	B	8/13/21	14:36:07	-56.40	364600.8027	4508271.085	40;42.85421N	070;36.18085W	IAC-051-B-SPI.jpg	IAC-051-B-PV.jpg
IAC-051	C	8/13/21	14:42:26	-56.43	364593.1312	4508258.595	40;42.84738N	070;36.18613W	IAC-051-C-SPI.jpg	IAC-051-C-PV.jpg
IAC-050	A	8/13/21	15:23:13	-56.09	365478.7013	4507414.791	40;42.40017N	070;35.54644W	IAC-050-A-SPI.jpg	IAC-050-A-PV.jpg
IAC-050	B	8/13/21	15:29:42	-56.06	365468.5645	4507405.000	40;42.39478N	070;35.55351W	IAC-050-B-SPI.jpg	IAC-050-B-PV.jpg
IAC-050	C	8/13/21	15:34:44	-56.15	365454.7110	4507394.512	40;42.38898N	070;35.56321W	IAC-050-C-SPI.jpg	IAC-050-C-PV.jpg
IAC-049	A	8/13/21	16:18:14	-56.24	365114.7006	4506854.172	40;42.09369N	070;35.79765W	IAC-049-A-SPI.jpg	IAC-049-A-PV.jpg
IAC-049	B	8/13/21	16:24:05	-56.30	365100.3935	4506846.715	40;42.08952N	070;35.80771W	IAC-049-B-SPI.jpg	IAC-049-B-PV.jpg
IAC-049	C	8/13/21	16:29:22	-56.33	365087.4865	4506836.902	40;42.08409N	070;35.81674W	IAC-049-C-SPI.jpg	IAC-049-C-PV.jpg
IAC-048	A	8/13/21	17:02:41	-56.88	364190.8695	4506027.936	40;41.63816N	070;36.44279W	IAC-048-A-SPI.jpg	IAC-048-A-PV.jpg
IAC-048	B	8/13/21	17:08:45	-56.83	364174.1628	4506022.747	40;41.63519N	070;36.45458W	IAC-048-B-SPI.jpg	IAC-048-B-PV.jpg
IAC-048	C	8/13/21	17:14:03	-56.84	364162.1339	4506012.248	40;41.62940N	070;36.46298W	IAC-048-C-SPI.jpg	IAC-048-C-PV.jpg
IAC-020	A	8/13/21	18:12:01	-57.29	362339.7687	4505925.619	40;41.56446N	070;37.75547W	IAC-020-A-SPI.jpg	IAC-020-A-PV.jpg

SPI AND PV ACTUAL STATION LOCATIONS

Project Name: Beacon Wind

Project No.: Equinor Beacon Wind Lease Area SPI Survey

Boat: R/V Deep Helder (Seamar/MMT)

Crew: Ian Stupakoff ✓ Leon Delwiche ✓

Data provided by MMT Navigation Team

					NAD 83 2011 UTM 19		NAD83 2011			
Station Name	Replicate	Date (mm/dd/yy)	Time (hh:mm:ss)	Water Depth (m)	Easting	Northing	Lat	Long	SPI Image File Name	PV Image File Name
IAC-020	B	8/13/21	18:18:40	-57.26	362322.7559	4505922.001	40;41.56233N	070;37.76750W	IAC-020-B-SPI.jpg	IAC-020-B-PV.jpg
IAC-020	C	8/13/21	18:26:04	-57.30	362308.7909	4505911.897	40;41.55673N	070;37.77728W	IAC-020-C-SPI.jpg	IAC-020-C-PV.jpg
IAC-008	A	8/14/21	9:05:44	-58.33	362320.6532	4504068.653	40;40.56094N	070;37.74460W	IAC-008-A-SPI.jpg	IAC-008-A-PV.jpg
IAC-008	B	8/14/21	9:12:12	-58.25	362311.3385	4504057.729	40;40.55494N	070;37.75107W	IAC-008-B-SPI.jpg	IAC-008-B-PV.jpg
IAC-008	C	8/14/21	9:17:56	-58.40	362329.2685	4504055.103	40;40.55370N	070;37.73831W	IAC-008-C-SPI.jpg	IAC-008-C-PV.jpg
IAC-002	A	8/14/21	10:04:45	-59.09	361399.3300	4503158.353	40;40.05984N	070;38.38638W	IAC-002-A-SPI.jpg	IAC-002-A-PV.jpg
IAC-002	B	8/14/21	10:10:01	-59.09	361396.0732	4503144.432	40;40.05229N	070;38.38851W	IAC-002-B-SPI.jpg	IAC-002-B-PV.jpg
IAC-002	C	8/14/21	10:14:41	-59.13	361398.8393	4503129.197	40;40.04408N	070;38.38634W	IAC-002-C-SPI.jpg	IAC-002-C-PV.jpg
IAC-006	A	8/14/21	10:52:22	-59.20	360481.0314	4503981.919	40;40.49553N	070;39.04896W	IAC-006-A-SPI.jpg	IAC-006-A-PV.jpg
IAC-006	B	8/14/21	10:57:37	-59.14	360471.0315	4503971.268	40;40.48967N	070;39.05591W	IAC-006-B-SPI.jpg	IAC-006-B-PV.jpg
IAC-006	C	8/14/21	11:02:33	-59.20	360469.7044	4503956.879	40;40.48188N	070;39.05666W	IAC-006-C-SPI.jpg	IAC-006-C-PV.jpg
IAC-007	A	8/14/21	11:42:44	-60.05	358619.3331	4504069.741	40;40.52396N	070;40.37129W	IAC-007-A-SPI.jpg	IAC-007-A-PV.jpg
IAC-007	B	8/14/21	11:49:28	-60.04	358606.9974	4504077.422	40;40.52798N	070;40.38015W	IAC-007-B-SPI.jpg	IAC-007-B-PV.jpg
IAC-007	C	8/14/21	11:54:59	-60.09	358607.5303	4504060.672	40;40.51893N	070;40.37954W	IAC-007-C-SPI.jpg	IAC-007-C-PV.jpg
IAC-001	A	8/14/21	12:41:12	-60.44	357706.4276	4503151.289	40;40.01830N	070;41.00665W	IAC-001-A-SPI.jpg	IAC-001-A-PV.jpg
IAC-001	B	8/14/21	12:46:35	-60.46	357692.8568	4503143.907	40;40.01418N	070;41.01618W	IAC-001-B-SPI.jpg	IAC-001-B-PV.jpg
IAC-001	C	8/14/21	12:52:41	-60.49	357682.7118	4503131.593	40;40.00742N	070;41.02321W	IAC-001-C-SPI.jpg	IAC-001-C-PV.jpg

ADDENDUM C | SPI IMAGE ANAYLYSES RESULTS

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-001	B	8/14/2021	12:46:35	-60.5	IAC-001-B-SPI.jpg	15.1	Biological	14.8	15.5	0.7	2.9	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-001	C	8/14/2021	12:52:41	-60.5	IAC-001-C-SPI.jpg	14.2	Biological	13.6	14.6	1.0	2.7	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-002	B	8/14/2021	10:10:01	-59.1	IAC-002-B-SPI.jpg	13.5	Biological	12.4	14.0	1.6	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-002	C	8/14/2021	10:14:41	-59.1	IAC-002-C-SPI.jpg	13.9	Physical	12.0	15.7	3.7	1.7	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-003	A	8/11/2021	15:14:41	-59.4	IAC-003-A-SPI.jpg	16.8	Physical	16.5	17.1	0.6	2.5	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-003	C	8/11/2021	15:25:14	-59.5	IAC-003-C-SPI.jpg	17.8	Biological	17.4	18.1	0.7	2.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-004	A	8/11/2021	14:27:21	-59.1	IAC-004-A-SPI.jpg	15.6	Physical	15.3	15.9	0.6	2.1	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-004	C	8/11/2021	14:37:18	-59.0	IAC-004-C-SPI.jpg	17.1	Physical	15.4	18.0	2.6	1.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-005	A	8/11/2021	17:42:23	-58.3	IAC-005-A-SPI.jpg	16.4	Biological	15.7	16.9	1.2	2.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-005	C	8/11/2021	17:52:38	-58.3	IAC-005-C-SPI.jpg	17.6	Biological	16.6	18.0	1.4	4.0	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-006	A	8/14/2021	10:52:22	-59.2	IAC-006-A-SPI.jpg	14.7	Biological	14.4	15.7	1.3	3.8	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-006	C	8/14/2021	11:02:33	-59.2	IAC-006-C-SPI.jpg	14.2	Biological	13.4	14.7	1.3	3.4	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-007	A	8/14/2021	11:42:44	-60.0	IAC-007-A-SPI.jpg	15.7	Biological	15.4	16.5	1.1	4.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-007	B	8/14/2021	11:49:28	-60.0	IAC-007-B-SPI.jpg	17.5	Biological	16.9	18.4	1.5	2.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-008	A	8/14/2021	9:05:44	-58.3	IAC-008-A-SPI.jpg	15.1	Biological	14.6	15.4	0.8	2.2	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-008	B	8/14/2021	9:12:12	-58.2	IAC-008-B-SPI.jpg	17.2	Biological	14.8	18.3	3.5	5.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-009	B	8/11/2021	13:43:44	-58.6	IAC-009-B-SPI.jpg	13.4	Biological	12.0	14.6	2.6	3.8	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-009	C	8/11/2021	13:49:06	-58.5	IAC-009-C-SPI.jpg	15.5	Biological	15.2	15.9	0.7	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-010	D	8/11/2021	3:32:09	-58.2	IAC-010-D-SPI.jpg	16.0	Physical	15.5	16.2	0.7	1.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-010	E	8/11/2021	3:37:40	-58.2	IAC-010-E-SPI.jpg	15.7	Physical	15.2	16.0	0.8	2.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-011	B	8/11/2021	4:26:40	-57.9	IAC-011-B-SPI.jpg	15.0	Biological	13.4	15.9	2.5	3.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-011	C	8/11/2021	4:30:22	-57.9	IAC-011-C-SPI.jpg	14.5	Biological	14.4	15.1	0.7	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-012	B	8/11/2021	5:16:00	-57.5	IAC-012-B-SPI.jpg	16.5	Physical	16.1	17.0	0.9	2.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-012	C	8/11/2021	5:19:52	-57.5	IAC-012-C-SPI.jpg	15.9	Biological	15.3	16.4	1.1	1.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-013	B	8/11/2021	6:26:45	-56.8	IAC-013-B-SPI.jpg	14.7	Physical	14.2	15.1	0.9	4.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-013	C	8/11/2021	6:30:34	-56.7	IAC-013-C-SPI.jpg	16.2	Physical	15.8	17.0	1.2	2.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-014	A	8/11/2021	10:15:55	-59.1	IAC-014-A-SPI.jpg	15.4	Physical	14.3	16.1	1.8	0.9	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-014	C	8/11/2021	10:27:27	-59.1	IAC-014-C-SPI.jpg	13.1	Physical	12.3	13.4	1.1	0.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-015	D	8/11/2021	11:12:55	-58.7	IAC-015-D-SPI.jpg	16.9	Biological	16.7	17.1	0.4	4.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-015	E	8/11/2021	11:20:50	-58.6	IAC-015-E-SPI.jpg	17.2	Physical	17.2	17.8	0.6	5.6	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-016	A	8/11/2021	7:05:25	-57.0	IAC-016-A-SPI.jpg	14.8	Physical	14.1	15.3	1.2	1.1	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-016	B	8/11/2021	7:10:11	-57.1	IAC-016-B-SPI.jpg	15.7	Physical	15.3	16.0	0.7	1.1	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-017	A	8/10/2021	20:00:16	-56.7	IAC-017-A-SPI.jpg	16.1	Biological	15.5	16.2	0.7	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-017	C	8/10/2021	20:09:15	-56.6	IAC-017-C-SPI.jpg	14.8	Biological	14.6	15.4	0.8	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-018	A	8/10/2021	19:21:51	-56.5	IAC-018-A-SPI.jpg	14.9	Physical	14.6	15.2	0.6	1.1	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-018	B	8/10/2021	19:26:32	-56.5	IAC-018-B-SPI.jpg	14.6	Physical	14.2	14.9	0.7	0.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-019	A	8/10/2021	18:41:50	-56.3	IAC-019-A-SPI.jpg	14.2	Biological	13.9	14.5	0.6	3.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-019	B	8/10/2021	18:46:43	-56.2	IAC-019-B-SPI.jpg	16.0	Physical	15.8	16.6	0.8	2.6	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-020	A	8/13/2021	18:12:01	-57.3	IAC-020-A-SPI.jpg	15.2	Physical	14.8	15.5	0.7	2.8	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-020	C	8/13/2021	18:26:04	-57.3	IAC-020-C-SPI.jpg	12.9	Physical	12.5	13.5	1.0	1.7	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-021	B	8/11/2021	19:45:29	-57.5	IAC-021-B-SPI.jpg	16.0	Physical	15.5	16.0	0.5	2.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
IAC-021	C	8/11/2021	19:50:28	-57.4	IAC-021-C-SPI.jpg	14.9	Biological	14.5	15.5	1.0	2.2	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-022	B	8/13/2021	7:08:36	-56.2	IAC-022-B-SPI.jpg	15.6	Biological	15.3	16.3	1.0	3.5	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-022	C	8/13/2021	7:14:09	-56.2	IAC-022-C-SPI.jpg	14.6	Physical	13.8	15.4	1.6	2.9	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-023	A	8/11/2021	16:12:12	-58.7	IAC-023-A-SPI.jpg	15.0	Biological	13.9	15.6	1.7	3.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-023	B	8/11/2021	16:17:38	-58.5	IAC-023-B-SPI.jpg	16.1	Biological	15.3	16.8	1.5	1.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-024	B	8/11/2021	17:04:43	-58.1	IAC-024-B-SPI.jpg	15.4	Physical	15.0	15.7	0.7	1.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-001	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-001	C	none	none	1	No	1	3.67	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-002	B	loose biogenic aggregates	Yes	0	No	3	1.01	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-002	C	none	Yes	1	No	3	0.6	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-003	A	none	none	0	No	2	0.98	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
IAC-003	C	none	none	0	No	1	1.69	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-004	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-004	C	loose biogenic aggregates	Yes	0	No	4	0.58	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-005	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-005	C	none	none	1	No	2	2.2	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-006	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-006	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-007	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-007	B	none	none	0	No	1	2	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-008	A	cluster(s) of rounded pellets	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-008	B	loose biogenic aggregates	Yes	4	No	7	0.56	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-009	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-009	C	none	none	2	No	1	1.58	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-010	D	loose biogenic aggregates	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-010	E	none	none	1	No	4	2.03	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-011	B	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-011	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-012	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-012	C	loose biogenic aggregates	none	1	No	7	0.73	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-013	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-013	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-014	A	loose biogenic aggregates	none	0	No	5	0.57	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-014	C	none	none	0	No	8	0.42	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-015	D	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-015	E	none	none	0	No	3	2.13	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-016	A	loose biogenic aggregates	none	0	No	1	0.36	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-016	B	none	none	1	No	3	0.53	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	5
IAC-017	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-017	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-018	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-018	B	loose biogenic aggregates	none	0	No	7	0.46	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-019	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-019	B	none	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-020	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-020	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-021	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-021	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-022	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-022	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-023	A	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-023	B	none	none	1	No	3	1.05	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-024	B	loose biogenic aggregates	none	1	No	4	1.18	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-001	B	Sandy mud, mostly sand, biota established on sediment surface, amphipods and sticks.
IAC-001	C	Sandy mud, amphipod tubes on surface, large mud clast on sediment surface- looks like potential tube casing.
IAC-002	B	tan f.sand and tan/grey silt/clay. Surface tubes and mudclast dragdown. Surface pit. Void visible at depth.
IAC-002	C	tan f/vf.sand and tan/grey silt/clay. Polychaete in <2 cm depth. Surface tubes
IAC-003	A	Muddy Sand- shallow rpd, some breakage on sediment surface, mdclasts on sediment surface
IAC-003	C	Sandy mud- some feeding voids, amphipod tubes on surface. Large mud clast top left sedimet surface.
IAC-004	A	tan f.sand with grey silt/clay and trace biogenic carbonate grains. Polychaetes and voids at depth. Surface tubes.
IAC-004	C	tan f.sand and tan/grey silt/clay. Polychaete visible and feeding void. Surface tubes and mudclasts
IAC-005	A	Sandy Mud- amphipod tubes on surface, polychaete in middle right of profile. Some dark reduced sediment at depth.
IAC-005	C	Sandy mud, long polychaete in far left of profile. Small feeding void. Mud clasts on surface.
IAC-006	A	tan f.sand and trace biogenic carbonate grains. Tan/grey silt/clay. Surface tubes. Polychaetes and filled voids at depth
IAC-006	C	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete visible.
IAC-007	A	Sandy mud, large / long polychaete in sediment on far right of profile. Some amphipod tubes on surface
IAC-007	B	Sandy mud, unconsolidated sediment on surface, amphipod tubes and mud clasts. Feeding voids forming deeper in profile
IAC-008	A	tan f.sand and grey silt/clay. Surface tubes, mudclast, and clusters of fecal pellets. Polychaetes and voids visible at depth.
IAC-008	B	tan f.sand and grey silt/clay. Surface mudclasts and tube. Surface pit with polychaetes and voids at depth.
IAC-009	B	sandy mud, amphipod tubes on surface and in background. Darker reduced sediment in lower portion of profile.
IAC-009	C	Sandy mud, mud clast on surface, polychaetes in sediment
IAC-010	D	tan f.sand and tan/grey silt/clay. Polychaetes and feeding void at depth. Surface tubes.
IAC-010	E	tan f.sand with tan/grey silt/clay and trace biogenic carbonate grains. Surface mud shaving artifact, dragdown. Polychaete and feeding void at depth. Surface tubes.
IAC-011	B	Sandy mud ~50% mud. Deep feeding pit and void below. Some amphipod tubes on surface. Bits of shell in pit.
IAC-011	C	Sandy mud, amphipod tubes on surface. Some small shell bits deep in profile. Some dark patches of reduced sediment in profile.
IAC-012	B	tan f.sand with trace biogenic carbonate and tan/grey silt/clay. Feeding voids at depth. Surface tubes.
IAC-012	C	tan f.sand and tan/grey silt/clay. Many feeding voids and polychaete visible. Surface tube and mudclasts w/ dragdown.
IAC-013	B	Sandy Mud- ~50% mud. Possible infauna-unknown white translucent opbject. RPD difficult to discern
IAC-013	C	Muddy sand ~50%- feeding voids, amphipod tubes on surface- RPD difficult to discern
IAC-014	A	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Anoxiic sediment at depth. Feeding voids visible at depth. Surface tubes and mudclasts.
IAC-014	C	tan f.sand and tan/grey silt/clay and anoxic at depth. Many surface tubes and mudclasts (w/ dragdown). Feeding voids at depth.
IAC-015	D	Sandy mud- dark reduced sediment deeper in profile, some amphipod tubes on surface
IAC-015	E	Sandy mud, dark, reduced mud clasts on sediment surface. evidence of amphipod tubes on sediment surface.
IAC-016	A	tan f.sand with trace biogenic carbonate and tan/grey silt/clay. Many feeding voids.
IAC-016	B	tan f.sand with trace biogenic carbonate and tan/grey silt/clay, anoxic sediment at depth. Polychaete visible and surface mudclasts.
IAC-017	A	Sandy mud, dark strip of reduced mud lower in profile, amphipod tubes on surface.
IAC-017	C	Sandy mud- polychaete deep in sediment profile, amphipod tubes on surface. Relatively shallow RP
IAC-018	A	tan f.sand and tan/grey silt/clay with anoxic sediment at depth. Feeding void and surface tubes.
IAC-018	B	tan f.sand with trace m.sand. Tan/grey silt/clay and anoxic sediment at depth. Surface mudclasts (w/dragdown) and surface tube. Feeding voids at depth.
IAC-019	A	Sandy mud- a lot of amphipod tubes on surface. Dark reduced sediment intermixed in profile.
IAC-019	B	Sandy mud, large polychaete in profile, some bioturbation on surface. Relatively shallow RPD.
IAC-020	A	tan f.sand and tan/grey silt/clay, trace biogenic carbonate grains. Surface tubes and mud. Feeding void at depth
IAC-020	C	tan f.sand and trace biogenic carbonate grains. tan/grey silt/clay. >10cm polychaete visible with depths. Surface tubes
IAC-021	B	Muddy sand, some turbidity on surface, RPD difficult to discern. Good penetration.
IAC-021	C	Sandy mud- a lot of amphipod tubes on surface. RPD difficult to discern, some dark patches of reduced sediment deeper in profile
IAC-022	B	tan f.sand and grey silt/clay. Surface tubes and mud. Polychaetes and possible voids at depth.
IAC-022	C	tan f.sand and trace biogenic carbonate. Grey silt/clay. Surface tubes. Polychaete and possible filled void at depth
IAC-023	A	Sandy Mud- 3 polychaetes in the profile, amphipods on surface, a bit of an uneven sediment profile.
IAC-023	B	Sandy mud, amphipod tubes on surface. Some mud clasts on surface. Polychaete in far left profile.
IAC-024	B	tan f.sand and tan/grey silt/cly. Surface tubes and mudclasts. Polychaete and voids at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-024	C	8/11/2021	17:08:47	-58.3	IAC-024-C-SPI.jpg	16.8	Physical	16.4	17.1	0.7	0.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-025	A	8/11/2021	18:51:37	-57.9	IAC-025-A-SPI.jpg	15.4	Biological	15.0	15.7	0.7	3.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-025	C	8/11/2021	19:02:32	-58.0	IAC-025-C-SPI.jpg	15.3	Biological	14.1	16.4	2.3	2.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-026	B	8/11/2021	22:46:46	-58.1	IAC-026-B-SPI.jpg	15.2	Physical	14.4	15.9	1.5	1.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-026	C	8/11/2021	22:51:37	-58.0	IAC-026-C-SPI.jpg	14.6	Physical	14.1	14.8	0.7	1.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-027	A	8/13/2021	6:16:07	-56.4	IAC-027-A-SPI.jpg	15.7	Biological	15.2	15.9	0.7	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-027	B	8/13/2021	6:23:10	-56.2	IAC-027-B-SPI.jpg	16.7	Biological	16.4	17.0	0.6	1.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-028	A	8/10/2021	17:34:10	-56.2	IAC-028-A-SPI.jpg	5.9	Physical	5.8	6.5	0.7	3.5	3 to 2 phi	>4 phi	0 to -1 phi	Stage II
IAC-028	B	8/10/2021	17:38:01	-56.0	IAC-028-B-SPI.jpg	5.6	Physical	5.4	6.3	0.9	2.6	3 to 2 phi	>4 phi	1 to 0 phi	Stage II
IAC-029	B	8/11/2021	2:20:00	-57.3	IAC-029-B-SPI.jpg	14.4	Biological	14.3	14.8	0.5	3.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-029	C	8/11/2021	2:23:00	-57.4	IAC-029-C-SPI.jpg	15.0	Biological	14.7	15.3	0.6	2.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-030	A	8/11/2021	1:36:13	-57.4	IAC-030-A-SPI.jpg	15.7	Physical	15.4	15.8	0.4	2.5	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-030	C	8/11/2021	1:44:50	-57.3	IAC-030-C-SPI.jpg	13.7	Physical	13.3	13.9	0.6	1.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-031	B	8/11/2021	0:52:53	-57.0	IAC-031-B-SPI.jpg	16.7	Biological	16.6	17.1	0.5	1.3	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-031	C	8/11/2021	0:56:30	-57.0	IAC-031-C-SPI.jpg	13.6	Physical	13.2	14.3	1.1	4.3	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-032	A	8/10/2021	23:45:00	-56.9	IAC-032-A-SPI.jpg	12.8	Physical	12.4	13.1	0.7	1.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-032	C	8/10/2021	23:53:48	-56.6	IAC-032-C-SPI.jpg	12.4	Physical	12.1	12.9	0.8	1.4	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-033	A	8/9/2021	16:19:38	-55.1	IAC-033-A-SPI.jpg	14.2	Physical	13.9	14.6	0.7	2.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-033	B	8/9/2021	16:24:11	-55.1	IAC-033-B-SPI.jpg	13.9	Physical	13.8	14.5	0.7	1.9	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-034	A	8/9/2021	15:37:11	-54.5	IAC-034-A-SPI.jpg	15.8	Physical	15.5	16.1	0.6	2.8	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-034	C	8/9/2021	15:46:34	-54.6	IAC-034-C-SPI.jpg	15.8	Physical	15.1	16.3	1.2	2.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-035	B	8/9/2021	17:06:10	-55.0	IAC-035-B-SPI.jpg	12.8	Physical	12.4	13.8	1.4	2.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-035	C	8/9/2021	17:10:20	-55.1	IAC-035-C-SPI.jpg	15.2	Physical	15.2	15.7	0.5	2.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-036	B	8/10/2021	23:00:50	-56.6	IAC-036-B-SPI.jpg	14.7	Physical	13.7	15.9	2.2	0.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-036	C	8/10/2021	23:05:16	-56.6	IAC-036-C-SPI.jpg	13.8	Physical	13.4	14.1	0.7	0.6	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-037	A	8/9/2021	17:45:12	-54.9	IAC-037-A-SPI.jpg	12.8	Physical	12.4	13.2	0.8	1.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-037	C	8/9/2021	17:53:04	-54.8	IAC-037-C-SPI.jpg	15.3	Physical	15.1	15.4	0.3	2.2	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-038	A	8/10/2021	22:07:14	-56.7	IAC-038-A-SPI.jpg	15.2	Biological	14.5	15.6	1.1	1.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-038	C	8/10/2021	22:17:12	-56.7	IAC-038-C-SPI.jpg	14.9	Physical	14.1	15.3	1.2	0.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-039	A	8/10/2021	21:26:48	-56.5	IAC-039-A-SPI.jpg	13.7	Biological	13.5	14.1	0.6	1.6	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-039	C	8/10/2021	21:35:03	-56.6	IAC-039-C-SPI.jpg	14.9	Physical	14.7	15.2	0.5	2.2	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-040	A	8/10/2021	20:43:20	-56.5	IAC-040-A-SPI.jpg	15.4	Physical	15.0	15.8	0.8	1.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-040	C	8/10/2021	20:53:07	-56.5	IAC-040-C-SPI.jpg	15.3	Physical	14.1	15.7	1.6	1.4	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-041	A	8/10/2021	14:24:23	-55.1	IAC-041-A-SPI.jpg	12.1	Physical	11.1	12.5	1.4	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-041	C	8/10/2021	14:33:32	-55.1	IAC-041-C-SPI.jpg	14.8	Physical	14.5	15.2	0.7	1.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-042	A	8/10/2021	15:02:17	-55.2	IAC-042-A-SPI.jpg	13.9	Physical	13.6	14.7	1.1	1.2	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-042	B	8/10/2021	15:06:01	-55.4	IAC-042-B-SPI.jpg	15.1	Physical	14.6	15.9	1.3	1.2	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-043	A	8/9/2021	19:25:31	-54.7	IAC-043-A-SPI.jpg	14.9	Biological	14.6	15.3	0.7	2.6	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-043	C	8/9/2021	19:33:45	-54.7	IAC-043-C-SPI.jpg	14.9	Biological	14.1	15.6	1.5	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-044	A	8/9/2021	14:56:52	-53.3	IAC-044-A-SPI.jpg	14.5	Physical	14.0	14.7	0.7	2.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-044	B	8/9/2021	15:00:37	-53.4	IAC-044-B-SPI.jpg	15.0	Physical	14.7	15.1	0.4	2.2	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-045	B	8/9/2021	14:11:50	-53.5	IAC-045-B-SPI.jpg	13.8	Physical	13.4	14.1	0.7	1.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-045	C	8/9/2021	14:15:58	-53.5	IAC-045-C-SPI.jpg	14.6	Physical	14.1	15.0	0.9	1.7	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-046	B	8/9/2021	13:24:37	-53.0	IAC-046-B-SPI.jpg	13.0	Physical	12.3	13.7	1.4	1.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-046	C	8/9/2021	13:28:33	-53.1	IAC-046-C-SPI.jpg	14.3	Physical	13.8	15.0	1.2	2.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-047	A	8/9/2021	12:32:38	-53.2	IAC-047-A-SPI.jpg	14.1	Physical	13.8	14.2	0.4	2.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-047	B	8/9/2021	12:37:35	-53.3	IAC-047-B-SPI.jpg	15.1	Biological	14.7	15.6	0.9	3.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-048	A	8/13/2021	17:02:41	-56.9	IAC-048-A-SPI.jpg	14.8	Biological	14.6	15.0	0.4	2.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-024	C	loose biogenic aggregates	none	1	No	2	1.37	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-025	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-025	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-026	B	loose biogenic aggregates	none	1	No	5	0.53	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-026	C	none	none	0	No	7	0.45	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-027	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-027	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-028	A	none	none	0	No	7	0.74	0	Fine Unconsolidated Substrate	Sand	Medium Sand	8
IAC-028	B	none	none	0	No	1	0.77	0	Fine Unconsolidated Substrate	Sand	Medium Sand	7
IAC-029	B	loose biogenic aggregates	none	1	No	2	1.08	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-029	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-030	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-030	C	none	none	0	No	4	0.83	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-031	B	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-031	C	none	none	0	No	1	2.38	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-032	A	none	none	0	No	2	0.64	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-032	C	none	none	0	No	2	1.71	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-033	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-033	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-034	A	loose biogenic aggregates	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-034	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-035	B	none	none	0	No	1	1.4	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-035	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-036	B	none	none	3	No	8	0.74	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-036	C	none	none	1	No	1	1.13	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-037	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
IAC-037	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-038	A	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-038	C	none	none	0	No	8	0.63	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-039	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-039	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-040	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-040	C	none	none	0	No	3	0.46	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-041	A	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-041	C	none	none	2	No	2	0.57	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-042	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	5
IAC-042	B	loose biogenic aggregates	none	2	No	1	0.77	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-043	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-043	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-044	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-044	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-045	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-045	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-046	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-046	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-047	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-047	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-048	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-024	C	tan f.sand and tan/grey silt/clay. Trace biogenic carbonate grains. Surface tubes and mud shaving artifacts. Polychaete visible at depth.
IAC-025	A	Sandy mud, some cascading in profile far right. Amphipod tubes on surface.
IAC-025	C	Sandy mud- severed polychaete in profile. Some rippling on surface but roughness is biological because of the amphipod tubes all over the sediment surface. RPD difficult to discern
IAC-026	B	tan f.sand with trace biogenic carbonate grains. Mostly grey/dk grey silt/clay. Surface mudclasts and tubes. Feeding voids and possible polychaete at depth.
IAC-026	C	tan f.sand with trace biogenic carbonate grains. Tan/grey silt/clay. Small feeding void at depth. Mud shaving artifacts and tube on surface.
IAC-027	A	Sandy mud, amphipod tubes on surface, forming feeding voids forming deeper in sediment. Unnatural shadow circle in top left of profile likely from camera
IAC-027	B	Sandy mud ~60& ud. Amphipod tubes all over surface. Circular unnatural shadow top left of profile likely manmade form camera malfunction
IAC-028	A	Underpenetration. Tan coarse sand. Surface mudclasts and tubes.
IAC-028	B	Underpenetration. Grey silt/clay above tan coarse sand with streaks of anoxic sand. Surface tubes
IAC-029	B	tan f.sand and tan/grey silt/clay. surface burrows, mudclasts, and unknown filaments. Possible polychaete at depth.
IAC-029	C	tan f.sand and tan/grey silt/clay. surface tubes, burrows, mudclast, and fecal pellets.
IAC-030	A	tan f. sand with trace biogenic carbonate. Tan/grey silt/clay. Anoxic at depth. Filled feeding voids and small faint surface tube.
IAC-030	C	tan f.sand with trace biogenic carbonate. Tan/grey silt/clay. Mud shaving artifact. Surface mudclasts and faint surface tube. Feeding voids at depth.
IAC-031	B	Sandy mud, potentially some polychaetes in the right side of the profile. Some dark patches of reduced sediment in profile.
IAC-031	C	Sandy mud- some patches of reduced mud in lower portion of profile. Mud clast on surface.
IAC-032	A	tan f.sand with trace biogenic carbonate grains. Grey silt/clay. Voids at depth and faint surface tubes.
IAC-032	C	tan f.sand with trace biogenic carbonate grains. Surface mudclast dragdown. Faint surface tube. Filled in feeding void?
IAC-033	A	Sandy mud, RPD difficult to discern. ~50% Silty mud and the rest fine grained sands
IAC-033	B	Sandy mud, polychaete in prfile next to cluster of shell bits
IAC-034	A	tan f.sand with trace biogenic carbonate. Tan/grey silt/clay. Polychaetes and feeding voids visible.
IAC-034	C	tan f.sand with trace biogenic carbonate. Tan/grey/black silt/clay, >50% anoxic. Surface burrow leading to a large void at <3cm depth. Faint surface tube
IAC-035	B	Sandy mud, some patches of dark reduced sediment. Relatively shallow RPD, mud clast on surface. Bits of possible shells intermixed in profile.
IAC-035	C	Muddy Sand- potentially up to 40% mud. Shallow RPD.
IAC-036	B	tan f.sand with tace biogenic carbonate. Tan/grey silt/clay, anoxic streaks. Feeding voids and polychaetes visible at depth. Surface mudclasts and tubes.
IAC-036	C	tan f.sand, tan/grey silt/clay, and trace biogenic carbonate grains. Surface mud shavings and dragdown. Feeding voids and polychaete visible.
IAC-037	A	Sandy mud- small feeding void but not qualifying stage 3. Turbation present on surface.
IAC-037	C	Sandy mud- some patches of dark reduced sediment in profile. Shallow RPD. Slighly sloped sediment surface indication possible rippling.
IAC-038	A	tan f.sand and trace biogenic carbonate grains. Tan/grey silt/clay. Feeding voids at depth and surface tubes.
IAC-038	C	tan f.sand and tan/grey silt/clay. Trace biogenic carbonate. Surface mudclasts and tubes. Feeding voids at depth
IAC-039	A	Sandy mud-large biota on surface, shallow rpd. Some evidence of amphipod tubes in distance on right side of sediment surface.
IAC-039	C	Sandy Mud, some dark patches of reduced sediment in profile. Interesting biota on surface, finer grain sands near the surface of the sediment. Some feeding pits.
IAC-040	A	tan f.sand with trace biogenic carbonate grains. Grey/dk grey silt/clay. Feeding voids at depth and surface tubes
IAC-040	C	tan f.sand and grey silt/clay. Feeding voids at depth. Epifaunal shrimp. Surface mud shavings.
IAC-041	A	Sandy mud, some rippling on surface making roughness 0. Mud clasts and maybe amphipod tubes on sediment surface in background. Feeding voids and polychaetes in profile.
IAC-041	C	Sandy mud, inconsistent RPD depth. Some mud clats ons surface. Polychaetes in sediment profile. Deeper part of profle intermixed with darker reduced mud.
IAC-042	A	tan f.sand and trace biogenic carbonate grains. Grey/tan silt/clay. Polychaete visible at depth. Surface tubes
IAC-042	B	tan f.sand with trace biogenic carbonate. Tan/grey silt/clay. Polychaetes and feeding voids visible at depth. Surface tubes and mudclasts
IAC-043	A	Sandy mud- late stage 2, feeding voids forming, amphipod scattering sediment surface. Polychaete in profile. Some reduced patches of sediment in profile.
IAC-043	C	Sandy mud, polychaete in profile, some dark patches of reduced sediment, amphipods tubes on sediment surface, some organic debris on sediment surface as well.
IAC-044	A	tan f.sand and tan/grey silt/clay. Polychaetes and feeding voids at depth. Surface tubes
IAC-044	B	tan m/f.sand and tan/grey silt/clay. Polychaete and feeding voids visible at depth.
IAC-045	B	Sandy mud, small pocket of possible fecal pellets in center left of profile. Dark patch of reduced sediment in profile. Shallow RPD.
IAC-045	C	Sandy mud, shallow RPD, some reduced patches of mud lower portion of profile.
IAC-046	B	tan f.sand with tan/grey silt/clay. Feeding voids and polychaete visible at depth. Surface tubes
IAC-046	C	tan m/f.sand and tan/grey silt/clay. Feeding voids and polychaete visible at depth. Surface tube
IAC-047	A	Sandy mud, large polychaete in profile. Feeding void right next to polychaete.
IAC-047	B	Sandy mud, large amphipod tube on sediment surface, polychaete in profile within shell debris.
IAC-048	A	tan f.sand and trace biogenic carbonate. Tan/[lt/dk]grey silt/clay. Oxidized burrow associated with unknown organism. Voids at depth and surface tubes.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-048	C	8/13/2021	17:14:03	-56.8	IAC-048-C-SPI.jpg	15.6	Biological	15.1	16.1	1.0	4.0	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-049	A	8/13/2021	16:18:14	-56.2	IAC-049-A-SPI.jpg	14.6	Biological	14.0	15.0	1.0	1.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-049	B	8/13/2021	16:24:05	-56.3	IAC-049-B-SPI.jpg	14.3	Biological	13.6	15.1	1.5	2.3	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-050	A	8/13/2021	15:23:13	-56.1	IAC-050-A-SPI.jpg	15.1	Biological	15.0	15.4	0.4	3.3	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-050	C	8/13/2021	15:34:44	-56.1	IAC-050-C-SPI.jpg	14.8	Biological	14.2	15.2	1.0	3.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-051	B	8/13/2021	14:36:07	-56.4	IAC-051-B-SPI.jpg	14.3	Biological	14.5	14.7	0.2	2.3	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-051	C	8/13/2021	14:42:26	-56.4	IAC-051-C-SPI.jpg	10.3	Biological	8.7	11.4	2.7	2.2	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-052	A	8/13/2021	7:57:53	-56.1	IAC-052-A-SPI.jpg	15.0	Biological	14.6	15.5	0.9	3.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-052	C	8/13/2021	8:16:24	-53.2	IAC-052-C-SPI.jpg	15.0	Biological	14.3	15.3	1.0	2.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-053	B	8/10/2021	16:59:17	-55.8	IAC-053-B-SPI.jpg	15.1	Biological	14.7	15.0	0.3	1.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-053	C	8/10/2021	17:04:29	-55.7	IAC-053-C-SPI.jpg	15.4	Biological	14.6	15.8	1.2	1.9	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-054	B	8/13/2021	10:25:01	-55.2	IAC-054-B-SPI.jpg	15.9	Biological	15.2	16.6	1.4	5.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-054	C	8/13/2021	10:32:28	-55.1	IAC-054-C-SPI.jpg	14.8	Biological	14.4	15.1	0.7	4.7	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-055	B	8/13/2021	11:23:52	-55.8	IAC-055-B-SPI.jpg	14.9	Physical	14.6	15.3	0.7	2.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-055	C	8/13/2021	11:28:26	-55.9	IAC-055-C-SPI.jpg	13.6	Biological	13.0	14.7	1.7	1.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-056	B	8/13/2021	12:41:13	-56.1	IAC-056-B-SPI.jpg	16.2	Biological	15.4	16.7	1.3	2.5	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-056	C	8/13/2021	12:46:29	-56.1	IAC-056-C-SPI.jpg	16.4	Physical	16.0	16.5	0.5	4.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-057	C	8/13/2021	13:36:19	-55.9	IAC-057-C-SPI.jpg	14.1	Biological	14.0	14.7	0.7	3.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-057	B	8/13/2021	13:43:11	-56.0	IAC-057-B-SPI.jpg	14.8	Biological	14.5	15.5	1.0	1.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-058	A	8/13/2021	9:03:02	-55.7	IAC-058-A-SPI.jpg	16.1	Biological	15.7	16.3	0.6	5.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-058	B	8/13/2021	9:09:05	-55.7	IAC-058-B-SPI.jpg	14.8	Biological	14.6	15.0	0.4	3.4	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-059	A	8/10/2021	16:18:25	-55.4	IAC-059-A-SPI.jpg	14.8	Physical	14.4	15.2	0.8	2.3	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-059	B	8/10/2021	16:22:30	-55.5	IAC-059-B-SPI.jpg	13.4	Physical	12.8	13.9	1.1	2.4	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-060	B	8/9/2021	18:51:07	-54.8	IAC-060-B-SPI.jpg	15.2	Physical	14.6	15.9	1.3	1.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-060	C	8/9/2021	18:55:48	-54.7	IAC-060-C-SPI.jpg	13.4	Physical	13.3	13.8	0.5	1.0	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-061	B	8/9/2021	2:20:11	-53.0	IAC-061-B-SPI.jpg	15.5	Physical	15.3	15.6	0.3	2.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-061	C	8/9/2021	2:24:05	-53.0	IAC-061-C-SPI.jpg	14.5	Physical	13.5	15.1	1.6	1.8	>4 phi	>4 phi	>4 phi	Stage II
IAC-062	A	8/8/2021	20:45:51	-53.4	IAC-062-A-SPI.jpg	14.5	Physical	13.8	14.9	1.1	1.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-062	C	8/8/2021	20:54:34	-53.3	IAC-062-C-SPI.jpg	14.8	Biological	14.3	15.0	0.7	0.6	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-063	A	8/8/2021	20:04:00	-50.3	IAC-063-A-SPI.jpg	8.4	Physical	7.9	8.7	0.8	2.2	3 to 2 phi	>4 phi	1 to 0 phi	Stage I
IAC-063	C	8/8/2021	20:14:04	-50.2	IAC-063-C-SPI.jpg	6.4	Physical	5.7	6.9	1.2	3.5	3 to 2 phi	>4 phi	1 to 0 phi	Stage I
IAC-064	B	8/8/2021	20:50:00	-50.2	IAC-064-B-SPI.jpg	13.7	Biological	13.1	14.4	1.3	3.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-064	C	8/8/2021	20:54:00	-50.2	IAC-064-C-SPI.jpg	14.1	Biological	13.5	14.4	0.9	4.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-065	B	8/8/2021	21:31:04	-50.7	IAC-065-B-SPI.jpg	6.2	Physical	4.8	7.1	2.3	1.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I
IAC-065	C	8/8/2021	21:35:25	-50.7	IAC-065-C-SPI.jpg	5.6	Physical	5.1	6.2	1.1	2.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage II
IAC-066	A	8/8/2021	22:13:52	-51.1	IAC-066-A-SPI.jpg	4.8	Physical	4.4	5.4	1.0	2.4	1 to 0 phi	>4 phi	0 to -1 phi	Stage I
IAC-066	C	8/8/2021	22:22:39	-51.1	IAC-066-C-SPI.jpg	3.8	Physical	2.6	5.8	3.2	3.4	1 to 0 phi	>4 phi	0 to -1 phi	Stage I
IAC-067	B	8/8/2021	23:10:09	-51.6	IAC-067-B-SPI.jpg	14.6	Physical	14.7	15.0	0.3	5.6	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-067	C	8/8/2021	23:14:46	-51.7	IAC-067-C-SPI.jpg	14.4	Physical	14.2	14.9	0.7	2.6	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-068	B	8/9/2021	10:50:53	-52.7	IAC-068-B-SPI.jpg	15.3	Physical	14.4	15.7	1.3	2.9	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-068	C	8/9/2021	10:55:11	-52.6	IAC-068-C-SPI.jpg	14.3	Physical	13.2	14.8	1.6	3.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-069	A	8/9/2021	11:25:18	-52.9	IAC-069-A-SPI.jpg	15.5	Physical	14.0	16.1	2.1	2.6	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-069	B	8/9/2021	11:29:33	-52.9	IAC-069-B-SPI.jpg	13.8	Biological	13.3	14.2	0.9	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-070	A	8/9/2021	10:03:13	-53.8	IAC-070-A-SPI.jpg	13.6	Physical	13.2	14.1	0.9	2.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-070	B	8/9/2021	10:07:13	-53.8	IAC-070-B-SPI.jpg	15.0	Physical	14.5	15.2	0.7	2.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-071	A	8/9/2021	9:14:52	-54.6	IAC-071-A-SPI.jpg	15.1	Biological	14.8	15.7	0.9	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-071	C	8/9/2021	9:23:51	-54.6	IAC-071-C-SPI.jpg	14.5	Physical	14.6	14.6	0.0	2.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-072	A	8/9/2021	5:24:14	-54.2	IAC-072-A-SPI.jpg	14.7	Physical	14.0	15.2	1.2	2.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-048	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-049	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-049	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-050	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-050	C	loose biogenic aggregates	none	0	No	4	0.7	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-051	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-051	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-052	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-052	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-053	B	none	none	1	No	2	1.97	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-053	C	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-054	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-054	C	loose biogenic aggregates	none	0	No	1	0.78	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-055	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-055	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-056	B	none	none	0	No	2	0.6	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-056	C	loose biogenic aggregates	none	3	No	1	0.74	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-057	C	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-057	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-058	A	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-058	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-059	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-059	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-059	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-059	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-060	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-060	C	none	none	4	No	1	0.52	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	5
IAC-061	B	none	none	0	No	5	0.51	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-061	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	6
IAC-062	A	none	none	1	No	1	0.63	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
IAC-062	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
IAC-063	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	4
IAC-063	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	6
IAC-064	B	loose biogenic aggregates	none	5	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-064	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-065	B	none	none	0	No	2	0.78	0	Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	4
IAC-065	C	none	Yes	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	6
IAC-066	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Coarse/Coarse Sand	5
IAC-066	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Coarse/Coarse Sand	6
IAC-067	B	none	none	4	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-067	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-068	B	none	none	3	No	1	0.63	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-068	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-069	A	none	none	0	No	1	0.87	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-069	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-070	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-070	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-071	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-071	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-072	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-048	C	tan f.sand and trace biogenic carbonate, grey silt/clay. Surface tubes.
IAC-049	A	Sandy mud, polychaetes in profile, shell bits also in profile, amphipod tubes on surface
IAC-049	B	Sandy mud, slightly sloped sediment surface, amphipod tubes on surface, unnatural circular shadow likely from camera.
IAC-050	A	tan f.sand and trace biogenic carbonate. Tan/grey silt/clay. Surface tubes. Polychaete and voids at depth.
IAC-050	C	tan f.sand with trace biogenic carbonate. Tan/grey silt/clay. Surface mudclasts and tubes. Voids visible at depth.
IAC-051	B	Sandy mud, some dark patches of reduced sediment in profile, active amphipod tubes on surface. RPD relatively difficult to discern
IAC-051	C	Sandy mud, almost underpentrated flag, sloped sediment surface with amphipod tubes on surface.
IAC-052	A	tan f.sand and trace biogenic carbonate, grey silt/clay. Surface tubes. Voids at depth.
IAC-052	C	tan f.sand and trace biogenic carbonate. grey silt/clay. Surface tube and small void at depth.
IAC-053	B	Dark reduced mud patch bottom right corner, large polychaete in sediment, feeding void. Some amphipods on sediment surface.
IAC-053	C	Sandy mud, feeding pit/ bioturbation on sediment surface.
IAC-054	B	tan f.sand and trace biogenic carbonate. Tan/grey silt/clay. >7cm polychaete and void at depth. Surface tube
IAC-054	C	tan f.sand and travce biogenic biogenic carbonate. Tan/grey silt/clay. Surface mudclast. Feeding voids at depth.
IAC-055	B	Sandy mud, feeding voids deeper in sediment profile, RPD relatively difficult to discern. Dark reduced sediment lower in profile.
IAC-055	C	Sandy mud, feeding voids in profile, amphipod tubes on surface
IAC-056	B	tan f.sand and trace biogenic carbonate. tan vf.sand/silt/clay. Surface tubes and mudclasts. Voids visible at depth.
IAC-056	C	tan f.sand and trace biogenic carbonate. tan/grey silt/clay. Surface tubes and mudclasts. Polychaetes and voids at depth.
IAC-057	C	tan/grey f.sand and tan/grey silt/clay with trace biogenic carbonate grains. Surface tubes. Polychaetes and feeding voids visible at depth.
IAC-057	B	Sandy mud, RPD relatively difficult to discern. Amphipod tube son surface.
IAC-058	A	tan f.sand and trace biogenic carbonate grains. tan/grey silt/clay. Surface tubes. Surface burrow leading to a void.
IAC-058	B	tan f.sand and tan/grey silt/clay. Surface tubes. Feeding voids at depth
IAC-059	A	Sandy mud, lower half of profile is darker reduced mud, shallow RPD.
IAC-059	B	Sandy Mud, RPD difficult to discern. some looser sediment lower in profile- maybe forming food voids.
IAC-060	B	tan m/f.sand and tan/grey silt/clay. Polychaete and feeding voids visible at depth. Surface tubes
IAC-060	C	tan m/f.sand and tan/grey silt/clay. Many polychaetes visible and in anoxic(?) sediment. Surface tubes
IAC-061	B	Muddy sand, mud clasts on sediment surface, feeding voids in profile.
IAC-061	C	Muddy sand, some darker reduced sediment in left of profile. Biota on surface. Sloped sediment surface indicating possible rippling and therefore physical roughness
IAC-062	A	tan m/f.sand and tan/grey silt/clay. Feeding void at depth. Surface tubes.
IAC-062	C	tan aggregates and sand with tan/grey silt/clay. Large feeding void. Shallow RPD.
IAC-063	A	Muddy sand, underpenetrated. RPD difficult to discern, mostly fine gtrian sands but some reduced silt in lower right profile.
IAC-063	C	Muddy sand, underpenetrated, some amphipod tubes on surface.
IAC-064	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids at depth.
IAC-064	C	tan f.sand and tan/grey silt/clay. Surface tubes. Massive void at depth.
IAC-065	B	Muddy Sand,very underpenetrated. Biota on sediment surface. some mud clasts also on surface.
IAC-065	C	Muddy sand, some mud lower portion of profile. Very underpenetrated. Some mounds and amphipod tubes visible on seafloor.
IAC-066	A	Underpenetration. tan coarse sand with mud aggregates (and dragdown). Plume of anoxic silt/clay. Surface tube
IAC-066	C	Underpentration. tan coarse sand and grey silt/clay mudclast.
IAC-067	B	Muddy sand ~20% mud in lower portion of profile. Bright polychaetes in profile.
IAC-067	C	Sandy mud, polychaete in surface. Some darker reduced silt intermixed.
IAC-068	B	tan f.sand and tan/grey silt/clay. Polychaetes and feeding voids visible. Surface tubes.
IAC-068	C	tan f.sand and tan/grey silt/clay. Long bright orange burrow (iron oxidized?). Surface tubes. Feeding voids at depth.
IAC-069	A	Sandy mud, lower portion of sediment relatively reduced. Mud clast on surface.
IAC-069	B	Feeding voids present. Biota on surface. RPD relatively difficult to discern.
IAC-070	A	tan f.sand with trace biogenic carbonate grains and grey silt/clay. Polychaete visible at depth and possible filled void. Surface tubes.
IAC-070	B	tan f.sand with trace biogenic carbonate grans. tan/grey silt/clay. Feeding voids visible. Surface tubes.
IAC-071	A	Sandy mud, large feeding void in lower right portion of profile. Amphipod tubes on sediment surface.
IAC-071	C	Sandy mud, feeding voids present, amphipods on surface- shells in profile.
IAC-072	A	tan f.sand andtrace biogenic carbonate grains. grey/dk grey silt/clay. Mostly anoxic. Feeding voids. Surface tubes.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-072	B	8/9/2021	5:28:21	-54.2	IAC-072-B-SPI.jpg	13.2	Biological	12.7	14.2	1.5	2.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-073	A	8/10/2021	3:47:32	-52.9	IAC-073-A-SPI.jpg	14.0	Biological	13.3	14.6	1.3	4.2	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-073	C	8/10/2021	3:58:33	-53.1	IAC-073-C-SPI.jpg	15.5	Biological	15.2	15.9	0.7	3.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-074	A	8/10/2021	10:00:55	-54.9	IAC-074-A-SPI.jpg	15.0	Biological	14.9	15.2	0.3	2.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-074	B	8/10/2021	10:05:36	-54.8	IAC-074-B-SPI.jpg	15.2	Physical	14.5	15.7	1.2	1.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-075	A	8/10/2021	12:27:34	-54.9	IAC-075-A-SPI.jpg	12.8	Biological	12.4	13.1	0.7	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-075	B	8/10/2021	12:31:46	-55.0	IAC-075-B-SPI.jpg	16.1	Biological	16.3	16.4	0.1	2.5	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-076	A	8/10/2021	15:42:55	-54.8	IAC-076-A-SPI.jpg	14.6	Physical	14.3	14.9	0.6	2.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-076	C	8/10/2021	15:51:06	-54.8	IAC-076-C-SPI.jpg	16.3	Physical	16.0	16.5	0.5	2.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-077	A	8/10/2021	1:13:23	-50.8	IAC-077-A-SPI.jpg	15.2	Biological	14.6	16.0	1.4	3.3	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-077	C	8/10/2021	1:22:06	-50.7	IAC-077-C-SPI.jpg	15.3	Biological	15.0	15.5	0.5	3.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-078	A	8/10/2021	1:56:58	-51.3	IAC-078-A-SPI.jpg	15.6	Physical	14.6	16.0	1.4	1.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-078	C	8/10/2021	2:05:46	-51.2	IAC-078-C-SPI.jpg	15.5	Biological	15.0	15.8	0.8	3.5	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-079	A	8/10/2021	2:56:46	-52.2	IAC-079-A-SPI.jpg	14.0	Biological	13.6	14.7	1.1	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-079	B	8/10/2021	3:02:02	-52.2	IAC-079-B-SPI.jpg	15.3	Physical	14.9	16.2	1.3	3.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-080	B	8/10/2021	10:46:46	-54.1	IAC-080-B-SPI.jpg	14.5	Physical	14.1	15.4	1.3	1.9	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-080	C	8/10/2021	10:50:54	-54.2	IAC-080-C-SPI.jpg	15.4	Biological	15.0	16.0	1.0	2.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-081	A	8/10/2021	11:32:34	-54.9	IAC-081-A-SPI.jpg	15.1	Physical	15.1	15.3	0.2	2.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-081	B	8/10/2021	11:37:03	-54.9	IAC-081-B-SPI.jpg	12.7	Biological	12.1	13.5	1.4	3.0	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-082	A	8/10/2021	13:09:49	-54.5	IAC-082-A-SPI.jpg	15.0	Physical	14.7	15.4	0.7	2.6	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-082	C	8/10/2021	13:17:42	-54.6	IAC-082-C-SPI.jpg	16.1	Biological	15.8	16.3	0.5	4.7	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-083	A	8/9/2021	21:38:09	-53.7	IAC-083-A-SPI.jpg	14.3	Physical	14.2	14.6	0.4	3.0	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-083	B	8/9/2021	21:43:04	-53.7	IAC-083-B-SPI.jpg	15.4	Physical	15.2	15.8	0.6	4.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-084	A	8/9/2021	22:32:22	-52.6	IAC-084-A-SPI.jpg	14.0	Physical	13.9	14.4	0.5	4.3	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-084	C	8/9/2021	22:42:27	-52.7	IAC-084-C-SPI.jpg	15.5	Biological	15.1	16.1	1.0	4.0	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-085	B	8/9/2021	23:28:04	-51.9	IAC-085-B-SPI.jpg	14.6	Biological	13.9	15.1	1.2	2.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-085	C	8/9/2021	23:32:26	-51.9	IAC-085-C-SPI.jpg	14.3	Biological	14.1	14.6	0.5	3.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-086	A	8/10/2021	0:22:50	-51.5	IAC-086-A-SPI.jpg	14.7	Physical	14.2	15.3	1.1	4.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-086	B	8/10/2021	0:27:13	-51.5	IAC-086-B-SPI.jpg	14.9	Physical	14.9	15.2	0.3	5.4	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-087	A	8/8/2021	7:28:50	-50.4	IAC-087-A-SPI.jpg	14.7	Biological	12.7	15.4	2.7	3.5	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-087	C	8/8/2021	7:37:26	-50.4	IAC-087-C-SPI.jpg	15.0	Biological	14.9	15.1	0.2	4.0	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-088	A	8/8/2021	6:47:05	-50.1	IAC-088-A-SPI.jpg	12.7	Physical	12.1	12.9	0.8	3.4	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-088	C	8/8/2021	6:57:13	-50.2	IAC-088-C-SPI.jpg	15.4	Biological	14.2	16.0	1.8	4.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-089	A	8/8/2021	5:51:50	-51.8	IAC-089-A-SPI.jpg	15.2	Physical	15.0	15.5	0.5	3.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-089	B	8/8/2021	5:56:11	-51.8	IAC-089-B-SPI.jpg	15.1	Physical	14.8	15.4	0.6	5.9	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-090	A	8/8/2021	5:00:42	-51.0	IAC-090-A-SPI.jpg	15.9	Physical	15.9	16.1	0.2	4.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-090	B	8/8/2021	5:05:20	-51.0	IAC-090-B-SPI.jpg	15.3	Physical	15.1	15.4	0.3	4.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-091	A	8/8/2021	1:54:37	-50.2	IAC-091-A-SPI.jpg	12.2	Physical	11.6	13.3	1.7	3.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-091	B	8/8/2021	1:59:57	-50.3	IAC-091-B-SPI.jpg	16.2	Biological	15.8	16.1	0.3	3.1	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-092	B	8/8/2021	4:14:56	-48.8	IAC-092-B-SPI.jpg	13.6	Physical	12.6	14.1	1.5	3.9	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-092	C	8/8/2021	4:18:46	-48.7	IAC-092-C-SPI.jpg	15.6	Physical	15.1	16.6	1.5	5.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-093	B	8/8/2021	3:27:21	-49.2	IAC-093-B-SPI.jpg	13.6	Biological	13.6	13.8	0.2	3.0	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-093	C	8/8/2021	3:31:20	-49.2	IAC-093-C-SPI.jpg	13.9	Biological	13.2	14.2	1.0	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-094	A	8/8/2021	2:43:56	-48.8	IAC-094-A-SPI.jpg	15.6	Physical	13.2	17.2	4.0	4.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-094	C	8/8/2021	2:54:30	-49.0	IAC-094-C-SPI.jpg	15.3	Biological	14.9	16.2	1.3	3.3	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-095	B	8/7/2021	20:43:14	-49.8	IAC-095-B-SPI.jpg	14.9	Biological	14.7	15.2	0.5	4.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-095	C	8/7/2021	20:48:19	-49.7	IAC-095-C-SPI.jpg	16.2	Biological	15.9	16.5	0.6	4.9	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-096	B	8/7/2021	16:21:36	-48.0	IAC-096-B-SPI.jpg	16.2	Physical	15.7	17.0	1.3	3.4	>4 phi	>4 phi	3 to 2 phi	Stage III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-072	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-073	A	none	none	6	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-073	C	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-074	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-074	B	none	none	4	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
IAC-075	A	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-075	B	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-076	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-076	C	loose biogenic aggregates	none	1	No	3	0.57	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-077	A	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-077	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-078	A	loose biogenic aggregates	Yes	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-078	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-079	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-079	B	loose biogenic aggregates	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-080	B	loose biogenic aggregates	none	2	No	4	0.42	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-080	C	loose biogenic aggregates	none	1	No	4	0.31	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-081	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-081	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-082	A	none	none	1	No	3	0.29	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-082	C	loose biogenic aggregates	none	2	No	4	1	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-083	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-083	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-083	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-083	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-084	A	loose biogenic aggregates	none	2	No	1	0.2	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-084	C	none	Yes	4	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-085	B	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-085	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-086	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-086	B	none	none	2	No	1	0.41	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-087	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-087	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-088	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-088	C	loose biogenic aggregates	Yes	0	No	3	1.34	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-089	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-089	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-090	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-090	B	none	none	1	No	2	0.26	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-091	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-091	B	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-092	B	loose biogenic aggregates	none	2	No	1	0.53	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-092	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-093	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-093	C	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-094	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-094	C	loose biogenic aggregates	none	1	No	1	0.26	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-095	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-095	C	none	none	0	No	1	0.89	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-096	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-072	B	tan f.sand with trace biogenic carbonate grains. grey/dk grey silt/clay. Mostly anoxic. Polychaete and void visible at depth. Surface bioaggregates and tube.
IAC-073	A	Sandy mud, several polychaetes in profile.
IAC-073	C	Feeding voids with established biota on sediment surface therefore stage 5. A few polychaetes in profile. Large amphipod tube clusters on sediment surface.
IAC-074	A	tan f.sand with trace biogenic carbonate grains. tan/dk grey silt/clay. Polychaete and possible filled feeding void. Surface tubes.
IAC-074	B	tan f.sand with trace biogenic carbonate, grey mudclasts, and tan/grey silt/clay. Many polychaetes at depth and a feeding void. Surface tubes.
IAC-075	A	Bioturbation on surface, feeidng pit, RPD difficult to discern.
IAC-075	B	Sandy mud, polychaetes in profile. Feeding void forming. Amphipod tubes on service. RPD relatively difficult to discern.
IAC-076	A	tan f.sand and tan/grey silt/clay. Mulitple 2mm carbonate shells. Feeding voids at depth. Surface tubes
IAC-076	C	tan f.sand and trace biogenic carbonate grains. tan/[dk]grey silt/clay. Surface tubes and mudclasts. Feeding void and polychaete visible.
IAC-077	A	Sandy mud, feeding pits and voids. Large clusters of amphipods on sediment surface.
IAC-077	C	Sandy mud, polychaete in sediment profile. Several amphipod tubes and biota on surface.
IAC-078	A	tan f.sand and tan/grey silt/clay. Surface tubes. Surface burrow leading to void. Polychaetes and voids visible.
IAC-078	C	tan f.sand and tan/grey silt/clay. Many surface tubes. Possible filled void.
IAC-079	A	Some patches of reduced silt in lower left. Several amphipod tubes all over sediment surface.
IAC-079	B	Sandy mud, multiple polychaete in profile. Patches of reduced sediment scattered
IAC-080	B	tan f.sand and grey silt/clay. Feeding voids and polychaetes visible at depth. Surface tubes and mudclasts.
IAC-080	C	tan f.sand with trace biogenic carbonate grains. Tan/grey silt/clay. Surface tubes. Feeding voids at depth.
IAC-081	A	Sandy mud, feeding voids, RPD difficult to discern.
IAC-081	B	Large polychaete in profile. Several biota on sediment surface. Unknown large organism on sediment surfac.e
IAC-082	A	tan f.sand and grey mudclast dragdown. Tan/grey silt/clay. Feeding void and polychaete at depth.
IAC-082	C	tan f.sand and tan/grey silt/clay. Surface mudclasts. Polychaetes and void at depth.
IAC-083	A	Sandy mud, some reduced silt in lower left. Large feeding voids.
IAC-083	B	Sandy mud, RPD diffficult to discern, some biota on sediment surface, small void near surface?
IAC-084	A	tan f.sand with trace biogenic carbonate. tan/grey silt/clay. Surface tubes and mudclasts. Feeding voids and polychaetes visible at depth.
IAC-084	C	tan f.sand and grey/dk grey silt/clay. Many polychaetes visible at depth. Surfuce pit/mount leading to a polychaete.
IAC-085	B	Sandy mud, feeding voids, polychaetes on surface, darker silt near bottom of profile.
IAC-085	C	Sandy mud ~50% mud. Amphipod tubes on surface. Feeding voids.
IAC-086	A	tan f.sand and trace biogenic carbonate. tan/grey silt/clay. Surface tubes. Polychaete and feeding voids visible at depth.
IAC-086	B	tan f.sand and tan/grey silt/clay. Surface tubes. 10cm polychaete. Polychaetes and voids visible at depth.
IAC-087	A	Sandy mud, polychaetes in sediment. Sediment surface littered with amphipod tubes. Uneven sediment surface.
IAC-087	C	Sandy mud, feeding voids in profile, amphipod tubes on surface.
IAC-088	A	tan f.sand and tan/grey silt/clay. Unknown white cluster in center of profile above feeding void. Surface tubes. Polychaete and feeding voids visible at depth.
IAC-088	C	tan f.sand and tan/grey/black silt/clay. Surface burrow leading to a void. Surface tubes and mudclast.
IAC-089	A	Sandy mud, polychaetes in profile. RPD relatively easy to discern.
IAC-089	B	Sandy mud, feeding void in profile. Lower half of profile relatively dark and reduced.
IAC-090	A	tan f.sand and trace biogenic carbonate. tan/grey silt/clay. Feeding voids at depth. Surface tubes.
IAC-090	B	tan f.sand and trace biogenic carbonate. tan/grey/black silt/clay. Small feeding void. Surface tubes.
IAC-091	A	Sandy mud, contrasting mud between RPD and deeper darker sediment. Some bioturbation on surface.
IAC-091	B	Sandy Mud, large feeding void, established amphipod tubes on surface. Multuple Polychaetes in sediment profile.
IAC-092	B	tan f.sand and tna/grey silt/clay. Surface tubes and mudclast. Polychaetes and feeding voids at depth.
IAC-092	C	tan f. sand and trace biogenic carbonate. Tan/grey/black silt/clay. Surface tubes. Polychaete and feeding voids visible.
IAC-093	B	Muddy sand, large polychaete in sediment profile. Feeding voids present.
IAC-093	C	Muddy sand, feeding pits, amphipod tubes on surface, some bioturbation/pitting on sediment surface
IAC-094	A	tan f.sand and tan/grey/black silt/clay. Surface tubes. Surface burrow leading to voids. Polychaete visible.
IAC-094	C	tan f.sand and trace biogenic carbonate. Tan/grey/black silt/clay. >5cm polychaete and large void at depth. Surface tubes.
IAC-095	B	Large polychaete in sediment profile. Amphipod on surface.
IAC-095	C	Sandy mud, amphipod tubes and mud clasts on sediment surface.
IAC-096	B	tan f.sand and tan/grey silt/clay. Filled feeding voids and polychaete at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-096	C	8/7/2021	16:24:25	-47.8	IAC-096-C-SPI.jpg	15.6	Biological	15.0	16.2	1.2	4.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-097	A	8/10/2021	13:47:19	-54.8	IAC-097-A-SPI.jpg	13.7	Biological	13.2	14.2	1.0	2.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-097	B	8/10/2021	13:51:05	-54.6	IAC-097-B-SPI.jpg	14.5	Biological	14.4	14.7	0.3	4.5	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-098	A	8/9/2021	20:11:13	-54.5	IAC-098-A-SPI.jpg	15.7	Biological	15.1	16.4	1.3	3.5	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-098	B	8/9/2021	20:15:13	-54.6	IAC-098-B-SPI.jpg	12.9	Biological	12.5	13.2	0.7	2.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-099	A	8/9/2021	20:53:22	-53.9	IAC-099-A-SPI.jpg	14.0	Biological	13.9	14.3	0.4	2.0	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-099	C	8/9/2021	21:03:10	-54.1	IAC-099-C-SPI.jpg	13.9	Physical	13.6	14.1	0.5	2.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-100	A	8/8/2021	16:05:56	-52.3	IAC-100-A-SPI.jpg	14.2	Biological	13.0	14.9	1.9	2.8	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-100	C	8/8/2021	16:14:04	-52.4	IAC-100-C-SPI.jpg	15.6	Physical	14.7	16.0	1.3	4.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-101	A	8/8/2021	15:15:42	-51.3	IAC-101-A-SPI.jpg	14.6	Biological	13.5	15.4	1.9	3.7	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-101	C	8/8/2021	15:23:59	-51.3	IAC-101-C-SPI.jpg	14.3	Biological	13.8	15.0	1.2	2.3	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-102	A	8/8/2021	14:36:40	-51.0	IAC-102-A-SPI.jpg	14.8	Biological	14.3	15.2	0.9	3.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-102	C	8/8/2021	14:47:20	-51.1	IAC-102-C-SPI.jpg	11.9	Physical	10.3	13.6	3.3	2.0	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-103	B	8/9/2021	0:29:08	-53.1	IAC-103-B-SPI.jpg	13.9	Physical	13.6	14.3	0.7	3.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-103	C	8/9/2021	0:33:20	-53.1	IAC-103-C-SPI.jpg	14.3	Physical	14.0	15.1	1.1	1.9	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-104	A	8/8/2021	13:27:16	-52.2	IAC-104-A-SPI.jpg	14.6	Physical	14.1	15.1	1.0	4.1	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-104	B	8/8/2021	13:49:42	-52.4	IAC-104-B-SPI.jpg	14.6	Physical	14.3	15.0	0.7	2.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-105	B	8/8/2021	17:28:35	-51.7	IAC-105-B-SPI.jpg	14.6	Biological	14.3	14.9	0.6	2.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-105	C	8/8/2021	17:32:39	-51.8	IAC-105-C-SPI.jpg	14.8	Physical	14.4	15.0	0.6	3.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-106	B	8/8/2021	18:29:46	-51.0	IAC-106-B-SPI.jpg	15.5	Physical	15.2	15.7	0.5	7.2	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-106	C	8/8/2021	18:34:14	-50.9	IAC-106-C-SPI.jpg	16.3	Physical	16.0	16.6	0.6	5.1	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-107	B	8/8/2021	19:15:38	-50.4	IAC-107-B-SPI.jpg	5.5	Physical	4.6	5.9	1.3	3.2	3 to 2 phi	>4 phi	1 to 0 phi	Stage II
IAC-107	C	8/8/2021	19:20:24	-48.0	IAC-107-C-SPI.jpg	6.7	Physical	5.9	7.4	1.5	4.1	3 to 2 phi	>4 phi	1 to 0 phi	Stage II
IAC-108	E	8/9/2021	4:39:30	-53.1	IAC-108-E-SPI.jpg	14.2	Physical	13.9	14.5	0.6	3.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-108	F	8/9/2021	4:44:09	-53.0	IAC-108-F-SPI.jpg	13.2	Biological	13.1	13.3	0.2	4.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-109	A	8/8/2021	8:21:26	-51.0	IAC-109-A-SPI.jpg	14.4	Biological	14.2	14.9	0.7	2.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-109	B	8/8/2021	8:25:53	-51.0	IAC-109-B-SPI.jpg	15.9	Physical	15.7	16.1	0.4	4.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-110	A	8/8/2021	9:03:58	-52.9	IAC-110-A-SPI.jpg	18.2	Biological	17.8	18.8	1.0	5.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-110	B	8/8/2021	9:08:03	-52.9	IAC-110-B-SPI.jpg	15.0	Biological	14.3	15.9	1.6	3.2	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-111	D	8/8/2021	10:33:31	-52.2	IAC-111-D-SPI.jpg	16.1	Biological	15.3	16.9	1.6	5.1	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-111	E	8/8/2021	10:37:29	-52.1	IAC-111-E-SPI.jpg	16.3	Biological	15.8	17.0	1.2	5.1	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-112	A	8/8/2021	0:20:48	-50.9	IAC-112-A-SPI.jpg	16.3	Biological	16.0	16.4	0.4	6.1	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-112	C	8/8/2021	0:29:22	-50.8	IAC-112-C-SPI.jpg	16.5	Biological	16.2	16.9	0.7	3.8	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-113	A	8/8/2021	1:10:18	-50.1	IAC-113-A-SPI.jpg	15.4	Biological	14.9	16.0	1.1	3.2	>4 phi	>4 phi	1 to 0 phi	Stage II
IAC-113	B	8/8/2021	1:15:32	-49.8	IAC-113-B-SPI.jpg	15.9	Physical	15.6	16.3	0.7	4.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-114	A	8/7/2021	21:53:39	-50.0	IAC-114-A-SPI.jpg	16.0	Biological	15.4	16.7	1.3	3.7	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-114	B	8/7/2021	21:58:56	-50.0	IAC-114-B-SPI.jpg	16.9	Biological	16.4	17.4	1.0	4.1	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-115	A	8/7/2021	15:38:18	-48.5	IAC-115-A-SPI.jpg	15.5	Biological	15.0	15.9	0.9	3.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-115	C	8/7/2021	15:46:52	-48.5	IAC-115-C-SPI.jpg	16.3	Physical	15.6	16.8	1.2	4.5	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-116	A	8/4/2021	17:33:35	-52.9	IAC-116-A-SPI.jpg	17.5	Biological	16.7	18.1	1.4	3.8	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-116	C	8/4/2021	17:43:13	-52.9	IAC-116-C-SPI.jpg	13.0	Biological	11.7	13.5	1.8	1.9	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-117	B	8/4/2021	18:58:23	-52.4	IAC-117-B-SPI.jpg	16.0	Physical	15.9	16.3	0.4	3.7	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-117	C	8/4/2021	19:02:19	-52.1	IAC-117-C-SPI.jpg	15.3	Biological	15.2	15.6	0.4	3.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-118	A	8/4/2021	16:01:25	-51.0	IAC-118-A-SPI.jpg	16.7	Physical	16.4	16.8	0.4	4.5	3 to 2 phi	>4 phi	1 to 0 phi	Stage III
IAC-118	C	8/4/2021	16:10:05	-51.1	IAC-118-C-SPI.jpg	16.4	Physical	15.6	16.7	1.1	4.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-119	C	8/4/2021	15:01:28	-50.5	IAC-119-C-SPI.jpg	17.5	Biological	17.2	18.2	1.0	2.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-119	E	8/4/2021	15:23:09	-50.5	IAC-119-E-SPI.jpg	16.8	Physical	16.1	17.6	1.5	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-120	A	8/4/2021	16:46:37	-51.5	IAC-120-A-SPI.jpg	16.4	Biological	16.2	16.7	0.5	5.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-096	C	loose biogenic aggregates	none	0	No	3	0.54	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-097	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-097	B	none	none	0	No	1	0.59	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-098	A	loose biogenic aggregates	none	0	No	2	0.25	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-098	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-099	A	none	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-099	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-100	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-100	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-101	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-101	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-102	A	cluster(s) of rounded pellets	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-102	C	loose biogenic aggregates	none	1	No	6	0.58	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-103	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-103	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-104	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-104	B	loose biogenic aggregates	none	2	No	2	0.82	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-105	B	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-105	C	none	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-106	B	loose biogenic aggregates	Yes	1	No	1	0.37	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-106	C	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-107	B	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	8
IAC-107	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	9
IAC-108	E	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-108	F	loose biogenic aggregates	none	0	No	1	0.68	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-109	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-109	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-110	A	loose biogenic aggregates	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-110	B	loose biogenic aggregates	none	2	No	3	0.3	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-111	D	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-111	E	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-112	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-112	C	loose biogenic aggregates	none	2	No	2	0.92	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-113	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-113	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-114	A	loose biogenic aggregates	none	3	No	2	0.84	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-114	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-115	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-115	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-116	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-116	C	loose biogenic aggregates	none	0	No	5	0.47	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-117	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-117	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-118	A	none	none	2	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	11
IAC-118	C	loose biogenic aggregates	none	4	No	1	0.19	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-119	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-119	E	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-120	A	loose biogenic aggregates	none	4	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-096	C	tan f.sand and tan/grey/black silt/clay. Surface tubes. Filled feeding voids at depth.
IAC-097	A	Large biota on surface (hydroid?). Amphipod tubes, small voids near surface.
IAC-097	B	Sandy mud, amphipod tubes on surface, some reduced darker sediment in lower half of sediment profile
IAC-098	A	tan f.sand and tan/grey silt/clay. Surface burrows and feeding voids at depth. Surface tubes.
IAC-098	B	tan f.sand and grey mudclasts. Grey silt/clay. Many feeding voids and polychaete visible. Surface tubes.
IAC-099	A	Sandy mud, feeding void, a lot of surface bioturbation, pitting polychaete.
IAC-099	C	Sandy mud, long polychaete in sediment, feeding voids
IAC-100	A	tan f.sand and grey silt/clay. Surface pit connected to a feeding void at depth. Possible polychaete visible
IAC-100	C	tan f.sand and trace biogenic carbonate. tan/grey silt/clay. Streak of orange sediment. Feeding voids and surface tubes.
IAC-101	A	Sandy mud with feeding pits and other bioturbation near surface.
IAC-101	C	Sandy mud, large feeding voids in profile, several amphipods on sediment surface.
IAC-102	A	tan f.sand and trace biogenic crabonate grains. tan/grey silt/clay. Surface tubes. Polychaetes and feeding voids at depth.
IAC-102	C	tan f.sand and grey silt/clay. Surface tubes and mudclasts. Polychaete and void visible at depth.
IAC-103	B	Sandy mud, feeding void deep in profile. Small polychaete right of feeding void. RPD relatively difficult to discern.
IAC-103	C	Sandy mud, RPD difficult to discern. Disrupted polychaete in sediment profile.
IAC-104	A	tan f.sand and trace biogenic carbonate grains. tan/grey silt/clay. Massive feeding void and a polychaete at depth.
IAC-104	B	tan f.sand and tan/grey silt/clay. Many feeding voids and polychaetes visible at depth. Surface mudclast and bioaggregates.
IAC-105	B	Sandy muc ~60% Mud. Some amphipod tube structures on surface. Polychaetes in sediment. Small feeding void forming.
IAC-105	C	Sandy mud, darker reduced sediment in lower half of profile. amphipod tube on surface. Multiple polychaetes in sediment.
IAC-106	B	tan f.sand and tan/grey silt/clay. Surface burrow leading to void at depth. Surface tube. Polychaete visible at depth.
IAC-106	C	mostly tan f sand and silt. Some grey silt/clay at depth. Polychaetes and voids visible at depth. Surface tubes.
IAC-107	B	Muddy Sand, mostly medium fine sands then some pockets of silt below.
IAC-107	C	Muddy sand, mostly medium fine sands on sediment surface with some mud/ silt intermixed mostly below. Very underpenetrated.
IAC-108	E	tan/grey f.sand and grey/dk grey silt/clay, trace biogenic carbonate. Voids and possible polychaetes at depth. Surface tubes
IAC-108	F	tan/grey f.sand and grey silt/clay. Surface tubes. Void at depth.
IAC-109	A	Sandy mud, amphipod tubes on sediment serface, patches of darker reduced silt deeper in profile. RPD midly difficult to discern.
IAC-109	B	Sandy mud, feeding voids, RPD difficult to discern.
IAC-110	A	tan f.sand and tan/grey silt/clay. Surface tubes. Feeding voids and polychaetes visible at depth.
IAC-110	B	tan f.sand and tan/grey silt/clay, trace biogenic carbonate grains. Surface tubes. Polychaetes at depth.
IAC-111	D	Sandy mud, amphipod tubes on surface
IAC-111	E	Sandy mud, clear bioturbation and pitting in sediment and on sediment surface.
IAC-112	A	tan f.sand and tan/grey silt/clay. Polychaetes and filled voids. Faint surface tubes.
IAC-112	C	tan f.sand and tan/grey silt/clay. Polychaetes and voids visible at depth. Surface tubes and mudclasts.
IAC-113	A	Sandy mud, mostly silt. Amphipod tubes on surface
IAC-113	B	Sandy mud, some patches of reduced sediment in profile. Amphipods visible on sediment surface.
IAC-114	A	tan f.sand and tan/grey silt/clay. Surface burrows leading to feeding voids at depth. Polychaetes and surface tubes.
IAC-114	B	tan f.sand and tan/grey silt/clay, trace biogenic carbonate grains. Polychaete visible at depth. Surface tubes.
IAC-115	A	Sandy mud, polychaete in profile. Darker reduced silt lower in profile.
IAC-115	C	sandy mud, vibrant polychaete in profile. RPD mildy difficult to discern
IAC-116	A	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids at depth.
IAC-116	C	tan f.sand and grey/tan silt/clay. Feeding void at depth. Surface tubes and mudclasts.
IAC-117	B	Sandy mud with ~60% mud. Feeding void in profile and some visible amphipods on sediment surface
IAC-117	C	Sandy mud, feeding voids, bioturbation on surface with amphipods on surface.
IAC-118	A	tan m/f.sand and tan vf.sand/silt. Patch of grey silt/clay. Polychaetes and feeding voids at depth.
IAC-118	C	tan m/f.sand and tan/grey vf.sand/silt. Polychaetes and voids visible at depth. Surface tubes and mudclasts
IAC-119	C	Sandy mud, very vivid (likely bisected) polychaete in the profile. Bioturbation on sediment surface
IAC-119	E	Sandy mud, several polychaetes in sediment. Dark reduced patch of silt in bottom right corner of profile.
IAC-120	A	tan m/f.sand and tan/grey silt/clay. Anoxic plumes at depth. Surface tubes. Polychaetes and voids visible. Unknown white object in profile.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-120	B	8/4/2021	16:50:25	-51.4	IAC-120-B-SPI.jpg	17.2	Physical	16.8	17.7	0.9	6.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-121	A	8/7/2021	7:16:48	-51.7	IAC-121-A-SPI.jpg	18.9	Physical	18.7	19.3	0.6	2.4	>4 phi	>4 phi	1 to 0 phi	Stage III
IAC-121	B	8/7/2021	7:21:08	-51.6	IAC-121-B-SPI.jpg	15.2	Biological	14.6	15.6	1.0	3.3	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-122	A	8/7/2021	10:06:06	-50.8	IAC-122-A-SPI.jpg	16.6	Physical	15.6	17.3	1.7	5.6	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-122	B	8/7/2021	10:10:36	-50.8	IAC-122-B-SPI.jpg	16.6	Biological	16.1	17.1	1.0	4.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-123	E	8/7/2021	11:18:06	-50.0	IAC-123-E-SPI.jpg	15.6	Biological	15.1	16.0	0.9	2.9	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-123	F	8/7/2021	11:22:24	-50.1	IAC-123-F-SPI.jpg	16.1	Biological	15.9	16.5	0.6	3.5	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-124	B	8/7/2021	13:27:11	-48.9	IAC-124-B-SPI.jpg	15.6	Biological	14.4	16.3	1.9	4.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-124	C	8/7/2021	13:30:50	-49.0	IAC-124-C-SPI.jpg	13.7	Biological	13.3	14.1	0.8	3.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-125	A	8/6/2021	23:00:55	-51.5	IAC-125-A-SPI.jpg	16.0	Biological	15.4	15.9	0.5	2.1	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-125	B	8/6/2021	23:05:47	-51.4	IAC-125-B-SPI.jpg	14.9	Biological	14.5	15.3	0.8	2.3	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-126	B	8/6/2021	22:26:24	-51.7	IAC-126-B-SPI.jpg	16.4	Physical	16.2	16.7	0.5	5.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
IAC-126	C	8/6/2021	22:30:34	-51.7	IAC-126-C-SPI.jpg	15.9	Physical	15.2	16.6	1.4	3.8	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-127	A	8/6/2021	23:47:14	-51.6	IAC-127-A-SPI.jpg	14.9	Biological	14.3	15.6	1.3	4.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-127	C	8/6/2021	23:55:52	-51.4	IAC-127-C-SPI.jpg	15.2	Physical	15.1	15.4	0.3	5.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-128	B	8/7/2021	0:47:17	-52.1	IAC-128-B-SPI.jpg	14.3	Biological	13.6	15.4	1.8	4.3	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-128	C	8/7/2021	0:52:48	-52.1	IAC-128-C-SPI.jpg	17.7	Physical	17.6	18.0	0.4	5.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-129	B	8/7/2021	1:33:09	-51.2	IAC-129-B-SPI.jpg	13.7	Biological	12.7	16.8	4.1	5.1	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-129	C	8/7/2021	1:38:12	-51.2	IAC-129-C-SPI.jpg	18.5	Biological	18.0	18.8	0.8	5.6	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-130	B	8/7/2021	8:10:19	-51.5	IAC-130-B-SPI.jpg	17.0	Physical	16.5	17.5	1.0	4.2	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-130	C	8/7/2021	8:14:47	-51.5	IAC-130-C-SPI.jpg	14.9	Physical	14.2	15.3	1.1	4.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-131	A	8/7/2021	8:46:11	-51.1	IAC-131-A-SPI.jpg	14.8	Biological	14.1	16.1	2.0	3.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-131	D	8/7/2021	9:25:43	-50.9	IAC-131-D-SPI.jpg	15.4	Biological	14.8	15.7	0.9	4.1	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-132	A	8/7/2021	12:35:18	-49.3	IAC-132-A-SPI.jpg	14.8	Biological	13.7	15.2	1.5	4.1	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-132	C	8/7/2021	12:45:01	-49.3	IAC-132-C-SPI.jpg	18.7	Physical	18.3	19.0	0.7	3.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-133	B	8/7/2021	14:17:36	-48.4	IAC-133-B-SPI.jpg	15.4	Biological	15.0	15.7	0.7	4.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-133	C	8/7/2021	14:22:09	-48.4	IAC-133-C-SPI.jpg	15.7	Biological	15.4	16.2	0.8	4.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-134	A	8/8/2021	13:53:53	-51.0	IAC-134-A-SPI.jpg	14.8	Biological	14.5	15.3	0.8	4.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-134	C	8/8/2021	14:02:35	-51.1	IAC-134-C-SPI.jpg	15.7	Biological	15.2	16.0	0.8	5.3	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-135	A	8/8/2021	13:05:22	-52.8	IAC-135-A-SPI.jpg	16.2	Biological	15.9	16.7	0.8	5.0	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-135	B	8/8/2021	13:09:08	-52.7	IAC-135-B-SPI.jpg	14.9	Physical	14.7	15.1	0.4	4.7	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-136	A	8/8/2021	12:20:13	-52.5	IAC-136-A-SPI.jpg	16.2	Physical	15.1	16.8	1.7	4.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-136	C	8/8/2021	12:30:22	-52.5	IAC-136-C-SPI.jpg	15.2	Biological	14.2	15.7	1.5	4.5	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-137	A	8/8/2021	11:24:24	-52.3	IAC-137-A-SPI.jpg	17.3	Biological	16.8	17.5	0.7	3.8	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-137	B	8/8/2021	11:28:22	-52.4	IAC-137-B-SPI.jpg	16.1	Biological	15.7	16.7	1.0	2.7	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-138	B	8/7/2021	23:22:43	-51.6	IAC-138-B-SPI.jpg	13.7	Biological	12.0	14.5	2.5	4.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
IAC-138	C	8/7/2021	23:26:32	-51.7	IAC-138-C-SPI.jpg	17.9	Physical	17.1	18.2	1.1	5.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-139	A	8/7/2021	22:37:27	-49.5	IAC-139-A-SPI.jpg	16.1	Physical	16.0	16.3	0.3	4.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-139	C	8/7/2021	22:46:41	-49.5	IAC-139-C-SPI.jpg	14.6	Biological	14.1	15.7	1.6	3.2	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-140	A	8/7/2021	14:58:36	-48.3	IAC-140-A-SPI.jpg	16.3	Biological	16.1	16.6	0.5	5.6	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-140	C	8/7/2021	15:07:25	-48.1	IAC-140-C-SPI.jpg	15.4	Biological	14.7	15.9	1.2	2.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-141	B	8/7/2021	17:51:43	-46.0	IAC-141-B-SPI.jpg	16.1	Physical	15.9	16.5	0.6	6.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-141	C	8/7/2021	17:55:30	-46.0	IAC-141-C-SPI.jpg	16.7	Physical	16.2	17.2	1.0	3.9	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-142	B	8/7/2021	18:42:12	-47.8	IAC-142-B-SPI.jpg	17.0	Biological	16.7	17.2	0.5	4.8	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-142	C	8/7/2021	18:47:26	-47.9	IAC-142-C-SPI.jpg	14.2	Biological	13.5	14.9	1.4	5.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-143	A	8/7/2021	19:18:22	-48.9	IAC-143-A-SPI.jpg	16.9	Biological	15.4	17.4	2.0	4.1	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-143	C	8/7/2021	19:27:04	-48.9	IAC-143-C-SPI.jpg	15.0	Physical	14.6	15.5	0.9	3.3	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-144	B	8/7/2021	20:01:14	-48.2	IAC-144-B-SPI.jpg	16.7	Physical	16.3	17.0	0.7	4.1	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-120	B	loose biogenic aggregates	none	2	No	1	1.76	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-121	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-121	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-122	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-122	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-123	E	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-123	F	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-124	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-124	C	loose biogenic aggregates	Yes	3	No	5	0.43	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-125	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-125	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-126	B	none	Yes	1	No	1	1.09	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-126	C	loose biogenic aggregates	none	3	No	1	0.2	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-127	A	cluster(s) of rounded pellets	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-127	C	loose biogenic aggregates	none	1	No	2	0.49	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-128	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-128	C	loose biogenic aggregates	none	1	No	2	1.06	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-129	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-129	C	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-130	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-130	C	none	none	1	No	3	0.6	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-131	A	loose biogenic aggregates	Yes	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-131	D	loose biogenic aggregates	none	1	No	5	0.43	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-131	A	loose biogenic aggregates	Yes	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-131	D	loose biogenic aggregates	none	1	No	5	0.43	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-132	A	loose biogenic aggregates	Yes	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-132	C	loose biogenic aggregates	none	1	No	1	0.73	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-133	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-133	C	loose biogenic aggregates	Yes	1	No	1	0.38	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-134	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-134	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-135	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-135	B	none	none	1	No	2	1.42	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-136	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-136	C	loose biogenic aggregates	none	1	No	7	0.43	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-137	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-137	B	loose biogenic aggregates	Yes	0	No	5	1.23	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-138	B	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-138	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-139	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-139	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-140	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-140	C	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-141	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-141	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-142	B	loose biogenic aggregates	Yes	2	No	1	0.6	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-142	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-143	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-143	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-144	B	none	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-120	B	tan f.sand and tan/grey silt/clay. Surface tube and mudclast. Feeding void and large polychaete visible.
IAC-121	A	Sandy mud, very deep penetration. Feeding voids are present
IAC-121	B	Sandy mud with less consolidated sediment near sediment surface.Amphipod tubes on sedument surface
IAC-122	A	tan f.sand and tan/grey silt/clay. Dark grey/black anoxic plume at depth. Surface tubes. Filled feeding voids and polychaete at depth.
IAC-122	B	tan f.sand and tan/grey silt/clay. Surface tubes and burrow leading to void. Feeding void at depth.
IAC-123	E	Very large feeding voids in profile. Polychaetes also in profile. Amphipod tubes on surface.
IAC-123	F	Sandy mud, pitting and feeding voids present. Amphipod tubes on surface.
IAC-124	B	tan f.sand and tan/grey silt/clay. Trace biogenic carbonate. Polychaete and void at depth. Surface tubes.
IAC-124	C	tan f.sand and tan/grey silt/clay. Many surface burrows leading to voids. Surface mudclasts and bioaggregates. Polychaetes and voids visible at depth.
IAC-125	A	sandy mud, unconsolidated fine grained sand at sediment surface, amphipod tubes present, polychaete in sediment.
IAC-125	B	Sandy mud, amphipod tubes on surface. Dark patch of reduced silt in bottom right corne of profile
IAC-126	B	tan f.sand and tan/grey silt/clay. Deep oxidized burrow from surface pit. Surface mudclast with dragdown. Polychaete and void at depth.
IAC-126	C	tan f.sand and tan/grey vf.sand/silt. Surface tubes and bioaggregates. Voids and polychaetes at depth.
IAC-127	A	tan f.sand and tan/grey silt/clay. Surface tubes and mound. Voids visible at depth. Infaunal bivalve in void.
IAC-127	C	tan f.sand and tan/grey silt/clay. Surface tubes and mudclasts Polychaete and void at depth.
IAC-128	B	tan f.sand and tan/grey silt/clay. Voids at depth. Surface tubes.
IAC-128	C	tan f.sand and tan/grey silt/clay. Surface tubes and mudclasts. Polychaetes and voids at depth.
IAC-129	B	tan f.sand and tan/grey/black silt/clay. Surface tubes and mudclasts. Polychaete amd voids at depth.
IAC-129	C	tan f.sand and tan/grey silt/clay. polychaetes and void at depth.
IAC-130	B	tan f.sand and mostly grey silt/clay. Surface tubes. >10cm polychaete and void at depth.
IAC-130	C	tan f.sand and tan/grey silt/clay. Voids and polychaete visible. Surface tube and mudclasts in background.
IAC-131	A	tan f.sand and tan/grey silt/clay, trace biogenic carbonate. Surface tubes and burrows leading to voids. Polychaetes visible at depth.
IAC-131	D	tan f.sand and tan/grey silt/clay. Surface tubes and burrows. Mudclasts in profile. Polychaete and voids at depth.
IAC-132	A	tan f/vf.sand and grey silt/clay. Polychaetes and void at depth.
IAC-132	C	tan f.sand and tan/grey silt/clay. Band of grey vf.sand/silt under RPD. Deep feeding voids and polychaete visible. Surface tubes and bioaggregates
IAC-133	B	than f.sand and tan/grey silt/clay. Surface tube and burrows. Polychaetes and voids at depth.
IAC-133	C	tan f.sand and tan/grey silt clay. Black anoxic sediment in bottom left. Surface tubes and pits leading to voids. Polychaetes and voids visible at depth.
IAC-134	A	tan f.sand and tan/grey silt/clay. Polychaetes visible and bioturbation burrow. Surface tubes.
IAC-134	C	tan f.sand and tan/grey vf.sand/silt. Dark grey silt/clay plumes at depth. Surface burrows and voids at depth. surface tubes.
IAC-135	A	tan f.sand and tan/grey silt/clay. Surface burrows. Polychaetes and filled voids at depth.
IAC-135	B	tan f.sand and tan/grey silt/clay. Surface mudclasts. Possible polychaete and filled void at depth
IAC-136	A	tan f.sand and tan/grey silt/clay. Polychaetes and voids at depth. Possible surface tube?
IAC-136	C	tan f.sand amd tan/grey silt/clay. Surface tubes, mudclasts, and bioaggregates. Polychaete visible at depth.
IAC-137	A	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete and filled void at depth.
IAC-137	B	tan f.sand and tan/grey silt/clay. Surface mudclast dragdown. Massive void at depth.
IAC-138	B	tan f.sand and tan/grey silt/clay. Surface bioturbation and bioaggregates. Voids at depth.
IAC-138	C	tan f.sand and tan/grey silt/clay. Surface tubes. Large feeding foid.
IAC-139	A	tan f.sand and tan/grey silt/clay. Tunnels and voids at depth.
IAC-139	C	tan f.sand and tan/grey silt/clay. Surface tubes and burrows leading to voids at depth. other voids and polychaete visible at depth.
IAC-140	A	tan f.sand and tan vf.sand/silt. Grey silt/clay at depth. Surface burrow, feeding void and polychaete visible at depth.
IAC-140	C	tan f.sand and tan/grey silt/clay. Polychaetes and voids visible at depth. Surface tubes.
IAC-141	B	tan f.sand/silt and trace grey silt/clay. Surface burrows leading to multiple tunnels and voids.
IAC-141	C	tan f.sand and tan/grey silt/clay. Voids visible at depth.
IAC-142	B	tan f.sand and tan/[lt/dk]grey silt/clay. Surface burrow leading to void. Other feeding voids and polychaetes visible at depth.
IAC-142	C	tan f.sand and tan/[lt/dk]grey silt/clay. Polychaete and voids at depth. Surface tubes.
IAC-143	A	tan f.sand and tan/grey silt/clay. Anoxic plumes at depth. Surface tubes and burrows. Voids near surface and at depth. Polychaete visible.
IAC-143	C	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete and void at depth.
IAC-144	B	tan f.sand and tan vf.sand/silt. Surface burrow leading to void. Other voids at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-144	C	8/7/2021	20:05:20	-48.3	IAC-144-C-SPI.jpg	13.8	Physical	13.2	14.5	1.3	4.0	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-145	A	8/7/2021	16:52:10	-47.5	IAC-145-A-SPI.jpg	16.3	Physical	15.6	16.8	1.2	5.1	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-145	B	8/7/2021	16:54:57	-47.6	IAC-145-B-SPI.jpg	14.8	Biological	13.8	15.3	1.5	4.7	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-146	B	8/4/2021	0:48:27	-43.6	IAC-146-B-SPI.jpg	14.5	Biological	13.6	15.0	1.4	3.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-146	C	8/4/2021	0:53:32	-43.6	IAC-146-C-SPI.jpg	14.9	Biological	13.9	15.6	1.7	3.5	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-147	B	8/4/2021	1:35:09	-43.8	IAC-147-B-SPI.jpg	17.9	Physical	16.8	18.2	1.4	4.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-147	C	8/4/2021	1:41:16	-43.8	IAC-147-C-SPI.jpg	14.5	Biological	14.1	14.7	0.6	4.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-148	B	8/4/2021	2:29:24	-44.8	IAC-148-B-SPI.jpg	15.3	Physical	14.9	15.7	0.8	1.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-148	C	8/4/2021	2:34:02	-44.8	IAC-148-C-SPI.jpg	14.7	Physical	14.1	15.2	1.1	2.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-149	A	8/4/2021	5:17:07	-46.3	IAC-149-A-SPI.jpg	12.9	Biological	11.3	14.5	3.2	3.8	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-149	B	8/4/2021	5:22:46	-46.3	IAC-149-B-SPI.jpg	15.4	Biological	14.7	15.8	1.1	5.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-150	B	8/4/2021	9:10:29	-48.0	IAC-150-B-SPI.jpg	13.2	Physical	12.7	14.1	1.4	2.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-150	C	8/4/2021	9:15:14	-47.8	IAC-150-C-SPI.jpg	14.5	Physical	13.8	15.1	1.3	5.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-151	A	8/4/2021	9:56:04	-48.5	IAC-151-A-SPI.jpg	14.9	Biological	13.7	16.0	2.3	5.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-151	C	8/4/2021	10:05:10	-48.6	IAC-151-C-SPI.jpg	15.2	Biological	15.1	15.6	0.5	3.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-152	A	8/4/2021	10:43:52	-49.3	IAC-152-A-SPI.jpg	15.3	Biological	14.9	15.8	0.9	5.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-152	B	8/4/2021	10:49:24	-49.4	IAC-152-B-SPI.jpg	16.0	Biological	15.2	16.3	1.1	4.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-153	B	8/4/2021	14:01:48	-49.8	IAC-153-B-SPI.jpg	15.8	Biological	15.2	16.5	1.3	5.9	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-153	C	8/4/2021	14:06:25	-49.8	IAC-153-C-SPI.jpg	15.5	Biological	15.0	15.8	0.8	6.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-154	A	8/4/2021	13:14:28	-48.9	IAC-154-A-SPI.jpg	16.1	Biological	15.7	16.6	0.9	4.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-154	B	8/4/2021	13:20:04	-48.9	IAC-154-B-SPI.jpg	16.8	Physical	16.0	17.1	1.1	8.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
IAC-155	B	8/4/2021	12:36:50	-48.3	IAC-155-B-SPI.jpg	5.6	Biological	4.9	5.8	0.9	4.0	3 to 2 phi	4 to 3 phi	1 to 0 phi	Stage II
IAC-155	C	8/4/2021	12:43:19	-48.2	IAC-155-C-SPI.jpg	7.0	Physical	6.4	7.4	1.0	4.4	3 to 2 phi	4 to 3 phi	1 to 0 phi	Stage II
IAC-156	A	8/4/2021	11:30:09	-48.3	IAC-156-A-SPI.jpg	13.6	Biological	13.3	13.8	0.5	2.7	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-156	B	8/4/2021	11:34:57	-48.4	IAC-156-B-SPI.jpg	16.2	Physical	15.6	16.8	1.2	6.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-157	A	8/4/2021	8:26:28	-47.0	IAC-157-A-SPI.jpg	14.3	Physical	13.6	14.7	1.1	5.3	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-157	B	8/4/2021	8:31:08	-46.9	IAC-157-B-SPI.jpg	14.8	Biological	14.5	14.9	0.4	4.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-158	B	8/3/2021	11:09:07	-47.0	IAC-158-B-SPI.jpg	14.4	Physical	14.1	14.6	0.5	3.4	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-158	C	8/3/2021	11:13:53	-47.0	IAC-158-C-SPI.jpg	13.1	Physical	12.6	13.3	0.7	2.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-159	A	8/3/2021	10:19:49	-47.3	IAC-159-A-SPI.jpg	14.9	Biological	14.2	15.2	1.0	5.6	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-159	C	8/3/2021	10:28:55	-47.2	IAC-159-C-SPI.jpg	15.3	Biological	15.2	15.5	0.3	5.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-160	B	8/3/2021	9:40:57	-46.6	IAC-160-B-SPI.jpg	15.2	Biological	15.0	15.5	0.5	3.6	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-160	C	8/3/2021	9:45:26	-46.7	IAC-160-C-SPI.jpg	14.1	Physical	13.7	14.8	1.1	3.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-161	A	8/3/2021	8:58:02	-46.1	IAC-161-A-SPI.jpg	14.8	Biological	14.2	15.1	0.9	3.4	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-161	C	8/3/2021	9:06:55	-46.2	IAC-161-C-SPI.jpg	15.9	Biological	15.0	16.9	1.9	4.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-162	A	8/3/2021	8:20:13	-46.1	IAC-162-A-SPI.jpg	15.3	Biological	14.7	15.6	0.9	4.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-162	B	8/3/2021	8:24:14	-46.2	IAC-162-B-SPI.jpg	15.5	Biological	14.7	15.9	1.2	7.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-163	A	8/3/2021	7:43:46	-45.9	IAC-163-A-SPI.jpg	14.9	Physical	14.5	15.2	0.7	6.3	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-163	C	8/3/2021	7:52:53	-46.0	IAC-163-C-SPI.jpg	14.6	Physical	13.8	15.0	1.2	4.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-164	A	8/3/2021	7:08:25	-45.2	IAC-164-A-SPI.jpg	15.1	Physical	14.8	15.3	0.5	4.2	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-164	C	8/3/2021	7:18:07	-45.3	IAC-164-C-SPI.jpg	14.5	Physical	14.1	14.8	0.7	2.4	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-165	A	8/2/2021	18:29:04	-43.7	IAC-165-A-SPI.jpg	14.0	Biological	13.4	14.7	1.3	3.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-165	B	8/2/2021	18:35:02	-43.5	IAC-165-B-SPI.jpg	14.3	Physical	14.0	14.6	0.6	4.8	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-166	B	8/3/2021	6:23:04	-44.2	IAC-166-B-SPI.jpg	14.6	Physical	14.3	14.9	0.6	4.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-166	C	8/3/2021	6:27:56	-44.0	IAC-166-C-SPI.jpg	13.9	Biological	13.7	14.2	0.5	3.9	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-167	B	8/3/2021	5:06:05	-45.8	IAC-167-B-SPI.jpg	15.3	Biological	14.9	15.6	0.7	4.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-167	C	8/3/2021	5:10:30	-45.7	IAC-167-C-SPI.jpg	10.8	Physical	7.9	14.2	6.3	4.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-168	B	8/3/2021	4:21:51	-45.2	IAC-168-B-SPI.jpg	12.6	Physical	12.3	12.8	0.5	4.0	>4 phi	>4 phi	3 to 2 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-144	C	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-145	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-145	B	loose biogenic aggregates	Yes	1	No	1	0.47	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-146	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-146	C	loose biogenic aggregates	Yes	8	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-147	B	none	none	1	No	2	0.41	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-147	C	loose biogenic aggregates	none	0	No	2	0.8	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-148	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-148	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-149	A	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-149	B	loose biogenic aggregates	Yes	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-150	B	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-150	C	loose biogenic aggregates	Yes	1	No	2	1.18	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-151	A	loose biogenic aggregates	none	0	No	1	0.57	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-151	C	loose biogenic aggregates	Yes	2	No	3	0.92	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-152	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-152	B	loose biogenic aggregates	Yes	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-153	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-153	C	loose biogenic aggregates	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-154	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-154	B	loose biogenic aggregates	none	12	No	2	0.45	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-155	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	9
IAC-155	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	9
IAC-156	A	loose biogenic aggregates	none	1	No	2	0.62	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-156	B	loose biogenic aggregates	none	2	No	3	0.27	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-157	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-157	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-158	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-158	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-159	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-159	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-160	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-160	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-161	A	loose biogenic aggregates	Yes	2	No	4	0.45	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-161	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-162	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-162	B	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-163	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-163	C	loose biogenic aggregates	none	0	No	4	0.22	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-164	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-164	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-165	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-165	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-166	B	loose biogenic aggregates	none	2	No	1	0.53	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-166	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-167	B	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-167	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-168	B	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-144	C	tan f.sand and tan/grey vf.sand/silt. Surface burrows. Surface tubes and amphipods. Polychaetes and voids at depth.
IAC-145	A	tan f.sand and tan/grey silt/clay. Mior bioturbation. Void at depth.
IAC-145	B	tan f.sand and tan/grey silt/clay. Surface pit and mudclasts. Polychaete and voids at depth.
IAC-146	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids at depth.
IAC-146	C	tan f.sand and tan/grey silt/clay. Many polychaetes and voids visible. Surface pit and tubes.
IAC-147	B	tan f.sand and tan/grey silt/clay. Surface tubes and mudclasts. Polychaete and void at depth.
IAC-147	C	tan f.sand and tan/grey silt/clay. Surface tubes. Deep oxidized burrows/voids.
IAC-148	B	tan f.sand and tan/grey vf.sand/silt. Surface tubes. Polychaetes and voids visible at depth.
IAC-148	C	tan f.sand and tan/grey vf.sand/silt. Polychaete and voids at depth. Surface tubes and amphipods
IAC-149	A	tan f.sand and tan/grey silt/clay. Surface tubes. Surface pit leading to large void. Other voids present.
IAC-149	B	tan f.sand and tan/grey silt/clay. Surface amphipods. Surface burrows leading to tunnels and voids. Polychaetes at depth.
IAC-150	B	tan f.sand and grey mudclast dragdown. Tan/grey silt/clay. Polychaetes and voids at depth. Surface tubes
IAC-150	C	tan f.sand and tan/grey silt/clay. Polychaete and voids at depth. Surface tubes and mudclast (w/dragdown). Surface burrow
IAC-151	A	tan f.sandand tan/grey silt/clay. Surface amphipods and mudclast. Surface burrows leading to voids and voids at depth.
IAC-151	C	tan f.sand and tan/grey silt/clay. Surface tube, mudclast, and pit leading to large void. Polychaetes and voids visible at depth.
IAC-152	A	tan f.sand and tan/[lt/dk]grey silt/clay. Polychaete and voids visible at depth. Surface tubes.
IAC-152	B	tan f.sand and grey/tan silt/clay. Surface pit and burrow. Polychaetes and voids at depth. Surface tubes.
IAC-153	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids visible at depth.
IAC-153	C	tan f.sand and tan/grey silt/clay. Surface tubes and burrows. Polychaetes and voids at depth.
IAC-154	A	tan f.sand and tan/grey silt/clay. Surface tubes. Massive void at depth.
IAC-154	B	tan f.sand and tan/grey vf.sand/silt. Very bioturbated. Polychaete and tunnels at depth. Surface tube and mudclast.
IAC-155	B	tan m/f.sand. surface tubes.
IAC-155	C	tan m/f.sand. Surface tubes
IAC-156	A	dk tan f.sand. tan/dk.grey silt/clay. Anoxic at depth. Surface mudclast. Feeding voids.
IAC-156	B	tan f.sand and tan/grey silt/clay. Polychaetes and voids at depth. Surface tubes
IAC-157	A	tan f.sand and tan/grey silt/clay. Surface burrows. Polychaete in deep oxidized burrow and feeding void.
IAC-157	B	tan f.sand and tan/grey silt/clay. Surface tubes and burrows. Voids at depth.
IAC-158	B	tan f.sand and grey silt/clay. Surface tubes. Filled void
IAC-158	C	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids visible at depth.
IAC-159	A	tan f.sand and tan/grey silt/clay. Surface burrows leading to tunnels and voids. Surface artifact?
IAC-159	C	tan f.sand and tan/grey silt/clay. Surface amphipods. Large void systems at depth.
IAC-160	B	tan f.sand and tan vf.sand/silt. Trace grey silt/clay. Surface burrows leading to voids. Polychaete visible. Surface tubes
IAC-160	C	tan f.sand and tan/grey silt/clay, trace biogenic carbonate. Surface tubes. Large feeding void (>9cm)
IAC-161	A	tan f.sand and tan/grey silt/clay. Surface tubes, mudclasts, and pit leading to deep burrow and voids. Other voids and polychaetes present.
IAC-161	C	tan f.sand and tan/grey silt/clay. Surface mound leading to large void. Unknown white infauna. Surface tube.
IAC-162	A	tan f.sand and grey silt/clay.Surface tubes. Filled voids at depth.
IAC-162	B	tan f.sand and tan/grey vf.sand/silt. Surface burrow leading to large tunnel system and void. Surface tubes.
IAC-163	A	tan f.sand and tan/grey silt/clay. Minor bioturbation at surface. Polychaetes visible at depth.
IAC-163	C	tan f.sand and tan/grey silt/clay. Surface tubes, mudclasts, and hermit crab. Voids at depth.
IAC-164	A	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete and minor voids at depth.
IAC-164	C	tan f.sand and tan/grey silt/clay. Surface tubes.Polychaete and minor voids at depth.
IAC-165	A	tan f.sand and tan/grey silt/clay. Surface tubes. Surface burrows and voids at depth.
IAC-165	B	tan f.sand and tan/grey silt/clay. Surface tubes. Feeding voids and polychaetes visible at depth.
IAC-166	B	tan f.sand and tan/grey silt/clay. Surface tubes and mudclasts. Polychaetes and feeding voids.
IAC-166	C	tan f.sand and lt/dk grey silt/clay. Surface tubes. Feeding voids at depth.
IAC-167	B	tan f.sand and tan/grey silt/clay. Surface pit associated with burrow and voids. Polychaete at depth. Surface tubes and epifaunal hermit crab.
IAC-167	C	tan f.sand and tan/grey silt/clay. surface tubes. filled voids at depth.
IAC-168	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-168	C	8/3/2021	4:26:26	-45.1	IAC-168-C-SPI.jpg	15.1	Physical	14.7	15.6	0.9	4.6	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-169	A	8/3/2021	12:19:04	-45.4	IAC-169-A-SPI.jpg	14.4	Biological	14.3	14.8	0.5	4.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-169	C	8/3/2021	12:28:18	-45.6	IAC-169-C-SPI.jpg	14.3	Physical	13.3	14.7	1.4	4.8	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-170	A	8/4/2021	7:46:23	-46.5	IAC-170-A-SPI.jpg	14.0	Biological	13.3	14.8	1.5	2.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-170	B	8/4/2021	7:51:04	-46.6	IAC-170-B-SPI.jpg	15.2	Physical	15.0	15.4	0.4	3.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-171	A	8/3/2021	13:07:19	-44.7	IAC-171-A-SPI.jpg	14.6	Biological	14.3	15.0	0.7	2.8	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-171	C	8/3/2021	13:14:25	-44.7	IAC-171-C-SPI.jpg	15.3	Physical	14.8	15.6	0.8	5.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-172	A	8/3/2021	2:42:07	-44.4	IAC-172-A-SPI.jpg	15.5	Biological	15.1	15.8	0.7	5.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-172	C	8/3/2021	2:52:14	-44.3	IAC-172-C-SPI.jpg	15.4	Biological	15.1	15.6	0.5	4.2	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-173	B	8/3/2021	3:29:34	-44.1	IAC-173-B-SPI.jpg	16.6	Biological	16.3	16.7	0.4	3.3	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-173	C	8/3/2021	3:34:26	-44.1	IAC-173-C-SPI.jpg	14.7	Biological	13.8	15.0	1.2	5.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-174	A	8/2/2021	19:16:55	-43.0	IAC-174-A-SPI.jpg	14.2	Biological	13.5	14.4	0.9	4.1	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-174	B	8/2/2021	19:22:04	-43.1	IAC-174-B-SPI.jpg	14.3	Physical	13.7	14.5	0.8	4.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-175	B	8/2/2021	17:28:57	-41.7	IAC-175-B-SPI.jpg	13.2	Biological	12.8	13.5	0.7	1.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-175	C	8/2/2021	17:32:58	-41.8	IAC-175-C-SPI.jpg	12.5	Physical	12.2	12.8	0.6	3.4	3 to 2 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-176	B	8/2/2021	16:53:03	-41.4	IAC-176-B-SPI.jpg	9.3	Physical	8.6	9.9	1.3	1.7	3 to 2 phi	>4 phi	1 to 0 phi	Stage I
IAC-176	C	8/2/2021	16:56:39	-41.4	IAC-176-C-SPI.jpg	9.8	Physical	8.2	11.0	2.8	3.2	3 to 2 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-177	A	8/2/2021	9:07:53	-40.7	IAC-177-A-SPI.jpg	11.8	Physical	9.5	13.5	4.0	2.6	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-177	B	8/2/2021	9:12:53	-40.3	IAC-177-B-SPI.jpg	10.5	Biological	10.2	11.0	0.8	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-178	B	8/4/2021	7:12:52	-45.8	IAC-178-B-SPI.jpg	15.0	Physical	14.7	15.4	0.7	2.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-178	C	8/4/2021	7:17:46	-45.8	IAC-178-C-SPI.jpg	15.4	Biological	14.9	15.8	0.9	3.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-179	B	8/3/2021	13:47:00	-44.6	IAC-179-B-SPI.jpg	13.7	Biological	12.9	14.5	1.6	3.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-179	C	8/3/2021	13:51:13	-44.5	IAC-179-C-SPI.jpg	14.7	Physical	14.5	14.9	0.4	6.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-180	A	8/3/2021	1:55:52	-43.5	IAC-180-A-SPI.jpg	11.9	Biological	11.5	12.7	1.2	3.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-180	C	8/3/2021	2:07:25	-43.5	IAC-180-C-SPI.jpg	14.1	Physical	13.4	14.5	1.1	2.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-181	B	8/2/2021	20:07:26	-41.9	IAC-181-B-SPI.jpg	13.9	Biological	13.7	14.4	0.7	4.0	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-181	C	8/2/2021	20:12:02	-41.8	IAC-181-C-SPI.jpg	14.4	Biological	14.0	14.6	0.6	2.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-182	B	8/2/2021	16:03:38	-41.6	IAC-182-B-SPI.jpg	10.7	Physical	10.4	11.1	0.7	4.5	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
IAC-182	C	8/2/2021	16:07:57	-41.6	IAC-182-C-SPI.jpg	7.5	Physical	6.5	8.5	2.0	3.0	3 to 2 phi	>4 phi	1 to 0 phi	Stage III
IAC-183	B	8/2/2021	9:53:30	-40.0	IAC-183-B-SPI.jpg	9.5	Physical	8.5	10.2	1.7	3.8	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-183	C	8/2/2021	9:58:19	-40.0	IAC-183-C-SPI.jpg	11.1	Physical	10.8	11.3	0.5	3.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-184	A	8/2/2021	8:29:46	-39.2	IAC-184-A-SPI.jpg	4.3	Physical	4.1	4.5	0.4	1.3	3 to 2 phi	>4 phi	1 to 0 phi	Stage III
IAC-184	C	8/2/2021	8:38:14	-39.2	IAC-184-C-SPI.jpg	4.0	Physical	3.5	4.6	1.1	1.4	3 to 2 phi	>4 phi	1 to 0 phi	Stage III
IAC-185	A	8/2/2021	7:51:43	-39.8	IAC-185-A-SPI.jpg	11.9	Physical	11.1	12.3	1.2	1.7	>4 phi	>4 phi	2 to 1 phi	Stage I
IAC-185	B	8/2/2021	7:55:54	-39.7	IAC-185-B-SPI.jpg	8.7	Physical	8.1	9.4	1.3	2.1	>4 phi	>4 phi	3 to 2 phi	Stage I
IAC-186	A	8/2/2021	5:08:00	-39.6	IAC-186-A-SPI.jpg	10.4	Physical	9.1	11.3	2.2	2.5	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-186	C	8/2/2021	5:19:03	-39.7	IAC-186-C-SPI.jpg	10.2	Biological	8.9	11.2	2.3	1.7	>4 phi	>4 phi	2 to 1 phi	Stage II
IAC-187	A	8/2/2021	6:34:14	-37.8	IAC-187-A-SPI.jpg	4.5	Physical	4.0	4.9	0.9	1.5	3 to 2 phi	4 to 3 phi	2 to 1 phi	Stage I
IAC-187	C	8/2/2021	6:43:30	-40.7	IAC-187-C-SPI.jpg	4.6	Physical	4.1	4.9	0.8	2.7	2 to 1 phi	3 to 2 phi	1 to 0 phi	Stage I
IAC-188	A	8/2/2021	7:13:17	-37.6	IAC-188-A-SPI.jpg	3.7	Biological	3.1	4.3	1.2	1.3	3 to 2 phi	4 to 3 phi	1 to 0 phi	Stage II
IAC-188	B	8/2/2021	7:18:00	-37.5	IAC-188-B-SPI.jpg	6.0	Physical	4.5	6.7	2.2	1.6	3 to 2 phi	4 to 3 phi	2 to 1 phi	Stage I
IAC-189	A	8/2/2021	10:37:16	-39.3	IAC-189-A-SPI.jpg	12.8	Physical	12.5	13.1	0.6	4.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-189	B	8/2/2021	10:41:08	-39.2	IAC-189-B-SPI.jpg	12.5	Physical	12.0	12.9	0.9	3.2	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-190	A	8/2/2021	11:15:53	-40.4	IAC-190-A-SPI.jpg	13.9	Physical	13.2	14.1	0.9	5.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-190	B	8/2/2021	11:20:35	-40.2	IAC-190-B-SPI.jpg	12.9	Physical	11.7	14.6	2.9	5.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-191	A	8/2/2021	15:13:14	-41.4	IAC-191-A-SPI.jpg	12.2	Biological	11.5	12.5	1.0	3.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-191	C	8/2/2021	15:21:07	-41.5	IAC-191-C-SPI.jpg	13.3	Biological	12.4	13.8	1.4	3.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-192	B	8/2/2021	20:54:13	-41.6	IAC-192-B-SPI.jpg	12.5	Physical	11.6	13.0	1.4	3.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-168	C	loose biogenic aggregates	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-169	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-169	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-170	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-170	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-171	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-171	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-172	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-172	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-173	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-173	C	loose biogenic aggregates	none	0	No	4	0.47	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-174	A	loose biogenic aggregates	none	0	No	2	0.37	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-174	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-175	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-175	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-176	B	none	none	1	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	4
IAC-176	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	10
IAC-177	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-177	B	none	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-178	B	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-178	C	loose biogenic aggregates	none	1	No	2	0.44	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-179	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-179	C	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-180	A	loose biogenic aggregates	Yes	0	No	5	0.91	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-180	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-181	B	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-181	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-182	B	none	none	0	No	1	0.59	0	Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	11
IAC-182	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-183	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-183	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-184	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	7
IAC-184	C	none	Yes	2	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	7
IAC-185	A	none	Yes	0	1				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	4
IAC-185	B	none	none	0	1				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	4
IAC-186	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-186	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	6
IAC-187	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	3
IAC-187	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	5
IAC-188	A	none	Yes	1	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	5
IAC-188	B	none	Yes	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	4
IAC-189	A	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-189	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-190	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-190	B	none	none	1	No	2	0.29	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-191	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-191	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-192	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-168	C	tan m/f.sand and tan/grey vf.sand/silt. Many polychaetes and voids at depth. Surface tube or mudclast
IAC-169	A	tan f.sand and tan/grey silt/clay. Surface tubesand burrows. Voids at depth.
IAC-169	C	tan f.sand and tan/grey silt/clay. Surface tubes. Voids visible at depth.
IAC-170	A	tan f.sand and tan/grey silt/clay. Surface tubes. Voids at depth.
IAC-170	B	tan f.sand and grey silt/clay. Surface tubes. Feeding voids at depth.
IAC-171	A	tan f.sand and tan/grey silt/clay. Surface tubes and burrows. Polychaete and voids at depth.
IAC-171	C	tan f.sand and tan/grey silt/clay. Surface tubes and burrows. Voids and polychaete visible at depth.
IAC-172	A	tan f.sand and tan/grey vf.sand/silt Surface tube and burrow leading to voids at depth. Polychaete visible
IAC-172	C	tan f.sand and tan/grey silt/clay. Surface tube and burrow leading to void. Polychaete visible
IAC-173	B	tan f/vf.sand and tan/grey silt/clay. Surface tubes and burrows leading to voids at depth.
IAC-173	C	tan f.sand and tan/grey silt/clay. Surface mudclasts and tubes. Epifaunal crab. Voids at depth.
IAC-174	A	tan f.sand and tan/grey silt/clay. Surface mudclast and tubes. Possible filled void at depth.
IAC-174	B	tan f.sand and tan/grey silt/clay. Surface tubes. Many feeding voids at depth.
IAC-175	B	tan f.sand and tan/grey silt/clay. Surface tubes and burrows. deep oxidized voids and polychaete at depth.
IAC-175	C	tan f.sand and tan/grey vf.sand/silt/ Plumes of black anoxic silt/clay. Singular surface tube. Polychaete and void at depth.
IAC-176	B	Underpenetration. tan m/f.sand abd grey vf.sand/silt.
IAC-176	C	tan m/f.sand and grey vf.sand/silt. Surface tube. Possible filled feeding void.
IAC-177	A	tan f.sand and tan/grey silt/clay. Voids at depth
IAC-177	B	tan f.sand and tan/grey silt/clay. Surface amphipods and mound in the background. Large void at depth
IAC-178	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and voids at depth.
IAC-178	C	tan f.sand and tan vf.sand/silt. Trace lt/dk grey silt/clay. Surface mudclast and tubes. Polychaete and filled voids at depth
IAC-179	B	tan f.sand and tan/grey silt/clay. Surface tbes and voids at depth.
IAC-179	C	tan f.sand and tan/grey silt/clay. Surface amphipods and burrow leading to void. Polychaetes and voids visible.
IAC-180	A	tan f.sand and tan vf.sand/silt. Trace grey silt/clay. Surface tubes and mudclasts. Large oxidized burrow.
IAC-180	C	tan f.sand and mostly grey sit/clay. POssible surface tube. Bristleworm in feeding void associated with oxidized burrow.
IAC-181	B	tan f.sand and tan/grey silt/clay. Surface tubes and mound associated with a burrow and void.
IAC-181	C	tan f.sand and tan/grey silt/clay. Surface tubes and filled voids.
IAC-182	B	tan m/f.sand and tan/dk grey silt/clay. Surface mudclast and tube in background. Possible filled feeding void.
IAC-182	C	tan m/f.sand and tan/[lt/dk]grey silt/clay. Possible void at depth.
IAC-183	B	tan f.sand and tan/grey silt/clay. deep oxidized burrows and polychaete at depth.
IAC-183	C	tan f.sand and tan/grey silt/clay. surface tubes. polychaetes and filled voids at depth.
IAC-184	A	tan m/f.sand and grey f.vf.sand. Epifaunal sanddollars. Infauna sand dollar. Void at depth.
IAC-184	C	tan m/f.sand and grey f.vf.sand. Epifaunal sanddollars. Infauna sand dollar. Void at depth.
IAC-185	A	tan f.sand mostly grey/black silt/clay (anoxic). Epifaunal sand dollars, partial burrowing.
IAC-185	B	tan f.sand. Mostly grey/black silt/clay (anoxic). Epifaunal sand dollar and seastar.
IAC-186	A	tan m/f.sand and grey silt/clay. Shallow RPD. Epi/infaunal sand dollars. Large void.
IAC-186	C	tan m/f.sand and grey silt/clay. Shallow RPD. Epi/infaunal sand dollars.
IAC-187	A	Underpenetration. tan m/f.sand and grey vf.sand. Sand dollars in background.
IAC-187	C	Underpenetration. tan m/f sand and grey vf.sand.
IAC-188	A	Underpenetration. tan m/f/vf.sand and trace grey vf.sand/silt. Epi/infaunal sand dollars. Surface burrows
IAC-188	B	tan m/f/vf.sand and grey vf.sand/silt. Surface burrows. Epi/infaunal sand dollars.
IAC-189	A	tan f.sand and tan/grey silt/clay. Surface amphipods and tubes. Polychaetes and voids at depth.
IAC-189	B	tan f.sand and tan/grey silt/clay. Surface amphipods. Filled voids at depth.
IAC-190	A	tan f.sand/silt and grey/dk.grey silt/clay. Amphipod on surface. Polychaetes and voids at depth.
IAC-190	B	tan f.sand and tan/grey silt/clay. Surface amphipods and mudclasts. Polychaete and voids visible.
IAC-191	A	tan f.sand/silt and grey silt/clay. Surface tubes. Voids at depth
IAC-191	C	tan f.sand and tan/grey silt/clay. Surface tubes and polychaete at surface. Feeding void at depth.
IAC-192	B	tan f.sand and grey silt/clay. Surface tubes and 7mm shell. Polychaetes and voids at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-192	C	8/2/2021	20:59:56	1.3	IAC-192-C-SPI.jpg	14.1	Physical	13.4	14.6	1.2	3.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-193	A	8/3/2021	14:16:50	-45.0	IAC-193-A-SPI.jpg	10.5	Biological	7.8	12.6	4.8	3.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-193	C	8/3/2021	14:25:00	-45.2	IAC-193-C-SPI.jpg	14.6	Physical	13.2	15.2	2.0	3.6	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-194	A	8/4/2021	6:26:18	-46.1	IAC-194-A-SPI.jpg	17.0	Physical	16.3	17.3	1.0	3.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-194	B	8/4/2021	6:30:57	-46.1	IAC-194-B-SPI.jpg	15.3	Physical	14.8	15.8	1.0	3.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-195	B	8/3/2021	15:40:32	-43.5	IAC-195-B-SPI.jpg	14.6	Biological	14.2	15.1	0.9	2.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-195	C	8/3/2021	15:44:27	-43.4	IAC-195-C-SPI.jpg	15.0	Physical	14.7	15.4	0.7	3.0	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-196	A	8/2/2021	22:30:47	-40.8	IAC-196-A-SPI.jpg	13.2	Physical	12.7	13.6	0.9	4.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-196	C	8/2/2021	22:40:00	-41.0	IAC-196-C-SPI.jpg	15.0	Physical	14.6	15.3	0.7	5.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-197	B	8/2/2021	23:23:13	-41.3	IAC-197-B-SPI.jpg	14.1	Physical	13.9	14.2	0.3	2.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-197	C	8/2/2021	23:27:32	-41.3	IAC-197-C-SPI.jpg	15.3	Physical	14.7	15.6	0.9	3.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-198	A	8/3/2021	0:22:20	-41.7	IAC-198-A-SPI.jpg	13.3	Biological	12.6	14.3	1.7	7.6	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-198	C	8/3/2021	0:32:12	-41.8	IAC-198-C-SPI.jpg	13.2	Physical	12.9	13.4	0.5	4.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-199	A	8/2/2021	12:58:40	-38.8	IAC-199-A-SPI.jpg	9.3	Physical	8.9	9.7	0.8	2.1	3 to 2 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-199	B	8/2/2021	13:03:45	-38.9	IAC-199-B-SPI.jpg	8.8	Physical	8.3	9.1	0.8	2.7	3 to 2 phi	>4 phi	1 to 0 phi	Stage I on III
IAC-200	A	8/2/2021	13:49:05	-41.0	IAC-200-A-SPI.jpg	15.5	Biological	15.1	15.9	0.8	1.6	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-200	C	8/2/2021	13:56:43	-40.8	IAC-200-C-SPI.jpg	13.8	Biological	13.3	14.3	1.0	3.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-201	A	8/2/2021	14:31:39	-41.8	IAC-201-A-SPI.jpg	12.3	Biological	11.7	12.7	1.0	3.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-201	C	8/2/2021	14:39:14	-41.7	IAC-201-C-SPI.jpg	13.8	Physical	13.3	14.2	0.9	1.8	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-202	A	8/2/2021	21:36:54	-40.0	IAC-202-A-SPI.jpg	8.2	Physical	7.8	8.5	0.7	2.3	4 to 3 phi	>4 phi	1 to 0 phi	Stage I
IAC-202	C	8/2/2021	21:46:35	-40.0	IAC-202-C-SPI.jpg	7.4	Physical	7.0	7.8	0.8	3.6	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-203	A	8/3/2021	1:04:58	-41.6	IAC-203-A-SPI.jpg	14.3	Physical	13.6	14.7	1.1	3.9	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-203	C	8/3/2021	1:17:20	-41.5	IAC-203-C-SPI.jpg	12.0	Physical	11.9	12.2	0.3	3.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
IAC-204	A	8/3/2021	14:57:41	-43.7	IAC-204-A-SPI.jpg	16.3	Physical	15.7	16.5	0.8	3.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-204	B	8/3/2021	15:02:20	-43.7	IAC-204-B-SPI.jpg	14.8	Physical	14.5	15.3	0.8	2.1	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-205	A	8/3/2021	19:52:48	-40.2	IAC-205-A-SPI.jpg	13.1	Physical	13.0	13.3	0.3	2.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-205	B	8/3/2021	19:57:36	-40.2	IAC-205-B-SPI.jpg	15.0	Physical	14.9	15.2	0.3	3.7	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-206	A	8/3/2021	19:05:05	-41.0	IAC-206-A-SPI.jpg	13.5	Physical	13.2	13.7	0.5	5.8	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-206	C	8/3/2021	19:14:14	-40.8	IAC-206-C-SPI.jpg	9.6	Biological	8.4	10.1	1.7	3.7	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-207	A	8/3/2021	17:29:08	-42.0	IAC-207-A-SPI.jpg	11.4	Physical	10.5	12.6	2.1	3.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage II
IAC-207	B	8/3/2021	17:33:23	-41.9	IAC-207-B-SPI.jpg	12.4	Physical	12.0	12.7	0.7	4.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-208	A	8/3/2021	16:53:54	-43.0	IAC-208-A-SPI.jpg	16.1	Physical	13.1	17.7	4.6	6.6	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-208	C	8/3/2021	17:03:36	-43.2	IAC-208-C-SPI.jpg	12.1	Biological	10.7	13.3	2.6	3.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-209	B	8/4/2021	4:00:33	-45.4	IAC-209-B-SPI.jpg	14.9	Physical	14.4	15.6	1.2	2.8	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-209	C	8/4/2021	4:05:37	-45.5	IAC-209-C-SPI.jpg	16.0	Physical	15.7	16.4	0.7	4.4	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-210	A	8/3/2021	20:44:02	-39.8	IAC-210-A-SPI.jpg	12.8	Physical	12.6	13.1	0.5	4.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-210	C	8/3/2021	20:53:17	-39.7	IAC-210-C-SPI.jpg	10.1	Physical	8.1	11.6	3.5	3.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-211	A	8/3/2021	21:36:40	-41.1	IAC-211-A-SPI.jpg	15.0	Biological	14.8	15.3	0.5	3.4	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-211	C	8/3/2021	21:44:59	-41.1	IAC-211-C-SPI.jpg	15.9	Biological	15.3	16.2	0.9	5.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-212	B	8/3/2021	22:28:12	-41.8	IAC-212-B-SPI.jpg	14.3	Physical	13.9	14.5	0.6	5.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-212	E	8/3/2021	23:15:23	-41.9	IAC-212-E-SPI.jpg	15.0	Physical	14.0	15.7	1.7	6.2	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-213	B	8/3/2021	16:23:06	-43.9	IAC-213-B-SPI.jpg	13.2	Biological	10.6	15.6	5.0	3.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
IAC-213	C	8/3/2021	16:26:35	-43.9	IAC-213-C-SPI.jpg	15.1	Physical	14.8	15.4	0.6	2.6	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
IAC-214	A	8/4/2021	4:37:40	-46.0	IAC-214-A-SPI.jpg	14.0	Physical	13.8	14.3	0.5	6.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-214	B	8/4/2021	4:42:51	-45.9	IAC-214-B-SPI.jpg	11.8	Biological	11.4	12.5	1.1	3.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
IAC-215	A	8/4/2021	3:09:59	-45.1	IAC-215-A-SPI.jpg	16.0	Physical	15.4	16.4	1.0	2.6	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-215	B	8/4/2021	3:15:32	-45.2	IAC-215-B-SPI.jpg	16.3	Physical	15.4	17.1	1.7	3.2	>4 phi	>4 phi	2 to 1 phi	Stage III
IAC-216	A	8/11/2021	12:44:25	-58.8	IAC-216-A-SPI.jpg	13.4	Biological	12.7	13.8	1.1	4.0	>4 phi	>4 phi	1 to 0 phi	Stage II on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-192	C	none	none	0	No	2	0.43	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-193	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-193	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-194	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-194	B	loose biogenic aggregates	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-195	B	loose biogenic aggregates	Yes	0	No	2	0.33	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-195	C	loose biogenic aggregates	Yes	1	No	1	0.81	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-196	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-196	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-197	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-197	C	loose biogenic aggregates	Yes	5	No	3	0.18	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-198	A	loose biogenic aggregates	none	0	No	4	0.45	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-198	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-199	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	8
IAC-199	B	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	9
IAC-200	A	loose biogenic aggregates	Yes	1	No	7	0.39	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-200	C	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-201	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-201	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-202	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	5
IAC-202	C	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-203	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-203	C	loose biogenic aggregates	none	0	No	4	0.3	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-204	A	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-204	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-205	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-205	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-206	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-206	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-207	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
IAC-207	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-208	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-208	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-209	B	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-209	C	none	none	1	No	2	0.39	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
IAC-210	A	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-210	C	none	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-211	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-211	C	loose biogenic aggregates	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-212	B	none	none	2	No	1	1.41	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-212	E	loose biogenic aggregates	none	1	No	1	0.29	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-213	B	loose biogenic aggregates	none	0	No	1	0.53	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-213	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-214	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-214	B	loose biogenic aggregates	none	0	No	2	0.81	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-215	A	loose biogenic aggregates	Yes	0	No	4	0.63	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
IAC-215	B	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
IAC-216	A	cluster(s) of rounded pellets	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-192	C	tan f.sand and tan/grey silt/clay. Surface mudclasts, tubes, hermit crab, and unknown organism. Voids at depth.
IAC-193	A	tan f.sand and tan/grey silt/clay. Oxidized burrow associated with a feeding void. Polychaete visible at depth. Surface tubes.
IAC-193	C	tan f.sand and tan/grey silt/clay. Polychaetes and voids at depth. Surface tubes.
IAC-194	A	tan f/vf.sand/silt and trace frey silt/clay. Surface burrow leading to a tube. Polychaete and voids visible.
IAC-194	B	tan f/vf.sand and tan/grey silt/clay. Surface tubes. Surface burrows leading to voids. Polychaetes visible at depth.
IAC-195	B	tan f.sand and tan/grey silt/clay. Surface tubes. Voids at depth.
IAC-195	C	tan f.sand and tan/grey silt/clay. Surface tubes. Surface pit associated with a void at depth.
IAC-196	A	tan f.sand and grey silt/clay. Voids at depth. Surface tubes.
IAC-196	C	tan f.sand and grey silt/clay. Polychaete and void at depth. Surface tubes
IAC-197	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete and voids at depth.
IAC-197	C	tan f.sand annd tan/grey silt/clay. Surface tubes and burrows. Polychaetes and voids at depth.
IAC-198	A	tan f.sand/silt and blank anoxic silt/clay plume. white object in profile. Surface tubes. feeding voids at depth.
IAC-198	C	tan f.sand and grey silt/clay. surface tubes. polychaete and voids at depth.
IAC-199	A	Underpenetration. tan m/f.sand and grey sand/silt/clay. area of anoxic sediment under RPD. Voids visible at depth
IAC-199	B	tan f.sand and grey vf.sand/silt. Plume of black anoxic silt/clay. Surface amphipods. Voids at depth.
IAC-200	A	bands of sediment. tan f.sand and tan/grey vf.sand/silt/clay. Surface pit associated with deep burrow. surface tubes. polychaete visible at depth.
IAC-200	C	tan f.sand and vf.sand/silt. Trace grey silt/clay. Large surface pit with associated burrow/void. Surface tubes
IAC-201	A	tan f.sand and tan/grey silt/clay. Anoxic sediment. Surface tubes. Voids at depth.
IAC-201	C	tan f.sand and tan/grey silt/clay. Surface amphipods. Polychaete and void at depth. Calcareous shells.
IAC-202	A	Underpenetrated. bands of sediment. tan m/f.sand with grey anoxic silt/clay. surface tubes.
IAC-202	C	underpenetrated. tan/grey m/f.sand and grey vf.sand/silt. Surface tube. Polychaetes and possible void at depth.
IAC-203	A	tan f.sand and tan/grey silt/clay.Surface tubes. Polychaetes and voids at depth.
IAC-203	C	tan f.sand and tan/grey silt/clay. Surface tubes and mudclasts. Void at depth.
IAC-204	A	tan vf/f.sand and grey silt/clay. Surface burrow leading to voids.
IAC-204	B	tan f.sand and tan/grey vf.sand/silt. Trace grey silt/clay. Surface tubes and burrow leading to void.
IAC-205	A	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete and void at depth.
IAC-205	B	tan f.sand and tan/grey silt/clay. Surface amphipods and tubes. Polychaetes and voids and depth.
IAC-206	A	tan/grey f.sand and gry silt/clay. Surface tubes. Polychaete and void at depth.
IAC-206	C	underpenetration. tan f/vf.sand and grey silt/clay. Surface tubes. Voids at depth.
IAC-207	A	tan f.sand and tan/grey silt/clay. Polychaete and void atdepth. Surface tubes.
IAC-207	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaete and filled voids at depth.
IAC-208	A	tan f/vf.sand and grey silt/clay. Surface tubes. Polychaete and feding voids at depth.
IAC-208	C	tan f/vf.sand and tan/grey silt/clay. Surface tubes. Feeding void at depth.
IAC-209	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes and large void at depth.
IAC-209	C	tan f.sand and tan/grey silt/clay. Surface amphipods, mudclast, and burrows. Polychaetes and voids at depth.
IAC-210	A	tan f.sand and tan/grey silt/clay. Pockets of anoxic sediment. Surface tubes and amphipods. Polychaetes and void visible at depth.
IAC-210	C	tan f.sand and mostly grey silt/clay. Surface tubes and non tube dwelling amphipods. Polychaetes and voids visible. Surface burrow leading to void.
IAC-211	A	tan f/vf.sand and tan/grey silt/clay. Surfcace tubes and burrows leading to voids. Unknown infauna at depth
IAC-211	C	tan f.sand and tan/grey silt/clay. Plume of black anoxic silt/clay. Deep oxidized burrow associated with voids. Surface amphipods
IAC-212	B	tan f.sand and tan/grey silt/clay. Surface tubes. Polychaetes, voids, and mudclasts at depth.
IAC-212	E	tan f.sand and tan/grey silt/clay. Surface tubes and mudclasts. Many burrows and voids. Polychaete visible.
IAC-213	B	tan f.sand and tan/grey silt/clay. Surface tubes and burrows leading to voids.
IAC-213	C	tan f.sand and tan/grey silt/clay. many voids at depth.
IAC-214	A	tan f/vf.sand and tan/grey silt/clay. Surface amphipods. Voids at depth.
IAC-214	B	tan f/vf.sand and tan/grey silt/clay. Surface tube and mudclasts. Burrows and voids visible.
IAC-215	A	tan f.sand and tan/grey silt/clay. Mudclasts, voids, and infauna at depth. Surface amphipods and surface burrows.
IAC-215	B	tan f.sand and tan/grey silt/clay. Surface burrows leading to voids at depth.
IAC-216	A	tan m/f.sand and grey silt/clay. Surface tubes. Soft bodied organism and voids visible at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
IAC-216	C	8/11/2021	12:55:32	-58.9	IAC-216-C-SPI.jpg	16.2	Biological	15.7	16.5	0.8	3.3	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-217	A	8/13/2021	4:44:56	-56.8	IAC-217-A-SPI.jpg	16.4	Biological	16.2	16.9	0.7	2.2	>4 phi	>4 phi	3 to 2 phi	Stage III
IAC-217	C	8/13/2021	5:03:17	-56.8	IAC-217-C-SPI.jpg	16.5	Biological	15.7	17.2	1.5	2.9	>4 phi	>4 phi	3 to 2 phi	Stage I on III
IAC-218	A	8/7/2021	21:17:02	-50.0	IAC-218-A-SPI.jpg	15.1	Physical	14.4	15.3	0.9	4.0	>4 phi	>4 phi	3 to 2 phi	Stage II on III
IAC-218	B	8/7/2021	21:21:47	-50.2	IAC-218-B-SPI.jpg	14.2	Physical	14.0	14.4	0.4	6.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-001	A	7/23/2021	2:47:32	-38.6	WTG-001-A-SPI.jpg	11.8	Biological	11.3	12.4	1.1	2.4	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-001	C	7/23/2021	2:59:07	-38.5	WTG-001-C-SPI.jpg	8.3	Biological	7.5	9.0	1.5	2.3	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-002	B	7/17/2021	23:31:36	-38.9	WTG-002-B-SPI.jpg	4.7	Physical	3.9	5.2	1.3	0.8	3 to 2 phi	>4 phi	1 to 0 phi	Stage II
WTG-002	C	7/17/2021	23:36:11	-38.9	WTG-002-C-SPI.jpg	9.3	Biological	8.7	10.0	1.3	3.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage II
WTG-003	B	7/18/2021	2:06:27	-41.1	WTG-003-B-SPI.jpg	11.4	Physical	11.0	11.5	0.5	1.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-003	C	7/18/2021	2:12:52	-40.9	WTG-003-C-SPI.jpg	12.9	Physical	12.5	13.2	0.7	1.5	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-004	A	7/23/2021	1:21:26	-38.0	WTG-004-A-SPI.jpg	7.7	Physical	7.2	8.2	1.0	2.3	4 to 3 phi	4 to 3 phi	1 to 0 phi	Stage I on III
WTG-004	B	7/23/2021	1:26:32	-38.1	WTG-004-B-SPI.jpg	8.5	Physical	8.0	8.9	0.9	2.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage I
WTG-005	A	7/18/2021	9:41:54	-37.2	WTG-005-A-SPI.jpg	5.7	Physical	5.2	5.8	0.6	2.0	4 to 3 phi	>4 phi	4 to 3 phi	Stage I
WTG-005	B	7/18/2021	9:46:19	-37.0	WTG-005-B-SPI.jpg	5.4	Physical	4.9	5.7	0.8	1.6	3 to 2 phi	>4 phi	1 to 0 phi	Stage I
WTG-006	B	7/23/2021	4:45:41	-41.2	WTG-006-B-SPI.jpg	8.8	Physical	7.9	9.7	1.8	3.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-006	C	7/23/2021	4:52:10	-41.3	WTG-006-C-SPI.jpg	10.5	Physical	10.0	11.0	1.0	2.3	4 to 3 phi	4 to 3 phi	2 to 1 phi	Stage I on III
WTG-007	A	8/2/2021	4:05:53	-41.0	WTG-007-A-SPI.jpg	11.3	Physical	11.0	11.5	0.5	2.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
WTG-007	B	8/2/2021	4:10:41	-40.9	WTG-007-B-SPI.jpg	9.9	Biological	9.4	10.6	1.2	3.2	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-008	A	7/18/2021	4:30:42	-40.3	WTG-008-A-SPI.jpg	13.2	Physical	13.0	13.7	0.7	1.4	>4 phi	>4 phi	2 to 1 phi	Stage II
WTG-008	B	7/18/2021	4:35:28	-40.3	WTG-008-B-SPI.jpg	11.6	Physical	10.5	12.8	2.3	3.3	4 to 3 phi	4 to 3 phi	2 to 1 phi	Stage III
WTG-009	A	8/2/2021	1:08:33	-40.5	WTG-009-A-SPI.jpg	12.7	Biological	12.4	13.1	0.7	3.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-009	C	8/2/2021	1:18:22	-40.5	WTG-009-C-SPI.jpg	12.8	Biological	12.1	13.9	1.8	4.9	>4 phi	>4 phi	2 to 1 phi	Stage I
WTG-010	B	8/1/2021	19:30:53	-42.1	WTG-010-B-SPI.jpg	13.5	Physical	13.2	13.8	0.6	2.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-010	C	8/1/2021	19:35:54	-41.9	WTG-010-C-SPI.jpg	13.5	Physical	12.9	13.9	1.0	1.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-011	C	7/18/2021	7:32:31	-40.9	WTG-011-C-SPI.jpg	13.8	Biological	13.6	14.1	0.5	2.4	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-011	F	7/18/2021	11:34:48	-41.4	WTG-011-F-SPI.jpg	15.7	Biological	14.8	16.5	1.7	2.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-012	A	8/2/2021	2:35:44	-42.4	WTG-012-A-SPI.jpg	12.7	Biological	10.5	14.4	3.9	3.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-012	B	8/2/2021	2:40:30	-42.4	WTG-012-B-SPI.jpg	14.2	Physical	13.9	14.6	0.7	2.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-013	A	8/1/2021	23:28:05	-40.5	WTG-013-A-SPI.jpg	13.8	Biological	13.5	13.9	0.4	3.8	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-013	C	8/1/2021	23:36:19	-40.5	WTG-013-C-SPI.jpg	14.5	Biological	13.9	14.7	0.8	1.6	4 to 3 phi	>4 phi	1 to 0 phi	Stage II
WTG-014	B	8/1/2021	17:47:00	-42.9	WTG-014-B-SPI.jpg	12.0	Physical	11.8	12.2	0.4	1.6	3 to 2 phi	4 to 3 phi	1 to 0 phi	Stage I on III
WTG-014	C	8/1/2021	17:52:31	-42.9	WTG-014-C-SPI.jpg	12.5	Physical	12.3	12.7	0.4	1.4	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-015	B	7/23/2021	6:46:47	-43.6	WTG-015-B-SPI.jpg	13.9	Biological	13.7	14.4	0.7	4.4	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-015	C	7/23/2021	6:52:32	-43.6	WTG-015-C-SPI.jpg	13.5	Biological	13.5	14.2	0.7	3.6	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
WTG-016	B	8/1/2021	20:53:11	-42.2	WTG-016-B-SPI.jpg	10.9	Physical	10.1	11.5	1.4	5.2	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-016	C	8/1/2021	20:57:49	-42.3	WTG-016-C-SPI.jpg	15.1	Physical	14.4	15.2	0.8	1.8	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-017	A	7/22/2021	23:26:50	-41.8	WTG-017-A-SPI.jpg	14.4	Biological	14.1	14.9	0.8	4.8	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-017	B	7/22/2021	23:31:52	-41.6	WTG-017-B-SPI.jpg	14.7	Biological	14.2	15.0	0.8	3.5	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-018	A	8/1/2021	22:17:09	-41.3	WTG-018-A-SPI.jpg	14.4	Physical	13.4	14.9	1.5	2.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-018	B	8/1/2021	22:21:16	-41.3	WTG-018-B-SPI.jpg	12.9	Physical	12.4	13.0	0.6	1.8	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-019	A	8/1/2021	16:24:15	-44.0	WTG-019-A-SPI.jpg	13.8	Biological	13.4	13.7	0.3	2.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-019	C	8/1/2021	16:32:27	-44.1	WTG-019-C-SPI.jpg	13.5	Biological	13.4	14.1	0.7	1.8	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-020	B	7/18/2021	14:11:31	-45.1	WTG-020-B-SPI.jpg	13.9	Biological	13.5	14.1	0.6	1.9	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-020	C	7/18/2021	14:15:56	-45.2	WTG-020-C-SPI.jpg	14.2	Physical	14.1	14.3	0.2	1.7	>4 phi	>4 phi	2 to 1 phi	Stage III
WTG-021	A	7/18/2021	16:10:06	-45.2	WTG-021-A-SPI.jpg	13.3	Biological	12.5	14.2	1.7	3.1	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-021	B	7/18/2021	16:14:18	-45.3	WTG-021-B-SPI.jpg	16.4	Biological	15.9	17.3	1.4	4.1	>4 phi	>4 phi	2 to 1 phi	Stage II
WTG-022	A	8/1/2021	11:19:47	-43.3	WTG-022-A-SPI.jpg	14.8	Physical	14.3	15.0	0.7	1.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
IAC-216	C	loose biogenic aggregates	none	2	No	6	0.41	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
IAC-217	A	cluster(s) of rounded pellets	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
IAC-217	C	cluster(s) of rounded pellets	Yes	0	No	4	0.25	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
IAC-218	A	none	none	0	No	3	1.07	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
IAC-218	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-001	A	none	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-001	C	none	Yes	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-002	B	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	5
WTG-002	C	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	8
WTG-003	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-003	C	none	none	1	No	2	0.5	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
WTG-004	A	none	none	1	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	9
WTG-004	B	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	4
WTG-005	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	4
WTG-005	B	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	4
WTG-006	B	none	none	3	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	11
WTG-006	C	none	none	3	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	9
WTG-007	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-007	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-008	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	5
WTG-008	B	loose biogenic aggregates	none	2	No	4	0.35	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-009	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-009	C	none	none	0	No	1	0.83	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-010	B	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-010	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-011	C	none	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-011	F	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-012	A	loose biogenic aggregates	none	0	No	1	0.32	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-012	B	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-013	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-013	C	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	6
WTG-014	B	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-014	C	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
WTG-015	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-015	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-016	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-016	C	none	none	5	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-017	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-017	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-018	A	none	4	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-018	B	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-019	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-019	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-020	B	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-020	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-021	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-021	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-022	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
IAC-216	C	Tan f.sand. Mostly grey silt/clay. Polychaetes and voids at depth. Mud shaving artifacts.
IAC-217	A	tan f.sand and tan/grey silt/clay. Void at depth. Fecal pellets at surface.
IAC-217	C	tan f.sand and tan/grey/black silt/clay. Surface pit leading to large void. Surface tubes and mudclasts.
IAC-218	A	tan f.sand and grey silt/clay. Riddled with mud and sand clasts. Burrows and voids at depth. Surface tubes.
IAC-218	B	tan f/vf.sand and tan/grey silt/clay. Surface tubes. Surface burrows leading to voids and polychaete visible.
WTG-001	A	Sandy mud with sand dollar(s) penetrating surface. Some shells in sediment. Reduced patch of sediment in center near bottom.
WTG-001	C	Muddy Sand with polychaetes burried within. Sand dollar on surface. Amphipod tubes and feeding pit/voids present. Some patches of reduced sediment. Slanted sediment surface
WTG-002	B	Underpenetration. Tan sand with band of dark clay below RPD. Sand dollars present.
WTG-002	C	tan sand with lt and dk grey sand at depth. Multiple sand dollars on surface
WTG-003	B	Muddy Sand. Relatively shallow RPD. Reduced silt patches and scattered shell particles at depth.
WTG-003	C	Muddy Sand. Feeding Voids. Posisble polychaete middle right. Mudclasts on surface. Interesting biota on surface.
WTG-004	A	Underpenetration. tan f.sand with dark grey/black vf.sand/silt at depth. Polychaete visible. Amphipods on surface
WTG-004	B	Underpenetration. tan coarse and m/f.sand with dk grey sand at depth.
WTG-005	A	Mostly fine sand, underpenetrated. Small crab on surface. Sloped / rippled sediment surface
WTG-005	B	Mostly fine sand, underpenetrated, uneven surface/ rippling , possible result from wave/current pattersn.
WTG-006	B	Underpenetration. tan sand with grey sand/silt at depth. Polychaetes and sand dollar visible at depth. Surface amphipod tubes.
WTG-006	C	tan m.sand with tan/grey vf.sand/silt streaks at depth. Polychaetes visible at depth.
WTG-007	A	Muddy Sand< less than 50% mud. Feeding void. Some patches of reduced sediment in profile.
WTG-007	B	Muddy sand, underpenetrated, turbation on surface.
WTG-008	A	Tan sand above lt and dk grey silt/clay. No organisms visible.
WTG-008	B	Mudclast drag down.
WTG-009	A	Sandy mud, polychaete in sediment in feeding void. some reduced patches of sediment. Shell remains in sediment profile on right. Amphipod tubes on surface.
WTG-009	C	Sandy Mud, reduced patch of sediment on surface and at depth. little evidience of biota.
WTG-010	B	tan f.sand and tan/grey vf.sand/silt. Small areas of anoxic sediment. Polychaetes and voids at depth. Surface tubes.
WTG-010	C	tan f.sand and tan/grey vf.sand/silt. Shallow RPD and feeding voids. Surface amphipod tubes
WTG-011	C	Sandy mud, feeding void, amphipod tubes on surface. low turbidity
WTG-011	F	Muddy sand with feeding voids and biota on surface. Good penetration. Low turbidity
WTG-012	A	tan f.sand and grey silt/clay. Surface tubes and feeding voids at depth.
WTG-012	B	tan f.sand and tan/[lt/dk]grey silt/clay. Polychaete and voids at depth. Surface tube in background
WTG-013	A	Sandy mud. Amphipod tubes and other biota on sediment surface. Some biotubation near surface in RPD. Some reduced patches of sediment in lower left. Polychaetes in sediment.
WTG-013	C	Muddy sand, two small polychaetes in sediment. Amphipod tubes on leftside of sediment surface which makes roughness biological. Relatively deep RPD.
WTG-014	B	tan f.sand tan/grey vf.sand/silt. Polychaetes and deep oxidized burrows. Surfaceamphipod tubes
WTG-014	C	tan f.sand and tan/grey vf.sand/silt. Polychaetes and voids at depth. Surface tubes
WTG-015	B	Muddy Sand, anthripod tubes on the surface. Some small feeding voids. Reduced patch far right.
WTG-015	C	Muddy Sand, anthripod tubes all over surface. Reduced patch bottom left. No feeding vioids.
WTG-016	B	tan f.sand and tan/grey vf.sand/silt. feeding voids at depth. Surface tubes.
WTG-016	C	tan f.sand and tan/grey vf.sand/clay. Many polychaetes and feeding voids present. Surface tubes and surface burrows
WTG-017	A	Muddy Sand, a lot of bioturbation. Some anothropod tubes on surface. Polychaete in profile on left side of image. Feeding voids present.
WTG-017	B	Muddy Sand, anthropod tubes. Reduced patch in center mid.
WTG-018	A	tan f.sand and tan/grey vf.sand/silt. Polychaetes visible and filled in voids at depth. Surface tubes
WTG-018	B	tan f.sand and tan/grey vf.sand/silt. Anoxic sediment at depth. Polychaete visible. Surface tubes.
WTG-019	A	Sandy Mud with feeding voids and bioturbation. Diving clam present. Amphipod tubes on surface. Very little patches of reduced sediment deep in profile.
WTG-019	C	Sandy Mud. Polychaete far right. Amphipod tubes on sediment surface.
WTG-020	B	tan sand/silt with mix grey silt/clay. Surface amphipod tubes. Feeding void at depth. Unknown white substance at depth.
WTG-020	C	tan sand with grey silt at depth. Shallow RPD. Polychaete visible at depth and surface tubes.
WTG-021	A	Muddy sand, polychaete bottom left, slanted surface
WTG-021	B	Muddy Sand, RPD diffcicult to descern, uneven surface
WTG-022	A	tan f.sand and tan/grey vf.sand/silt. Anoxic sediment at depth. Feeding voids.Surface tubes

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
WTG-022	C	8/1/2021	11:28:00	-43.5	WTG-022-C-SPI.jpg	13.9	Physical	13.6	14.4	0.8	2.3	4 to 3 phi	>4 phi	3 to 2 phi	Stage II
WTG-023	B	8/1/2021	10:02:07	-42.0	WTG-023-B-SPI.jpg	15.5	Biological	15.0	16.0	1.0	5.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage II
WTG-023	C	8/1/2021	10:06:13	-41.9	WTG-023-C-SPI.jpg	14.7	Physical	14.6	14.9	0.3	6.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage II
WTG-024	A	8/1/2021	8:36:45	-40.5	WTG-024-A-SPI.jpg	6.3	Physical	5.9	6.7	0.8	2.1	3 to 2 phi	4 to 3 phi	2 to 1 phi	Stage II
WTG-024	C	8/1/2021	8:45:08	-40.6	WTG-024-C-SPI.jpg	10.3	Physical	10.3	10.6	0.3	1.4	4 to 3 phi	>4 phi	2 to 1 phi	Stage II
WTG-025	A	7/18/2021	19:02:11	-40.3	WTG-025-A-SPI.jpg	11.3	Biological	11.0	11.5	0.5	4.3	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-025	B	7/18/2021	19:07:59	-40.4	WTG-025-B-SPI.jpg	14.4	Biological	12.6	15.5	2.9	3.4	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-026	B	8/1/2021	7:08:48	-39.3	WTG-026-B-SPI.jpg	14.4	Physical	13.7	15.2	1.5	2.0	3 to 2 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-026	C	8/1/2021	7:12:49	-39.3	WTG-026-C-SPI.jpg	14.8	Physical	14.3	15.3	1.0	1.9	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-027	A	7/18/2021	20:44:44	-38.8	WTG-027-A-SPI.jpg	8.8	Physical	6.9	12.1	5.2	2.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage II
WTG-027	C	7/18/2021	20:55:28	-38.4	WTG-027-C-SPI.jpg	11.3	Physical	10.9	11.3	0.4	5.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage II
WTG-028	A	8/1/2021	13:06:23	-45.9	WTG-028-A-SPI.jpg	15.3	Physical	15.1	15.6	0.5	1.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
WTG-028	C	8/1/2021	13:15:52	-45.8	WTG-028-C-SPI.jpg	15.0	Physical	14.5	15.4	0.9	1.8	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-029	A	7/23/2021	14:19:34	-45.7	WTG-029-A-SPI.jpg	14.7	Biological	14.7	15.1	0.4	3.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-029	C	7/23/2021	14:28:31	-45.7	WTG-029-C-SPI.jpg	3.8	Physical	2.6	4.8	2.2	2.5	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-030	B	8/1/2021	14:50:32	-46.6	WTG-030-B-SPI.jpg	15.7	Physical	15.0	16.0	1.0	2.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-030	C	8/1/2021	14:54:54	-46.5	WTG-030-C-SPI.jpg	14.9	Physical	14.7	15.2	0.5	1.8	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-031	B	7/31/2021	22:43:57	-45.3	WTG-031-B-SPI.jpg	13.7	Biological	13.4	14.1	0.7	4.2	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-031	C	7/31/2021	22:48:39	-45.3	WTG-031-C-SPI.jpg	14.9	Biological	14.5	15.0	0.5	3.6	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-032	A	7/23/2021	8:16:06	-45.3	WTG-032-A-SPI.jpg	9.6	Biological	9.3	10.1	0.8	4.4	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-032	B	7/23/2021	8:21:34	-45.1	WTG-032-B-SPI.jpg	13.7	Biological	13.0	14.1	1.1	2.5	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-033	A	7/19/2021	2:19:27	-43.6	WTG-033-A-SPI.jpg	15.3	Biological	15.0	15.6	0.6	3.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-033	F	7/19/2021	3:12:40	-44.1	WTG-033-F-SPI.jpg	15.6	Physical	15.3	15.9	0.6	6.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-034	A	7/19/2021	0:46:54	-42.5	WTG-034-A-SPI.jpg	15.2	Biological	14.9	15.3	0.4	2.3	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-034	C	7/19/2021	0:58:01	-42.5	WTG-034-C-SPI.jpg	15.0	Biological	14.4	15.4	1.0	2.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-035	A	8/1/2021	5:11:49	-41.5	WTG-035-A-SPI.jpg	14.5	Biological	14.1	14.7	0.6	5.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-035	B	8/1/2021	5:16:05	-41.6	WTG-035-B-SPI.jpg	14.2	Biological	13.5	14.8	1.3	5.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
WTG-036	A	7/22/2021	21:28:11	-41.5	WTG-036-A-SPI.jpg	15.2	Physical	14.6	15.5	0.9	2.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-036	B	7/22/2021	21:33:14	-41.5	WTG-036-B-SPI.jpg	14.7	Physical	14.4	15.1	0.7	2.2	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-037	A	7/23/2021	12:29:13	-45.6	WTG-037-A-SPI.jpg	14.1	Biological	13.9	14.4	0.5	4.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-037	B	7/23/2021	12:33:35	-45.7	WTG-037-B-SPI.jpg	14.6	Biological	14.3	14.5	0.2	3.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-038	B	7/31/2021	21:06:12	-47.7	WTG-038-B-SPI.jpg	15.3	Physical	14.9	15.8	0.9	2.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-038	C	7/31/2021	21:11:00	-47.8	WTG-038-C-SPI.jpg	16.2	Physical	15.5	16.9	1.4	1.9	>4 phi	>4 phi	2 to 1 phi	Stage III
WTG-039	A	7/23/2021	16:01:25	-48.1	WTG-039-A-SPI.jpg	14.2	Biological	13.6	14.6	1.0	3.9	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-039	C	7/23/2021	16:10:44	-48.2	WTG-039-C-SPI.jpg	15.8	Biological	15.5	16.2	0.7	5.8	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-040	B	7/19/2021	4:48:31	-47.8	WTG-040-B-SPI.jpg	15.5	Physical	15.0	15.8	0.8	2.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-040	C	7/19/2021	4:54:12	-48.0	WTG-040-C-SPI.jpg	16.7	Biological	16.1	17.1	1.0	2.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-041	A	8/1/2021	0:34:14	-45.9	WTG-041-A-SPI.jpg	14.8	Biological	14.2	15.0	0.8	3.4	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-041	B	8/1/2021	0:38:24	-46.0	WTG-041-B-SPI.jpg	15.4	Biological	15.2	15.7	0.5	2.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-042	B	7/22/2021	19:37:16	-44.7	WTG-042-B-SPI.jpg	13.0	Biological	12.5	13.5	1.0	1.9	4 to 3 phi	4 to 3 phi	2 to 1 phi	Stage I on III
WTG-042	C	7/22/2021	19:42:13	-44.6	WTG-042-C-SPI.jpg	12.6	Physical	12.4	12.9	0.5	2.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-043	A	8/1/2021	2:22:36	-44.6	WTG-043-A-SPI.jpg	12.2	Biological	10.7	14.6	3.9	3.6	3 to 2 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-043	B	8/1/2021	2:27:14	-44.6	WTG-043-B-SPI.jpg	15.2	Biological	14.7	15.4	0.7	2.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage I
WTG-044	B	8/1/2021	3:54:24	-43.3	WTG-044-B-SPI.jpg	14.5	Physical	13.6	15.0	1.4	1.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-044	C	8/1/2021	3:59:58	-43.2	WTG-044-C-SPI.jpg	16.9	Biological	16.3	17.5	1.2	1.0	3 to 2 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-045	B	7/23/2021	10:47:16	-48.3	WTG-045-B-SPI.jpg	16.1	Biological	15.5	16.4	0.9	4.4	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-045	C	7/23/2021	10:52:28	-48.3	WTG-045-C-SPI.jpg	15.0	Biological	14.9	15.5	0.6	4.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-046	A	7/31/2021	18:43:09	-49.6	WTG-046-A-SPI.jpg	15.3	Biological	13.8	15.7	1.9	1.3	>4 phi	>4 phi	2 to 1 phi	Stage III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
WTG-022	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-023	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-023	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-024	A	none	none	1	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	6
WTG-024	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	5
WTG-025	A	none	Yes	2	No	1	0.48	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-025	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-026	B	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-026	C	none	Yes	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	8
WTG-027	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
WTG-027	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-028	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	7
WTG-028	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-029	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-029	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-030	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-030	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-031	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-031	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-032	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	11
WTG-032	B	none	Yes	1	No	3	0.99	0	Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	9
WTG-033	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-033	F	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-034	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-034	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-035	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-035	B	4	Yes	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-036	A	none	none	4	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-036	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-037	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-037	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-038	B	none	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-038	C	loose biogenic aggregates	Yes	1	No	3	0.33	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-039	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-039	C	none	Yes	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-040	B	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-040	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-041	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-041	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-042	B	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-042	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-043	A	none	Yes	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-043	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	4
WTG-044	B	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-044	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
WTG-045	B	none	Yes	1	No	1	0.93	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-045	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-046	A	loose biogenic aggregates	Yes	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
WTG-022	C	tan f.sand and tan/grey vf.sand/silt. Polychaete visible. Surface tubes.
WTG-023	B	Muddy sand with some reduced patches of sediment at bottom of profile. Bioturbation at top righ tof profile. Amphipod tubes at sediment surface. Mostly fine sands.
WTG-023	C	Muddy sand, a lot of fine sands. Some reduced patches of silt in bottom left of picture. Polychaete in top right quadrant of sediment
WTG-024	A	Underpentration. tan f.sand and tan/grey f/vf.sand/silt. Polychaete visible.
WTG-024	C	banded sediment layers. tan m.sand with anoxic dk grey silt/clay at depth. Surface tubes
WTG-025	A	Muddy Sand, unknown infauna on far left and far right of image. Activity on surface present. Some interesting biota. Deeper RPD.
WTG-025	B	Muddy sand, deep RPD. Uneven surface probably due to seafloor topography from currents/tidal processes. Organism on surface possible shrimp. Polychaete in sediment.
WTG-026	B	tan f.sand with tan m.sand at depth mixed tan/grey f/vf.sand/silt. Course white (biogenic carbonate?) granules at depth. Polychaete and voids visible. Surface tubes
WTG-026	C	tan f.sand/silt and m.sand at depth. Patches of grey silt/clay. Unknown white clusters at depth. Large void near surface. Surface amphipods.
WTG-027	A	Slanted interface surface due to seafloor landscape from tidal/wave patterns. Relatively deeper RPD making it stage 3 instead of 2. Biota and mudclasts on surface. Rippling present
WTG-027	C	Muddy Sand with a deeper RPD making the stage 3. Possible caprellids present on sedment surface. More even distribution of surface sediment than Rep A and Rep B.
WTG-028	A	tan m/f.sand and grey silt/clay. Small shallow feeding voids.
WTG-028	C	tan m/f.sand and trace grey silt/clay. Polychate, voids, and burrows visible. Surface tubes.
WTG-029	A	Sandy Mud, some anthropod tubes
WTG-029	C	Muddy sand, very underpenatrated. Uneven rippled surface.
WTG-030	B	tan m/f.sand with patches of grey silt/clay. Multiple voids. Surface tubes
WTG-030	C	tan f.sand and tan/grey silt/clay. Feeding voids and polychaete visible. Surface tubes.
WTG-031	B	Muddy Sand, mostly very fine sands ~10% silty mud. Polychaete in sediment. Feeding void present and amphipod tubes on sediment surface making stage 4.
WTG-031	C	Sandy mud, feeding void and polychaete present in sediment. Amphipod tubes on sediment surface.
WTG-032	A	tan f.sand with streaks of grey/black silt/clay. Surface amphipods tubes, feeding voids at depth.
WTG-032	B	bands of tan f.sand and mixed grey silt/clay. Filled pit/void in middle of profile. Feeding voids and polychaete visible at depth.
WTG-033	A	Sandy mud, deeper RPD, multiple polychaetes, feeding voids, and biota on sediment surface
WTG-033	F	Sandy mud, deeper RPD, feeding voids, and biota on sediment surface.
WTG-034	A	tan sand with mix of lt grey silt. Orange sediment at depth (iron oxidation?). Many surface tubes and feeding voids at depth.
WTG-034	C	tan sand with grey silt mix and dark grey silt/clay at depth. Many amphipod surface tubes and feeding void at depth.
WTG-035	A	Muddy Sand, some slightly reduced patches of sediment deeper in profile. Amphipod tubes all over surface. Feeding void top right.
WTG-035	B	Muddy Sand, large bioturbation pitting and voids. A couple of small polychaetes in sediment. Biota on surface. Reduced patches of sediment bottom right.
WTG-036	A	tan f.sand with mostly tan silt and trace grey silt at depth. Large polychaetes visible and surface tubes.
WTG-036	B	tan f.sand with tan/grey silt. Polychaete at depth. Amphipods on surface
WTG-037	A	Sandy Mud, feeding voids, some shallow bioturbation. Anthropod tubes and organisms on surface.
WTG-037	B	Sandy Mud, feeding void to right and anthropod tubes on surface indicating stage 4.
WTG-038	B	tan f.sand and grey/tan silt/clay. 6/7cm polychaete. Voids and polychaetes visible. Surface tubes.
WTG-038	C	tan f.sand and tan/grey silt/clay. Anoxic sediment at depth. Large burrow leading to a feeding void.
WTG-039	A	Muddy sand, a lot of bioturbation and feeding tubes. polychaete visibile and its path.
WTG-039	C	Muddy sand with bioturbation and 2 polychaetes. Relatively deep RPD with some reduced sediment patches in lower right.
WTG-040	B	tan sand with lt grey silt at depth. Circular artifact in middle of profile. Polychaetes visible at depth.
WTG-040	C	tan sand with grey/black silt/clay at depth. Circular artifact in middle of profile. Polychaete visible. Many surface tubes.
WTG-041	A	Sandy mud. Amphipod tubes on surface. Some polychaetes in sediment. Reduced patch of silt center bottom of profile.
WTG-041	B	muddy sand,feeding void and long bioturbation path on far right. Amphipod tubes on surface. Patch of reduced silt on bottom left.
WTG-042	B	tan sand and tan/grey silt. Polychaetes visible at depth and surface amphipod tubes.
WTG-042	C	tan f.sand and tan/greysilt/clay. Streak of orange sediment at depth (iron oxidation?). Polychaete visible at depth. Surface tubes.
WTG-043	A	Muddy Sand, reduced silt/mud in lower portion of sediment, otherwise mostly fine sands. a lot of feeding voids and pitting. and bioturbation.
WTG-043	B	Muddy sand, some reduced silt in bottom right corner. Amphipod tubes on surface and bioturbation on seediment surface.
WTG-044	B	tan f.sand and tan/grey silt/clay. Polychaetes and voids visible. Surface tubes.
WTG-044	C	tan m/f sand with trace biogenic carbonate grains, tan/grey silt/clay. Deep oxidized burrow with polychaete visible. Surface tubes.
WTG-045	B	muddy sand- a lot of fine grain sands. feeding voids. reduced sediment patches bottom left corner. Some biota on sediment surface.
WTG-045	C	sandy mud with a rather deep rpd and feeding voids. Some bioturbation and anthropod tubes on surface.
WTG-046	A	tan f.sand and tan/grey silt/clay. Anoxic sediment at depth. Large pit and voids. Polychaete visible

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
WTG-046	F	7/31/2021	19:43:28	-49.3	WTG-046-F-SPI.jpg	14.4	Physical	13.5	15.1	1.6	1.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-047	A	7/19/2021	9:23:52	-49.7	WTG-047-A-SPI.jpg	17.0	Biological	16.6	17.2	0.6	5.4	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-047	B	7/19/2021	9:28:55	-49.3	WTG-047-B-SPI.jpg	15.8	Biological	15.5	16.1	0.6	4.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-048	B	7/19/2021	11:01:55	-49.4	WTG-048-B-SPI.jpg	16.8	Biological	16.0	17.0	1.0	3.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-048	C	7/19/2021	11:06:40	-49.5	WTG-048-C-SPI.jpg	16.4	Biological	15.8	16.8	1.0	3.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-049	A	7/19/2021	12:37:54	-50.9	WTG-049-A-SPI.jpg	16.0	Physical	15.1	16.6	1.5	5.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-049	C	7/19/2021	12:47:48	-50.8	WTG-049-C-SPI.jpg	14.7	Physical	14.1	15.1	1.0	5.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-050	B	7/31/2021	12:30:29	-48.7	WTG-050-B-SPI.jpg	15.2	Physical	14.8	15.4	0.6	1.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-050	C	7/31/2021	12:35:33	-48.7	WTG-050-C-SPI.jpg	14.1	Physical	13.4	14.4	1.0	1.5	>4 phi	>4 phi	2 to 1 phi	Stage III
WTG-051	B	7/22/2021	17:48:17	-47.9	WTG-051-B-SPI.jpg	15.1	Biological	14.9	15.5	0.6	5.9	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-051	C	7/22/2021	17:53:23	-47.9	WTG-051-C-SPI.jpg	16.6	Biological	16.0	17.4	1.4	4.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-052	A	7/31/2021	10:32:24	-46.6	WTG-052-A-SPI.jpg	15.4	Physical	14.5	16.1	1.6	2.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-052	C	7/31/2021	10:41:01	-46.7	WTG-052-C-SPI.jpg	15.5	Physical	15.2	15.8	0.6	1.6	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-053	B	7/18/2021	22:56:06	-44.6	WTG-053-B-SPI.jpg	15.4	Biological	13.9	15.5	1.6	3.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-053	C	7/18/2021	23:01:28	-44.7	WTG-053-C-SPI.jpg	15.7	Biological	15.2	16.1	0.9	3.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-054	B	7/19/2021	7:40:30	-48.7	WTG-054-B-SPI.jpg	16.4	Biological	16.4	16.6	0.2	3.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-054	C	7/19/2021	7:45:10	-48.6	WTG-054-C-SPI.jpg	16.0	Physical	15.8	16.3	0.5	3.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-055	B	7/31/2021	14:16:53	-50.9	WTG-055-B-SPI.jpg	16.4	Physical	15.8	17.1	1.3	5.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-055	C	7/31/2021	14:22:34	-50.9	WTG-055-C-SPI.jpg	16.1	Physical	15.9	16.3	0.4	3.4	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-056	A	7/23/2021	17:45:02	-51.6	WTG-056-A-SPI.jpg	15.1	Biological	14.1	16.1	2.0	1.7	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-056	C	7/23/2021	17:54:04	-51.6	WTG-056-C-SPI.jpg	17.6	Physical	17.1	18.0	0.9	1.2	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-057	B	7/31/2021	16:21:22	-51.8	WTG-057-B-SPI.jpg	16.9	Physical	15.6	17.4	1.8	3.4	>4 phi	>4 phi	2 to 1 phi	Stage II
WTG-057	C	7/31/2021	16:25:05	-51.9	WTG-057-C-SPI.jpg	16.1	Biological	15.2	16.9	1.7	4.1	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-058	B	7/19/2021	15:00:58	-53.0	WTG-058-B-SPI.jpg	17.2	Biological	16.3	18.6	2.3	3.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-058	C	7/19/2021	15:04:54	-53.0	WTG-058-C-SPI.jpg	15.0	Biological	13.9	15.4	1.5	2.4	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-059	A	7/22/2021	13:54:43	-49.2	WTG-059-A-SPI.jpg	15.5	Biological	15.0	16.0	1.0	3.5	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-059	D	7/22/2021	14:31:20	-49.3	WTG-059-D-SPI.jpg	15.1	Biological	14.8	15.7	0.9	5.1	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-060	E	7/31/2021	9:07:39	-48.6	WTG-060-E-SPI.jpg	16.9	Physical	16.3	17.5	1.2	2.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-060	F	7/31/2021	9:11:24	-48.5	WTG-060-F-SPI.jpg	15.5	Physical	15.1	16.1	1.0	2.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-061	A	7/22/2021	16:17:41	-48.2	WTG-061-A-SPI.jpg	16.2	Biological	15.5	17.4	1.9	5.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-061	B	7/22/2021	16:21:45	-48.1	WTG-061-B-SPI.jpg	15.1	Biological	14.7	15.4	0.7	1.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-062	A	7/29/2021	20:58:51	-50.4	WTG-062-A-SPI.jpg	16.3	Physical	15.8	16.9	1.1	2.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-062	B	7/29/2021	21:04:55	-50.4	WTG-062-B-SPI.jpg	12.8	Physical	11.4	14.1	2.7	1.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-063	A	7/29/2021	19:29:19	-50.9	WTG-063-A-SPI.jpg	15.7	Physical	15.4	16.4	1.0	1.7	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-063	C	7/29/2021	19:39:28	-51.0	WTG-063-C-SPI.jpg	16.8	Biological	16.2	17.3	1.1	7.3	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-064	A	7/29/2021	17:32:36	-51.2	WTG-064-A-SPI.jpg	17.0	Biological	16.6	17.4	0.8	3.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-064	B	7/29/2021	17:37:17	-51.3	WTG-064-B-SPI.jpg	14.7	Physical	13.1	15.3	2.2	5.5	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-065	A	7/23/2021	19:37:02	-53.0	WTG-065-A-SPI.jpg	14.8	Biological	14.7	15.0	0.3	4.2	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-065	C	7/23/2021	19:46:52	-53.0	WTG-065-C-SPI.jpg	13.1	Biological	12.6	13.4	0.8	1.8	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-066	B	7/19/2021	17:37:21	-52.6	WTG-066-B-SPI.jpg	12.1	Biological	11.4	12.5	1.1	1.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-066	C	7/19/2021	17:42:38	-52.7	WTG-066-C-SPI.jpg	13.2	Physical	12.0	14.0	2.0	1.9	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-067	C	7/19/2021	19:58:53	-50.3	WTG-067-C-SPI.jpg	5.1	Physical	4.8	5.7	0.9	2.4	3 to 2 phi	4 to 3 phi	1 to 0 phi	Stage II
WTG-067	D	7/19/2021	20:23:00	-50.3	WTG-067-D-SPI.jpg	5.8	Physical	5.3	6.1	0.8	2.6	4 to 3 phi	4 to 3 phi	1 to 0 phi	Stage II
WTG-068	C	7/19/2021	22:11:23	-49.6	WTG-068-C-SPI.jpg	5.9	Physical	5.6	6.4	0.8	2.5	2 to 1 phi	2 to 1 phi	0 to -1 phi	Stage II
WTG-068	F	7/19/2021	22:47:51	-49.8	WTG-068-F-SPI.jpg	6.1	Physical	5.0	6.6	1.6	2.4	2 to 1 phi	2 to 1 phi	0 to -1 phi	Stage II
WTG-069	A	7/31/2021	5:06:07	-49.9	WTG-069-A-SPI.jpg	14.2	Physical	13.1	15.2	2.1	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-069	B	7/31/2021	5:11:32	-49.9	WTG-069-B-SPI.jpg	15.7	Biological	15.0	16.4	1.4	4.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-070	B	7/31/2021	7:02:54	-48.5	WTG-070-B-SPI.jpg	14.4	Physical	14.0	14.6	0.6	1.3	>4 phi	>4 phi	3 to 2 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
WTG-046	F	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-047	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-047	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-048	B	none	none	1	No	2	0.64	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-048	C	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-049	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-049	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-050	B	loose biogenic aggregates	none	1	No	3	0.22	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-050	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-051	B	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-051	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-052	A	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-052	C	loose biogenic aggregates	none	1	No	3	2.27	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-053	B	none	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-053	C	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-054	B	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-054	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-055	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-055	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-056	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-056	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-057	B	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-057	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-058	B	loose biogenic aggregates	none	2	No	2	0.69	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-058	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-059	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-059	D	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-060	E	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-060	F	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-061	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-061	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-062	A	none	none	3	No	4	0.26	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-062	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-063	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
WTG-063	C	none	Yes	2	No	1	1.35	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-064	A	loose biogenic aggregates	Yes	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-064	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-065	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-065	C	none	Yes	2	No	3	0.24	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-066	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	7
WTG-066	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-067	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	7
WTG-067	D	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Fine/Fine Sand	7
WTG-068	C	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	7
WTG-068	F	none	none	0	No	1	0.71	0	Fine Unconsolidated Substrate	Sand	Medium Sand	7
WTG-069	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-069	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-070	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
WTG-046	F	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Anoxic sediment at depth. Polychaetes and void visible. Surface tube.
WTG-047	A	Mostly mud/silt in frame, feeding voids present and deeper RPD, circular shadow middle left- seemingly from camera gear. biota present on sediment surface, amphipod tubes
WTG-047	B	Sandy Mud, large feeding void on left of image. circular shadow-likely from camera in middle left of frame. Bit higher turbidity on sediment surface
WTG-048	B	tan sand with lt grey silt at depth. circular artifact in middle of profile. Polychaete visible at depth. Mudclast drag down. Surface tubes.
WTG-048	C	tan sand with it and dk grey silt at depth. Polychaetes visible at depth. Surface tubes present.
WTG-049	A	Sandy mud with moderately deep RPD. Biota and turbidity on sediment surface. Physical rippling. Relatively even penetration depth
WTG-049	C	Sandy mud, finer grain, possible polychaete center lower of image. Relatively deeper RPD. Still Stage 3 for lack of feeding voids and limited biota on sediment surface
WTG-050	B	tan f.sand and tan/grey silt/clay with trace biogenic carbonate grains. Anoxic sediment at depth. Infaunal organism and feeding void visible. Surface tube and mudclasts
WTG-050	C	tan f.sand and ta/grey silt/clay with trace biogenic carbonate grains. Plume of anoxic sediment. Small burrows connected to surface. Voids visible at depth.
WTG-051	B	Muddy sand, polychaetes in sediment. Feeding voids. Anthropod tubes on sediment surface.
WTG-051	C	Sandy mud, biological turbation, feeding void with some reduced sediment. Anthropod tubes on surface. some uneven sloping on sediment surface.
WTG-052	A	tan f.sand and tan/grey silt/clay. Trace biogenic carbonate grains and a 2 mm shell. Voids and burrows visible. Surface tube and mudclast.
WTG-052	C	tan f.sand and tan vf.sand/silt. Trace biogenic carbonate grains. 6 cm polychaete. Many burrows and void at depth. Polychaete visible. Surface mudclast.
WTG-053	B	Muddy sand, a lot of sand has been brought deeper into sediment. Small polychaete center right. Feeding voids. Some turbidity on sediment surface.
WTG-053	C	sandy mud. Polychaetes on right side of profile image. Deeper RPD, relatively turbid sediment surface. feeding voids present
WTG-054	B	tan sand with grey silt/clay at depth. Surface burrow leading to large feeding void. Polychaete visible at depth.
WTG-054	C	tan sand with grey silt at depth. Polychaete visible at depth. Surface amphipod tubes.
WTG-055	B	Sandy Mud with a feeding void near bottom. Relatively deep RPD. Some reduced sediment in lower left. Polycheate lower left.
WTG-055	C	Sandy mud, patches of reduced sediment in lower half of profile. Very long visible polychaete in profile (~60mm)
WTG-056	A	tan sand with tan/grey silt/clay
WTG-056	C	tan f.sand with tan/grey silt/clay. Feeding voids at depth and surface amphipod tubes.
WTG-057	B	Sandy Mud. Some reduced sediment on surface and deeper sediment. small polychaetes in sedment. Some rippling on sediment surface,
WTG-057	C	Sandy Mud, some reduced patches on left side of profile. Amphipod tubes on surface.
WTG-058	B	tan sand above grey/dark grey silt/clay. Polychaetes at depth. Amphipod surface tubes. Mudclast drag down.
WTG-058	C	tan fine sand above grey silt/clay. Many surface amphipod tubes.
WTG-059	A	Muddy Sand, bioturbation present. Amphipod tubes on surface. Patches of reduced sediment in bottom right and left.
WTG-059	D	Muddy Sand, ckear polychaete in sediment, some feeidng pits, amphipod tubes on surface
WTG-060	E	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Anoxic sediment at depth. Surface pit/burrow leading to a void. Surface tubes.
WTG-060	F	tan f.sand and tan/grey silt/clay. Anoxic sediment at depth. Deep feeding voids and surface tubes.
WTG-061	A	Muddy Sand- obvious feeding void. Slightly slanted sediment surface. Amphiod tubes present on surface. Reduced sediment deeper in profile.
WTG-061	B	Sandy mud. Prominent feeding void in center. Reduced sediment on left hand side. Amphipod tubes and amphipods on surface.
WTG-062	A	tan f.sand with biogenic carbonate grains. tan/grey vf.sand/silt. Feeding voids at depth and heterogeneous sediment (bioturbation). Polychaetes. Surface tubes/burrows leading to voids.
WTG-062	B	tan f.sand and tan/grey silt/clay. 4 mm shell. Surface tubes. Polychaete and void visible.
WTG-063	A	Sandy mud, some small reduced dark patched of silt near center-bottom of profile. Some biota on surface
WTG-063	C	Sandy mud, reduced mud clast on surface, patchy reduced sediment in bottom right corner. Amphipod tubes on surface and bioturbation / pitting on surface.
WTG-064	A	tan f.sand and tan/grey silt/clay. Many surface burrows leading to voids. Larger voids and polychaete visible at depth. Surface tube.
WTG-064	B	tan f.sand with trace biogenic carbonate grains. tan/grey silt/clay and anoxic at depth. Deep oxidized burrow. Polychaete and feeding voids visible at depth. Surface tube
WTG-065	A	Sandy Mud, mostly reduced silt in lower hald of profile. Amphipod tubes present on sediment surface.
WTG-065	C	Sandy Mud. A lot of amphipods/ biota in background surface of picture. Streaks of reduced silt in sediment profile. Polychaete in sediment
WTG-066	B	tan sand above lt/dk grey silt. Surface amphipod tubes. Polychaete visible at depth.
WTG-066	C	tan sand with grey silt at depth. Surface amphipod tubes.
WTG-067	C	Sandy, underpenetrated, rippled surface. Amphipods and other biota present in background
WTG-067	D	Sandy, underpentrated sediment with rippled surface. Biota present in background.
WTG-068	C	Underpenetration. Coarse tan sand. Pockets of grey sand. Many amphipods visible on surface.
WTG-068	F	Underpenetration. Coarse tan sand. Surface amphipod tubes.
WTG-069	A	Sandy mud, feeding voids, rippling on sediment surface, polychaete in sediment
WTG-069	B	Muddy Sand, feeding voids, some biota on surface, scattered reduced sediment in lower hald of profile
WTG-070	B	tan f.sand and grey/tan silt/clay. Patches of anoxic sediment at depth. Feeding void and surface tubes.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
WTG-070	C	7/31/2021	7:07:28	-48.8	WTG-070-C-SPI.jpg	14.0	Physical	13.8	14.2	0.4	2.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-071	A	7/22/2021	12:01:49	-50.2	WTG-071-A-SPI.jpg	13.2	Biological	12.8	13.9	1.1	4.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-071	B	7/22/2021	12:06:51	-50.0	WTG-071-B-SPI.jpg	14.6	Biological	14.2	15.2	1.0	4.1	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-072	A	7/22/2021	10:24:35	-51.8	WTG-072-A-SPI.jpg	15.5	Biological	14.9	15.8	0.9	1.9	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-072	B	7/22/2021	10:29:14	-51.7	WTG-072-B-SPI.jpg	14.8	Physical	14.2	15.0	0.8	2.2	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-073	A	7/29/2021	15:51:56	-52.8	WTG-073-A-SPI.jpg	16.5	Biological	15.8	17.1	1.3	2.6	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-073	B	7/29/2021	15:57:15	-52.8	WTG-073-B-SPI.jpg	12.8	Biological	12.3	13.9	1.6	2.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-074	A	7/20/2021	4:11:06	-53.6	WTG-074-A-SPI.jpg	16.4	Biological	16.1	16.9	0.8	1.9	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-074	C	7/20/2021	4:22:29	-53.6	WTG-074-C-SPI.jpg	14.4	Physical	13.4	15.0	1.6	1.7	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-075	A	7/23/2021	21:05:36	-51.8	WTG-075-A-SPI.jpg	14.2	Biological	13.6	15.0	1.4	3.9	4 to 3 phi	>4 phi	1 to 0 phi	Stage II
WTG-075	B	7/23/2021	21:10:38	-51.7	WTG-075-B-SPI.jpg	14.1	Biological	13.6	15.1	1.5	4.3	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-076	B	7/20/2021	2:31:01	-50.5	WTG-076-B-SPI.jpg	15.6	Biological	15.0	16.2	1.2	3.2	4 to 3 phi	4 to 3 phi	2 to 1 phi	Stage II on III
WTG-076	C	7/20/2021	2:36:12	-50.6	WTG-076-C-SPI.jpg	14.7	Physical	14.5	15.2	0.7	4.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-077	A	7/20/2021	0:54:11	-51.0	WTG-077-A-SPI.jpg	8.0	Physical	7.9	8.2	0.3	3.7	1 to 0 phi	4 to 3 phi	0 to -1 phi	Stage I
WTG-077	B	7/20/2021	0:59:37	-50.7	WTG-077-B-SPI.jpg	7.3	Physical	6.7	7.5	0.8	2.6	2 to 1 phi	4 to 3 phi	0 to -1 phi	Stage I
WTG-078	B	7/20/2021	7:44:06	-49.3	WTG-078-B-SPI.jpg	14.2	Biological	14.0	14.5	0.5	2.2	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-078	C	7/20/2021	7:47:50	-49.3	WTG-078-C-SPI.jpg	14.7	Biological	14.0	15.3	1.3	2.2	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-079	A	7/29/2021	6:42:40	-51.1	WTG-079-A-SPI.jpg	15.9	Biological	15.3	16.6	1.3	3.9	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-079	C	7/29/2021	6:52:08	-51.0	WTG-079-C-SPI.jpg	15.2	Biological	15.1	15.4	0.3	2.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-080	A	7/29/2021	8:15:06	-52.2	WTG-080-A-SPI.jpg	15.2	Physical	13.9	15.9	2.0	1.5	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-080	C	7/29/2021	8:23:53	-52.2	WTG-080-C-SPI.jpg	15.8	Physical	15.1	16.7	1.6	1.5	>4 phi	>4 phi	3 to 2 phi	Stage III
WTG-081	A	7/20/2021	5:48:27	-51.3	WTG-081-A-SPI.jpg	16.3	Biological	15.4	16.6	1.2	3.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-081	C	7/20/2021	5:58:36	-51.2	WTG-081-C-SPI.jpg	14.7	Biological	14.5	15.1	0.6	3.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-082	A	7/29/2021	12:50:37	-51.2	WTG-082-A-SPI.jpg	14.2	Physical	13.9	14.9	1.0	3.6	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-082	D	7/29/2021	13:08:13	-51.2	WTG-082-D-SPI.jpg	14.3	Physical	13.9	14.7	0.8	1.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-083	A	7/20/2021	15:25:04	-51.8	WTG-083-A-SPI.jpg	15.6	Physical	15.4	15.8	0.4	3.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-083	C	7/20/2021	15:34:37	-51.6	WTG-083-C-SPI.jpg	15.6	Physical	15.2	16.0	0.8	6.3	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-084	A	7/20/2021	17:05:58	-52.1	WTG-084-A-SPI.jpg	15.2	Physical	15.0	15.6	0.6	3.2	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-084	C	7/20/2021	17:15:27	-51.9	WTG-084-C-SPI.jpg	12.5	Physical	11.7	13.4	1.7	1.7	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-085	B	7/20/2021	19:17:51	-51.8	WTG-085-B-SPI.jpg	15.9	Biological	15.4	16.5	1.1	3.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-085	C	7/20/2021	19:22:38	-51.7	WTG-085-C-SPI.jpg	14.9	Biological	14.7	15.2	0.5	2.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-086	A	7/24/2021	3:58:48	-52.0	WTG-086-A-SPI.jpg	14.5	Biological	14.1	15.0	0.9	1.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-086	B	7/24/2021	4:05:16	-51.9	WTG-086-B-SPI.jpg	13.5	Physical	13.0	13.9	0.9	2.3	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-087	B	7/20/2021	21:09:27	-53.6	WTG-087-B-SPI.jpg	14.8	Physical	14.4	15.1	0.7	3.5	>4 phi	>4 phi	2 to 1 phi	Stage III
WTG-087	C	7/20/2021	21:14:28	-53.6	WTG-087-C-SPI.jpg	14.5	Physical	14.2	14.9	0.7	3.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-088	B	7/22/2021	8:48:17	-50.4	WTG-088-B-SPI.jpg	14.7	Physical	13.9	15.2	1.3	2.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-088	C	7/22/2021	8:53:35	-50.3	WTG-088-C-SPI.jpg	14.7	Physical	14.2	15.2	1.0	2.4	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-089	A	7/29/2021	4:48:05	-50.0	WTG-089-A-SPI.jpg	14.3	Biological	14.0	14.5	0.5	4.4	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-089	C	7/29/2021	4:58:39	-49.8	WTG-089-C-SPI.jpg	14.1	Biological	13.9	14.7	0.8	4.3	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
WTG-090	A	7/20/2021	11:01:21	-49.9	WTG-090-A-SPI.jpg	14.9	Physical	14.8	15.1	0.3	3.2	4 to 3 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-090	B	7/20/2021	11:05:39	-49.8	WTG-090-B-SPI.jpg	15.6	Physical	15.3	16.1	0.8	3.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-091	B	7/29/2021	1:45:22	-51.5	WTG-091-B-SPI.jpg	13.3	Biological	13.2	14.0	0.8	3.1	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-091	C	7/29/2021	1:51:06	-51.4	WTG-091-C-SPI.jpg	14.2	Biological	14.0	14.5	0.5	2.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-092	B	7/23/2021	22:52:24	-51.7	WTG-092-B-SPI.jpg	13.4	Physical	12.9	13.8	0.9	2.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-092	C	7/23/2021	22:58:07	-51.6	WTG-092-C-SPI.jpg	11.1	Physical	10.4	11.6	1.2	2.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-093	A	7/28/2021	23:50:43	-53.0	WTG-093-A-SPI.jpg	16.2	Biological	16.1	16.4	0.3	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-093	C	7/29/2021	0:01:01	-53.1	WTG-093-C-SPI.jpg	14.2	Biological	14.1	14.5	0.4	4.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-094	A	7/24/2021	2:24:17	-51.9	WTG-094-A-SPI.jpg	14.6	Physical	14.2	14.9	0.7	2.4	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
WTG-070	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-071	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-071	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-072	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-072	B	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-073	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-073	B	none	Yes	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-074	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-074	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-075	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-075	B	none	Yes	5	No	1	2.05	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-076	B	loose biogenic aggregates	Yes	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-076	C	none	none	6	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-077	A	none	none	0	No				Fine Unconsolidated Substrate	Sand	Medium Sand	6
WTG-077	B	none	none	0	No				Fine Unconsolidated Substrate	Sand	Very Coarse/Coarse Sand	5
WTG-078	B	loose biogenic aggregates	none	5	No	1	0.36	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-078	C	loose biogenic aggregates	Yes	1	No	1	0.29	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-079	A	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-079	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-080	A	none	none	1	No	1	0.31	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-080	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-081	A	none	Yes	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-081	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-082	A	none	Yes	3	No	3	0.47	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-082	D	none	none	2	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-083	A	none	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-083	C	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-084	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-084	C	loose biogenic aggregates	Yes	1	No	2	0.84	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-085	B	none	Yes	5	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-085	C	none	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-086	A	none	none	4	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-086	B	none	none	3	No	2	0.76	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-087	B	none	none	5	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-087	C	none	none	6	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-088	B	none	none	4	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-088	C	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-089	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-089	C	none	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-090	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-090	B	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-091	B	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-091	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-092	B	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-092	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-093	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-093	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-094	A	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
WTG-070	C	tan f.sand and grey/tan silt/clay. deep oxidized burrow leading to feeding void. Surface tubes.
WTG-071	A	Sandy Mud, relativley deep RPD. A lot of amphipod tubes all voer surface in foreground as well. Feeding voids. and small polychaete in sediment
WTG-071	B	Sandy mud. high levels of bioturbation. deep feeding voids- one of them bringing down the RPD. Amphipod tubes present along sediment surface.
WTG-072	A	tan f.sand with tan/grey silt/clay. Surface burrows. Polychaetes visible at depth. Surface amphipod tubes.
WTG-072	B	tan f.sand with tan/grey silt/clay. Polychaetes visible at depth. Surface amphipod tubes.
WTG-073	A	Sandy Mud, amphipod tubes on sediment surface, very small feeding void but only one small little polchaete infauna therefore stage 3
WTG-073	B	High bioturbation. Small polychaete in bottom center drag down RPD. Large amphipod tubes on sediment surface. Pitting / mounds at water-sediment interface.
WTG-074	A	tan fine sand with grey/black vf sand/silt at depth. Polychaete visible at depth. Small surface tube
WTG-074	C	tan fine sand with grey silt/clay at depth. Deep feeding voids and surface tubes present.
WTG-075	A	Muddy Sand. A lot of bioturbation on sediment-water interface. Not much below. Small reduced patch of silt at bottom left hand corner. Clear picture of amphipod tubes on surface
WTG-075	B	Sandy Mud- scattered polychaete infauna. Feeding voids lower left hand. Active biota on surface. Unidentified organism (maybe just mud clast in top center)
WTG-076	B	tan sand with grey sand at depth. Streak of bright orange sediment (iron oxidation?). Many surface tubes. Polychaetes visible at depth.
WTG-076	C	tan m. sand with fine grey sand/silt at depth. Many polychaetes visible at depth. Surface tubes.
WTG-077	A	Medium to course sand. low penetration, some rippling of sediment surface. RPD difficult to discern.
WTG-077	B	Medium to Course sand. RPD difficult to discern. Rippled sediment surface. Underpenetrated capture. Obvious rippling in background. No evidience of biota.
WTG-078	B	tan f.sand withgrey silt/clay at depth. Many amphipod surface tubes. Polychaetes visible at depth.
WTG-078	C	tan sand above grey silt/clay. Surface burrow connected to feeding void. Many surface tubes.
WTG-079	A	Sandy mud, deep large feeding void nad ample biota on surface and in background. relatively deep RPD.
WTG-079	C	Sandy mud. Some surface bioturbation. Small feeding void and amphipod tubes on surface therefore stage 4.
WTG-080	A	tan f.sand with tan/grey silt/clay at depth. Polychaetes visible at depth and surface amphipod tubes
WTG-080	C	tan f.sand with tan/grey silt/clay. Surface mudclasts and dragdown. Feeding voids.
WTG-081	A	Muddy sand, some pitting, feeding voids, polychaetes visible.
WTG-081	C	Sandy mud with large bioturbation / feeding pits and polychaete. Biota on sediment surface with some turbidity. Relatively deep RPD.
WTG-082	A	tan f.sand with m.sand around voids. Trace tan/grey silt/clay. Polychaetes and voids visible at dpeht. Surface tubes and mudclasts.
WTG-082	D	tan f.sand and tan/gray vf.sand/silt. Polychaetes and feeding voids visible. Surface tubes and burrows leading to voids. Unknown biota(?)
WTG-083	A	Sandy Mud, one small polychaete. Relatively deep RPD. Some turbation on the surface. Deep feeding voids.
WTG-083	C	Sandy mud with some polychaetes deeper in the profile. Some feeding voids. Rippling on sediment surface.
WTG-084	A	tan sand with grey f.sand/silt at depth. surface tubes.
WTG-084	C	tan sand. Surface pit connected to feeding void at depth. Surface tubes. Polychaete visible at depth.
WTG-085	B	Sandy mud with feeding burros and pits. Amphipod tubes on siurface, relatively deeper RPD.
WTG-085	C	Sandy mud, burrowing polychaete near surface (flagged) amphipod tubes on sediment surface. Some turbidity at interface.
WTG-086	A	tan f.sand with tan/grey silt/clay at depth. Polychaetes visible at depth.
WTG-086	B	tan f.sand with tan/grey silt/clay. Polychaetes visible at depth.
WTG-087	B	Sandy mud with multipe polychaetes and some amphipod tubes on sediment surface. Unknown sediment discontinuity in bottom left corner.
WTG-087	C	Sandy mud with multiple polychaetes scattered throughout. SomeFeeding voids very low in profile as well as middle indiciating stage 4. Low turbidity at interface.
WTG-088	B	tan f.sand with tan/grey silt/clay. Polychaetes visible at depth. Surface amphipod tubes.
WTG-088	C	tan sand with tan/grey f.sand/silt. Polychaetes visible at depth and surface amphipod tubes.
WTG-089	A	Sandy Mud- quite a bit of sand at depth however. Possible infauna or shell peice in bottom center and bottom left. Large clusters of amphipod tubes on surface. Relatively deep RPD
WTG-089	C	Muddy sand, large pitting and tunneling / bioturbation. Polychaete remnants in larger bioturbation. some reduced sediment bottom right corner. Amphipod tubes on surface.
WTG-090	A	tan sand with mixed silt/clay. Grey sediment streaks at depth. Polychaete visible. Surface tubes.
WTG-090	B	tan sand with grey silt at depth. Surface pit connected to feeding void at depth. Polychaete visible. Surface amphipod tube.
WTG-091	B	Sandy mud- some reduced silt in lower half of profile. Amphipod tubes on surface. Possible pieces of shell in profile.
WTG-091	C	Sandy Mud, amphipod tubes on surface.
WTG-092	B	tan f.sand with tan/grey f.sand/silt. Surface amphipod tubes. Feeding voids and channdels.
WTG-092	C	tan f.sand with tan/grey vf.sand/silt. Surface smphipod tubes. feeding voids.
WTG-093	A	Sandy mud, feeding void, relatively shallow RPD. Some amphipod tubes on surface.
WTG-093	C	Sandy mud, feeding void and bioturbation present. Amphipod tubes on surface.
WTG-094	A	tan f.sand with tan/grey vf.sand/silt. Polychaetes visible at depth. Surface amphipd tubes.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
WTG-094	C	7/24/2021	2:35:47	-51.9	WTG-094-C-SPI.jpg	14.5	Physical	14.0	14.7	0.7	2.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-095	A	7/21/2021	3:20:02	-53.1	WTG-095-A-SPI.jpg	14.2	Physical	14.2	14.5	0.3	2.1	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-095	C	7/21/2021	3:32:10	-53.2	WTG-095-C-SPI.jpg	15.0	Physical	14.4	15.5	1.1	2.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
WTG-096	A	7/28/2021	8:29:24	-53.8	WTG-096-A-SPI.jpg	11.9	Physical	11.5	12.5	1.0	1.8	4 to 3 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-096	C	7/28/2021	8:38:12	-53.9	WTG-096-C-SPI.jpg	15.0	Physical	14.2	16.3	2.1	2.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-097	B	7/20/2021	22:40:21	-53.5	WTG-097-B-SPI.jpg	14.7	Physical	14.0	15.0	1.0	2.5	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-097	C	7/20/2021	22:45:24	-53.5	WTG-097-C-SPI.jpg	14.8	Physical	14.7	14.9	0.2	2.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
WTG-098	B	7/20/2021	9:29:56	-49.7	WTG-098-B-SPI.jpg	14.5	Physical	14.3	14.9	0.6	2.6	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-098	C	7/20/2021	9:34:08	-49.6	WTG-098-C-SPI.jpg	15.5	Biological	14.7	15.9	1.2	3.0	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-099	A	7/29/2021	3:07:49	-50.6	WTG-099-A-SPI.jpg	15.0	Biological	14.9	15.3	0.4	3.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-099	C	7/29/2021	3:20:06	-50.5	WTG-099-C-SPI.jpg	13.4	Biological	13.0	13.7	0.7	4.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-100	B	7/28/2021	20:30:54	-51.4	WTG-100-B-SPI.jpg	14.7	Physical	14.3	15.1	0.8	3.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-100	C	7/28/2021	20:36:17	-51.3	WTG-100-C-SPI.jpg	15.0	Physical	14.6	15.6	1.0	2.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-101	A	7/20/2021	13:18:24	-51.8	WTG-101-A-SPI.jpg	15.6	Physical	15.3	15.9	0.6	3.9	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-101	C	7/20/2021	13:28:52	-52.1	WTG-101-C-SPI.jpg	15.6	Physical	15.4	16.2	0.8	4.0	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
WTG-102	B	7/28/2021	22:21:25	-53.4	WTG-102-B-SPI.jpg	15.5	Physical	15.2	16.0	0.8	2.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
WTG-102	C	7/28/2021	22:27:12	-53.3	WTG-102-C-SPI.jpg	14.6	Physical	14.4	15.2	0.8	1.7	4 to 3 phi	>4 phi	2 to 1 phi	Stage III
WTG-103	A	7/24/2021	0:37:30	-53.0	WTG-103-A-SPI.jpg	14.0	Physical	13.8	14.1	0.3	2.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-103	B	7/24/2021	0:43:48	-53.0	WTG-103-B-SPI.jpg	12.0	Biological	11.4	12.1	0.7	2.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-104	A	7/21/2021	4:46:49	-54.3	WTG-104-A-SPI.jpg	14.6	Biological	14.4	15.0	0.6	1.7	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-104	C	7/21/2021	4:56:30	-54.3	WTG-104-C-SPI.jpg	14.1	Physical	13.5	14.7	1.2	1.9	>4 phi	>4 phi	3 to 2 phi	Stage III
WTG-105	B	7/24/2021	6:04:08	-55.3	WTG-105-B-SPI.jpg	15.3	Physical	15.3	15.5	0.2	2.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-105	C	7/24/2021	6:10:08	-55.3	WTG-105-C-SPI.jpg	14.5	Physical	14.4	14.8	0.4	2.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-106	A	7/28/2021	6:08:53	-55.3	WTG-106-A-SPI.jpg	15.8	Physical	15.4	16.2	0.8	2.3	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-106	B	7/28/2021	6:13:43	-55.5	WTG-106-B-SPI.jpg	16.1	Physical	15.6	16.5	0.9	1.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-107	A	7/21/2021	1:03:28	-56.2	WTG-107-A-SPI.jpg	16.4	Physical	16.1	16.8	0.7	1.6	4 to 3 phi	>4 phi	3 to 2 phi	Stage III
WTG-107	C	7/21/2021	1:15:01	-56.2	WTG-107-C-SPI.jpg	15.3	Physical	15.0	15.6	0.6	0.8	4 to 3 phi	>4 phi	3 to 2 phi	Stage III
WTG-108	B	7/22/2021	7:05:37	-51.2	WTG-108-B-SPI.jpg	14.4	Biological	13.3	14.9	1.6	2.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-108	C	7/22/2021	7:10:18	-51.5	WTG-108-C-SPI.jpg	15.0	Biological	14.7	15.2	0.5	3.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-109	A	7/28/2021	18:56:31	-51.8	WTG-109-A-SPI.jpg	14.0	Biological	13.2	14.6	1.4	3.4	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-109	C	7/28/2021	19:06:36	-51.8	WTG-109-C-SPI.jpg	16.1	Biological	15.7	16.5	0.8	4.8	4 to 3 phi	>4 phi	1 to 0 phi	Stage III
WTG-110	A	7/28/2021	15:28:06	-53.1	WTG-110-A-SPI.jpg	14.3	Physical	13.8	14.8	1.0	2.7	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-110	B	7/28/2021	15:32:13	-53.2	WTG-110-B-SPI.jpg	15.7	Biological	14.4	16.0	1.6	3.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-111	A	7/22/2021	3:33:18	-53.9	WTG-111-A-SPI.jpg	14.5	Biological	14.1	14.9	0.8	5.0	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-111	C	7/22/2021	3:44:00	-53.9	WTG-111-C-SPI.jpg	14.1	Biological	12.6	14.7	2.1	3.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-112	A	7/28/2021	13:39:01	-54.5	WTG-112-A-SPI.jpg	13.8	Physical	12.9	14.4	1.5	2.8	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-112	B	7/28/2021	13:43:29	-54.4	WTG-112-B-SPI.jpg	14.6	Physical	14.3	15.0	0.7	2.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-113	B	7/28/2021	11:52:13	-55.8	WTG-113-B-SPI.jpg	14.3	Biological	13.6	15.4	1.8	2.6	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-113	C	7/28/2021	11:56:39	-55.8	WTG-113-C-SPI.jpg	11.4	Physical	10.9	12.3	1.4	3.5	4 to 3 phi	>4 phi	1 to 0 phi	Stage II
WTG-114	B	7/28/2021	10:18:52	-56.4	WTG-114-B-SPI.jpg	14.8	Physical	14.6	15.2	0.6	1.8	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-114	C	7/28/2021	10:23:39	-56.3	WTG-114-C-SPI.jpg	14.0	Physical	13.6	14.5	0.9	2.7	>4 phi	>4 phi	2 to 1 phi	Stage III
WTG-115	A	7/24/2021	8:11:07	-56.8	WTG-115-A-SPI.jpg	14.6	Physical	14.3	14.8	0.5	3.4	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-115	C	7/24/2021	8:19:10	-57.0	WTG-115-C-SPI.jpg	15.6	Biological	15.4	15.8	0.4	1.6	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-116	A	7/28/2021	3:25:46	-57.1	WTG-116-A-SPI.jpg	15.5	Physical	15.3	15.8	0.5	1.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-116	D	7/28/2021	4:15:55	-56.8	WTG-116-D-SPI.jpg	14.7	Physical	14.4	15.7	1.3	1.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-117	A	7/27/2021	22:29:41	-58.5	WTG-117-A-SPI.jpg	14.5	Physical	14.0	14.4	0.4	1.9	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-117	I	7/28/2021	0:20:45	-58.5	WTG-117-I-SPI.jpg	15.5	Physical	15.2	15.8	0.6	2.0	>4 phi	>4 phi	2 to 1 phi	Stage III
WTG-118	A	7/28/2021	17:11:12	-52.6	WTG-118-A-SPI.jpg	14.7	Physical	14.1	15.1	1.0	2.1	>4 phi	>4 phi	2 to 1 phi	Stage II on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
WTG-094	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-095	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-095	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-096	A	none	none	3	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-096	C	loose biogenic aggregates	none	2	No	1	0.47	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-097	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-097	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-098	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-098	C	loose biogenic aggregates	none	0	No	1	1.76	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-099	A	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-099	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-100	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-100	C	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-101	A	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-101	C	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-102	B	none	none	2	No	5	0.64	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-102	C	none	none	1	No	1	1.6	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-103	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-103	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-104	A	loose biogenic aggregates	none	3	No	1	0.68	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-104	C	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-105	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-105	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-105	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-106	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-106	B	none	none	0	No	4	0.72	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-107	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-107	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-108	B	loose biogenic aggregates	none	2	No	7	0.47	0	Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-108	C	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-109	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-109	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-110	A	loose biogenic aggregates	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-110	B	loose biogenic aggregates	none	2	No	2	0.92	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-111	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-111	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-112	A	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-112	B	none	none	1	No	1	1.27	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-113	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-113	C	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	8
WTG-114	B	none	none	1	No	2	0.39	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-114	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-115	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-115	C	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-116	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-116	D	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-117	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-117	I	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-118	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
WTG-094	C	tan f.sand with tan/grey silt/clay. Surface amphipod tues. Polychaete visible at depht.
WTG-095	A	Sandy Mud, small polychaete, unknown sediment discontinuity in bottom left corner. Feeding void in center of profile. Interesting biota on surface as well as amphipod tubes.
WTG-095	C	Sandy Mud, small polychate. Beginning of voids but not a lot so stage 3. Some turbidity on sediment surface interface. Unknown white objects in profile.
WTG-096	A	tan f.sand with tan/grey silt and trace m.sand. Surface amphipod tubes. Polychaetes visible at depth.
WTG-096	C	tan f.sand with tan/grey silt/clay. Streak of anoxic(?) sediment. Polychaetes visible at depth. Surface amphipod tubes.
WTG-097	B	Sandy mud, small polychate far left. Some uneven sediment surface / rippling. Some feeding voids. Unknown anoxic/black streak bottom right corner. Some turbidity at sediment surface.
WTG-097	C	sandy mud with larger gravel pocket in left center. Small polychate far left. RPD relatively shallow making stage 3.
WTG-098	B	tan sand with grey silt at depth. Plume of red sediment surrounding polychaete. Surface amphipod tubes.
WTG-098	C	tan sand with lt/dk grey silt at depth around feeding void. Surface amphipod tubes.
WTG-099	A	Sandy Mud- Fine sands intermixed. Large feeding void. Shell bits present. large amphipod tube clusters on sediment surface. Some sediment surface biorturbation and pitting present
WTG-099	C	Sandy Mud, large feeding pit with reduced patch of sediment next to it. Amphipod tubes on sediment surface. Biota flagged on sediment surface- unknown organism
WTG-100	B	tan f.sand with tan/grey silt/clay. Patches of sand throughout. Surface amphipod tubes. Polychaete visible at depth.
WTG-100	C	tan f.sand and tan/grey silt/clay. Polychaete visible at depth. Surface ampipod tubes.
WTG-101	A	Sandy mud, most sand within RPD. Some small polychaetes. Possible severed clam / crustacean. Feeding voids. Some uncolnsolidated sediment near bottom left.
WTG-101	C	Sandy mud, deep RPD but hardly any feeding voids so stage 3. Some rippling on sediment surface. High turbidity / disturbance at interface.
WTG-102	B	tan f.sand and tan/grey vf.sand/silt. Surface mudclasts. Polychaetes and feeding void visible at depth.
WTG-102	C	tan f.sand and tan/grey vf.sand/silt. Surface mudclasts (drag down). Feeding voids and polychaetes visible at depth.
WTG-103	A	Sandy mud. Long polychate in bottom right of image. No biota on sediment surface- but small feeding void and oxidized sediment so stage 4
WTG-103	B	Sandy mud- feeding voids, polychaete in profile. Amphipod tubes on surface
WTG-104	A	tan sand with grey f. sand at depth. Deep oxidized sediment associated with a burrow. Polychaetes at depth.
WTG-104	C	tan f.sand with tan/grey silt/clay at depth. polychaete visible at depth
WTG-105	B	Sandy mud- small polychate middle left in profile. Amphipod tubes on surface. Relatively shallow RPD.
WTG-105	C	Sandy mud- feeding void, two polychaetes.
WTG-106	A	tan f.sand and tan/grey silt/clay. Plume of dark anoxic sediment in center of profile.
WTG-106	B	tan f.sand and tan/grey silt/clay. Plume of dark anoxic sediment at depth. Feeding voids at depth. Surface tubes.
WTG-107	A	Sandy Mud, shallow RPD. Some small polychaetes. High turbid sediment surface.
WTG-107	C	Sandy mud, mostly mud. Small polychaete barely visible. Very low RPD.
WTG-108	B	tan f.sand and tan/grey silt/clay. Many surface tubes and mudclasts. Feeding voids at depth.
WTG-108	C	tan f.sand and tan/grey vf.sand/silt. Many surface pits/burrows leading to feeding voids at depth. Polychaete visible. Surface tubes.
WTG-109	A	Sandy mud- one polychaete in profile. Amphipod tubes on sediment surface. Some bioturation on surface.
WTG-109	C	Muddy Sand, amphipod tubes on surface- relatively deep RPD
WTG-110	A	tan f.sand and tan/grey silt/clay. Black anoxic sediment at depth. Polychaetes and feeding voids at depth. Surface tubes.
WTG-110	B	tan f.sand and tan/grey vf.sand/silt. Polychaetes and feeding voids at depth. Anoxic dark sediment at base of profile. Many surface mudclasts and tubes.
WTG-111	A	Sandy Mud- polychate in profile. Very active sediment surface and abundance of organisms / amphipods mostly
WTG-111	C	Sandy Mud- feeding void- sporatic RPD. Long polychaete in sediment profile. Relatively uneven sediment interface. amphipod tubes on surface
WTG-112	A	tan f.sand with tan/grey silt/clay. Polychaete visible. Many burrows leading to feeding voids. Surface tubes
WTG-112	B	tan f.sand and tan/grey silt/clay. Surface tubes. Feeding voids. Polychaete visible
WTG-113	B	Sandy mud, amphipod tubes on surface. Relatively sporadic RPD
WTG-113	C	Muddy Sand, sporadic RPD, some reduced sediment.
WTG-114	B	tan f.sand with tan/grey silt/clay. Surface biogenic aggregates and mudclasts. 8cm polychaete. Feeding voids.
WTG-114	C	tan f.sand and tan/grey silt/clay. Surface mudclast and dragdown. Feeding voids.
WTG-115	A	Sandy mud. Relatively smooth roughness, shallow RPD, some biota on surface
WTG-115	C	Sandy mud, shallow RPD, patch of reduced sediment on far left of image. Some pitting. Bioturbation on sediment - water interface
WTG-116	A	tan f.sand with tan/grey silt/clay. Anoxic sediment at depth. Biota visible at depth. Surface biogenic aggregates.
WTG-116	D	tan f.sand with trace biogenic carbonate grains with tan/grey silt/clay. Anoxic sediment at depth. Feeding voids, trace surface tubes.
WTG-117	A	Sandy mud, shallow RPD, some bioturbation on surface
WTG-117	I	Sandy mud, large interesting polychaete deep in profile, shallow RPD
WTG-118	A	tan f.sand with trace biogenic carbonate grains tan/grey silt/clay. Polychaete and possible sand dollar visible. Surface amphipod tubes. Feeding voids.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
WTG-118	B	7/28/2021	17:14:38	-52.7	WTG-118-B-SPI.jpg	15.1	Biological	14.5	15.5	1.0	2.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-119	B	7/22/2021	5:10:42	-54.5	WTG-119-B-SPI.jpg	15.5	Biological	15.3	16.2	0.9	7.0	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-119	C	7/22/2021	5:15:27	-54.5	WTG-119-C-SPI.jpg	14.2	Biological	13.3	14.8	1.5	3.4	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-120	A	7/27/2021	4:54:24	-54.4	WTG-120-A-SPI.jpg	14.8	Biological	14.5	15.0	0.5	2.0	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-120	C	7/27/2021	5:04:21	-54.3	WTG-120-C-SPI.jpg	14.2	Physical	14.0	14.5	0.5	2.5	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-121	A	7/27/2021	6:40:39	-55.1	WTG-121-A-SPI.jpg	14.9	Biological	13.5	15.5	2.0	2.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-121	B	7/27/2021	6:45:09	-55.1	WTG-121-B-SPI.jpg	16.3	Biological	15.7	16.6	0.9	3.7	4 to 3 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-122	A	7/21/2021	10:51:24	-55.3	WTG-122-A-SPI.jpg	16.1	Biological	15.5	16.6	1.1	1.8	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-122	C	7/21/2021	10:59:45	-55.4	WTG-122-C-SPI.jpg	15.0	Physical	14.5	15.7	1.2	2.1	>4 phi	>4 phi	3 to 2 phi	Stage I on III
WTG-123	B	7/21/2021	8:46:57	-56.3	WTG-123-B-SPI.jpg	16.2	Physical	16.0	16.4	0.4	2.2	4 to 3 phi	>4 phi	3 to 2 phi	Stage III
WTG-123	E	7/21/2021	9:27:22	-56.1	WTG-123-E-SPI.jpg	16.5	Physical	16.2	17.0	0.8	2.4	4 to 3 phi	>4 phi	3 to 2 phi	Stage III
WTG-124	A	7/27/2021	13:13:42	-57.6	WTG-124-A-SPI.jpg	16.0	Physical	15.6	16.5	0.9	1.7	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-124	C	7/27/2021	13:22:43	-57.6	WTG-124-C-SPI.jpg	17.2	Physical	16.5	17.7	1.2	1.3	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-125	A	7/27/2021	14:59:08	-57.8	WTG-125-A-SPI.jpg	15.9	Physical	15.9	16.0	0.1	1.5	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-125	B	7/27/2021	15:03:56	-58.1	WTG-125-B-SPI.jpg	17.5	Physical	17.2	17.9	0.7	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-126	A	7/24/2021	9:48:02	-58.8	WTG-126-A-SPI.jpg	14.4	Physical	13.7	15.2	1.5	1.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-126	B	7/24/2021	9:53:00	-58.9	WTG-126-B-SPI.jpg	11.7	Biological	11.2	12.3	1.1	1.0	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-127	A	7/27/2021	20:31:36	-59.2	WTG-127-A-SPI.jpg	15.5	Biological	15.5	15.8	0.3	3.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-127	B	7/27/2021	20:36:12	-59.4	WTG-127-B-SPI.jpg	13.0	Physical	12.8	13.2	0.4	3.2	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-128	A	7/21/2021	13:18:23	-54.3	WTG-128-A-SPI.jpg	14.3	Biological	13.4	14.9	1.5	1.9	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-128	C	7/21/2021	13:31:28	-54.1	WTG-128-C-SPI.jpg	15.5	Biological	15.0	16.2	1.2	2.0	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-129	A	7/27/2021	3:09:09	-54.8	WTG-129-A-SPI.jpg	15.3	Biological	14.7	15.4	0.7	3.1	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-129	B	7/27/2021	3:14:56	-54.8	WTG-129-B-SPI.jpg	15.5	Biological	15.4	15.7	0.3	2.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-130	A	7/27/2021	8:12:07	-55.8	WTG-130-A-SPI.jpg	14.5	Physical	13.6	15.0	1.4	1.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-130	B	7/27/2021	8:16:27	-55.9	WTG-130-B-SPI.jpg	16.5	Physical	16.0	17.1	1.1	1.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-131	A	7/22/2021	1:24:20	-55.7	WTG-131-A-SPI.jpg	14.7	Biological	14.1	15.3	1.2	1.4	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-131	B	7/22/2021	1:30:23	-55.7	WTG-131-B-SPI.jpg	12.7	Biological	12.6	13.1	0.5	1.9	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-132	B	7/27/2021	10:04:49	-57.3	WTG-132-B-SPI.jpg	14.9	Physical	14.6	15.2	0.6	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-132	C	7/27/2021	10:10:37	-57.2	WTG-132-C-SPI.jpg	15.4	Physical	15.1	15.8	0.7	1.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-133	A	7/27/2021	11:33:51	-58.0	WTG-133-A-SPI.jpg	14.7	Biological	14.6	14.9	0.3	1.9	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-133	C	7/27/2021	11:43:26	-58.1	WTG-133-C-SPI.jpg	15.4	Biological	15.2	15.8	0.6	2.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-134	A	7/21/2021	6:57:50	-58.0	WTG-134-A-SPI.jpg	15.4	Biological	15.0	15.8	0.8	2.2	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-134	B	7/21/2021	7:02:54	-58.0	WTG-134-B-SPI.jpg	14.1	Physical	13.5	15.0	1.5	3.0	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-135	A	7/27/2021	16:28:23	-58.2	WTG-135-A-SPI.jpg	14.7	Biological	14.3	15.0	0.7	2.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-135	C	7/27/2021	16:37:22	-58.2	WTG-135-C-SPI.jpg	15.9	Biological	15.3	16.4	1.1	2.8	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-136	A	7/27/2021	1:36:15	-55.9	WTG-136-A-SPI.jpg	15.8	Physical	14.5	16.7	2.2	1.5	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-136	B	7/27/2021	1:42:15	-55.8	WTG-136-B-SPI.jpg	15.6	Biological	15.3	15.9	0.6	2.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-137	A	7/21/2021	15:07:57	-56.2	WTG-137-A-SPI.jpg	13.7	Physical	13.3	14.3	1.0	1.6	4 to 3 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-137	C	7/21/2021	15:17:03	-56.2	WTG-137-C-SPI.jpg	15.9	Physical	15.8	16.1	0.3	2.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-138	B	7/25/2021	14:52:47	-55.9	WTG-138-B-SPI.jpg	13.8	Biological	13.0	14.1	1.1	1.6	>4 phi	>4 phi	2 to 1 phi	Stage II
WTG-138	C	7/25/2021	14:57:21	-56.2	WTG-138-C-SPI.jpg	15.4	Biological	14.8	16.0	1.2	1.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-139	A	7/25/2021	9:36:43	-57.8	WTG-139-A-SPI.jpg	15.9	Biological	15.9	16.1	0.2	1.9	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-139	B	7/25/2021	9:40:12	-57.8	WTG-139-B-SPI.jpg	15.2	Biological	14.4	15.8	1.4	2.1	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-140	A	7/24/2021	15:00:00	-57.5	WTG-140-A-SPI.jpg	15.6	Physical	15.3	15.8	0.5	2.5	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-140	C	7/24/2021	15:08:00	-57.6	WTG-140-C-SPI.jpg	14.2	Biological	13.8	14.5	0.7	1.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-141	B	7/25/2021	8:09:09	-59.0	WTG-141-B-SPI.jpg	16.2	Biological	15.8	16.8	1.0	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-141	C	7/25/2021	8:13:29	-59.0	WTG-141-C-SPI.jpg	17.7	Biological	17.3	18.1	0.8	2.7	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-142	A	7/24/2021	11:20:44	-59.3	WTG-142-A-SPI.jpg	14.9	Biological	13.8	15.4	1.6	1.2	>4 phi	>4 phi	1 to 0 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
WTG-118	B	loose biogenic aggregates	none	3	No	3	0.43	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-119	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	11
WTG-119	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-120	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-120	C	none	none	1	No	1	0.37	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-121	A	none	none	0	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-121	B	none	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	10
WTG-122	A	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-122	C	loose biogenic aggregates	Yes	0	No	6	0.79	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-123	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-123	E	none	none	0	No				Fine Unconsolidated Substrate	Mud	Mud	9
WTG-124	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-124	C	loose biogenic aggregates	none	0	No	1	1.02	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-125	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-125	B	none	none	0	No	1	2.26	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-126	A	loose biogenic aggregates	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-126	B	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-127	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-127	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-128	A	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-128	C	loose biogenic aggregates	none	0	No	5	0.46	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-129	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-129	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-129	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-129	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-130	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-130	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-131	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	5
WTG-131	B	none	none	0	No	1	2.59	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-132	B	none	none	1	No	1	0.84	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-132	C	loose biogenic aggregates	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-133	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-133	C	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-134	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-134	B	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Muddy Sand	Muddy Sand	9
WTG-135	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-135	C	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-136	A	loose biogenic aggregates	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-136	B	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-137	A	none	none	2	No				Fine Unconsolidated Substrate	Mud	Mud	8
WTG-137	C	none	none	1	No				Fine Unconsolidated Substrate	Mud	Mud	9
WTG-138	B	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
WTG-138	C	cluster(s) of rounded pellets	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-139	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-139	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
WTG-140	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-140	C	cluster(s) of rounded pellets	none	4	No	5	0.61	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-141	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-141	C	none	none	1	No	4	1.92	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-142	A	cluster(s) of rounded pellets	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
WTG-118	B	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Polychaetes visible at depth. Many surface tubes. Feeding voids
WTG-119	B	Muddy sand, multiple feeding voids, amphipod tubes on surface, so stage 5. Relatively deep RPD- though deep to discern because of sandy sediment
WTG-119	C	Sandy mud, two polychaetes in profile. Patch of reduced sediment far right of image. Some bioturbation on surface and evidence of amphipod tubes
WTG-120	A	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Feeding voids, surface tubes, polychaete visible at depth
WTG-120	C	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Feeding voids. Polychaete visible. Surface amphipod tubes
WTG-121	A	Sandy mud, large feeding void/pitting from surface. Some amphipod tubes on surface. RPD a bit difficult to discern.
WTG-121	B	Muddy sand. Patch of dark, reduced sediment in bottom right corner of profile. Amphipod tube cluster on surface
WTG-122	A	tan sand with lt/dk grey silt/clay at depth. Surface tubes. 3 mm shell.
WTG-122	C	tan sand with tan/grey silt/clay at depth. Large voids. Surface mudclasts and surface tubes. Surface tube cluster drag down.
WTG-123	B	Sandy mud- 90+% mud. Shallow RPD. Long polychaete in lower left corner.
WTG-123	E	Mostly mud, potentially some very fine sand near top. Shallow RPD. Little biota present.
WTG-124	A	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface burrows. Polychaete visible at depth.
WTG-124	C	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface tubes and hermit crab(?)
WTG-125	A	Sandy mud, shallow rpd, smooth face. Beginnings of biota on surface
WTG-125	B	Sandy Mud, ~70% mud. Feeding voids in lower bottom of profile mixed with darker reduced silt. Mud clast on surface
WTG-126	A	tan f.sand and tan/grey silt/clay. Surface biogenic aggregates. 6cm polychaete visible. Feeding voids.
WTG-126	B	tan f.sand with tan/grey silt/clay. Anoxic sediment at depth. Surface mudclast and dragdown. Surface amphipod tubes and seastar in background. Feeding voids at depth.
WTG-127	A	Sandy mud- small polychaete in bottom left corner. Amphipod tubes all over sediment surface and background. Bioturbation present on surface
WTG-127	B	Sandy mud ~50% mud. Some cascading of sediment wihtin profile. RPD difficult to discern. Some turbidity ons urface likely caused from camera penetration.
WTG-128	A	tan f.sand above tan/grey silt/clay. Surface tubes and feeding voids at depth.
WTG-128	C	tan
WTG-129	A	Sandy mud- ~50% mud /fine silts. feeding void. Polychaetes in profile. Some amphipod tubes on surface. RPD no entirely obvious
WTG-129	B	Sandy mud, polychaete in bottom right of picture. Clear amphipod tube on surface. some patchy reduced sediment near bottom of profile
WTG-130	A	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface tubes and feeding voids at depth.
WTG-130	B	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface tubes. Void cracks.
WTG-131	A	Sandy mud, polychaete in profile far left. Shallow RPD with darker silt on most of bottom half. Few amphipod tubes on surface
WTG-131	B	Sandy mud, what looks like the formation of a feeding void in bottom left corner. amphipod tubes on surface, mud clast on surface. Shallow RPD
WTG-132	B	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface tubes. Feeding voids and polychaete at depth
WTG-132	C	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface tubes and feeding voids
WTG-133	A	Sandy mud, feeding voids, amphipod tubes on surface. Polychaete in profile top right.
WTG-133	C	Sandy mud, large polychaete in profile (flagged), amphipod tubes on surface. Feeding voids present. RPD difficult to discern becuase of intermized reduced mud
WTG-134	A	tan f.sand above tan/grey silt/clay. Many surface amphipod tubes. Polychaete visible at depth.
WTG-134	B	tan f.sand above tan/grey silt/clay, mudclast drag down - disturbed RPD. Surface amphipod tubes. Polychaete at depth.
WTG-135	A	Sandy mud, two small polychaetes in bottom of profile, amphipod tubes on sediment surface. RPD difficult to discern
WTG-135	C	Sandy mud, RPD difficult to discern. Amphipod tubes on surface,
WTG-136	A	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface amphipod tubes. Polychaete visible. Possible filled voids
WTG-136	B	tan f.sand with trace biogenic carbonate grains and tan/grey silt/clay. Surface amphipod tubes. Feeding voids. Epifaunal shrimp (3)
WTG-137	A	Mostly mud with few fine sands near sediment surface. polykete in sediment and large one on surface under amphipod tubes.
WTG-137	C	Mostly mud some fine sands on sediment surface. Biota on sediment surface. Small polychaete near bottom of image.
WTG-138	B	tan f.sand with trace biogenic carbonate grains, and tan/grey silt/clay. Surface tubes. Fecal pellet clusters.
WTG-138	C	tan f.sand with trace biogenic carbonate grains. 3mm shell. Fecal pellet clusters. Surface tubes. Feeding voids
WTG-139	A	Sandy mud ~80% mud. Amphipod tubes on surface. Seastar on surface top left. RPD a bit difficult to discern
WTG-139	B	Sandy mud, Shallow RPD difficult to outline. Amphipod tubes on surface. Dark small reduced patch of silt in bottom right of profile.
WTG-140	A	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Surface amphipod tubes. Feeding voids and polychaete at depth.
WTG-140	C	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Many surface tubes, fecal pellet clusters. Many polychaetes at depth and feeding voids. Infaunal sand dollar?
WTG-141	B	Sandy mud, small polychaete in sediment. some bioturbation on surface. RPD difficult to discern.
WTG-141	C	Sandy mud, small polychaete very bottom of profile. Mud clasts and amphipod tubes on surface. RPD relatively difficult to discern
WTG-142	A	tan f.sand with trace biogenic carbonate grains, grey/tan silt/clay. Surface tubes and amphipods. Fecal pellet clusters. Polychaetes and feeding voids at depth.

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Local Date	Local Time (EST)	Water Depth (m)	SPI Image ID	Prism Penetration (cm)	SWI Roughness Origin	Prism Min Penetration (cm)	Prism Max Penetration (cm)	Relief (cm)	aRPD Mean Depth (cm)	Grain Size Major Mode	Grain Size Min. Size Range	Grain Size Max. Size range	Infaunal Successional Stage
WTG-142	D	7/24/2021	12:40:56	-58.9	WTG-142-D-SPI.jpg	12.9	Biological	11.6	13.6	2.0	1.7	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-143	A	7/21/2021	23:42:47	-56.0	WTG-143-A-SPI.jpg	15.8	Biological	15.3	16.2	0.9	1.9	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-143	C	7/22/2021	1:03:19	-56.1	WTG-143-C-SPI.jpg	15.7	Biological	15.5	16.2	0.7	2.3	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-144	B	7/25/2021	13:18:04	-56.6	WTG-144-B-SPI.jpg	14.5	Physical	13.8	15.8	2.0	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-144	C	7/25/2021	13:22:24	-56.5	WTG-144-C-SPI.jpg	15.0	Biological	14.7	15.4	0.7	1.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-145	A	7/25/2021	11:12:07	-57.8	WTG-145-A-SPI.jpg	15.8	Biological	15.4	16.2	0.8	3.1	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-145	C	7/25/2021	11:20:29	-57.7	WTG-145-C-SPI.jpg	14.5	Physical	14.2	15.2	1.0	2.7	>4 phi	>4 phi	1 to 0 phi	Stage III
WTG-146	A	7/24/2021	16:36:20	-58.0	WTG-146-A-SPI.jpg	15.1	Biological	14.5	15.7	1.2	1.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-146	B	7/24/2021	16:41:55	-58.3	WTG-146-B-SPI.jpg	15.4	Biological	14.8	15.8	1.0	2.0	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-147	A	7/25/2021	6:36:25	-59.2	WTG-147-A-SPI.jpg	13.9	Biological	13.7	14.8	1.1	2.4	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-147	B	7/25/2021	6:41:36	-59.2	WTG-147-B-SPI.jpg	17.0	Biological	16.6	17.3	0.7	2.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-148	A	7/27/2021	18:26:42	-59.5	WTG-148-A-SPI.jpg	17.3	Biological	16.8	17.7	0.9	2.3	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-148	C	7/27/2021	18:40:40	-59.6	WTG-148-C-SPI.jpg	15.0	Biological	14.2	15.6	1.4	1.9	>4 phi	>4 phi	3 to 2 phi	Stage II on III
WTG-149	B	7/24/2021	22:03:22	-58.4	WTG-149-B-SPI.jpg	15.4	Biological	14.9	16.2	1.3	2.8	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-149	C	7/24/2021	22:09:38	-58.4	WTG-149-C-SPI.jpg	16.7	Physical	16.3	17.4	1.1	4.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-150	A	7/24/2021	20:32:26	-59.0	WTG-150-A-SPI.jpg	14.0	Biological	13.6	14.6	1.0	1.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-150	C	7/24/2021	20:43:53	-59.0	WTG-150-C-SPI.jpg	15.7	Biological	15.3	16.1	0.8	3.4	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-151	B	7/25/2021	1:09:09	-58.6	WTG-151-B-SPI.jpg	16.5	Biological	16.2	17.4	1.2	2.6	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-151	C	7/25/2021	1:15:14	-58.6	WTG-151-C-SPI.jpg	15.5	Physical	15.0	15.8	0.8	2.7	>4 phi	>4 phi	1 to 0 phi	Stage II
WTG-152	A	7/24/2021	18:50:39	-60.0	WTG-152-A-SPI.jpg	15.9	Biological	15.1	16.7	1.6	1.9	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-152	C	7/24/2021	19:00:41	-59.9	WTG-152-C-SPI.jpg	17.2	Biological	16.9	17.5	0.6	2.2	>4 phi	>4 phi	3 to 2 phi	Stage II
WTG-153	A	7/25/2021	4:25:41	-59.8	WTG-153-A-SPI.jpg	15.9	Biological	15.0	16.2	1.2	2.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-153	C	7/25/2021	4:36:35	-59.8	WTG-153-C-SPI.jpg	16.1	Biological	15.5	16.7	1.2	3.1	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-154	A	7/24/2021	23:24:08	-58.9	WTG-154-A-SPI.jpg	14.3	Physical	12.7	15.3	2.6	1.6	>4 phi	>4 phi	2 to 1 phi	Stage II on III
WTG-154	C	7/24/2021	23:34:36	-58.9	WTG-154-C-SPI.jpg	15.4	Physical	15.2	15.6	0.4	2.0	>4 phi	>4 phi	2 to 1 phi	Stage II
WTG-155	A	7/21/2021	21:41:30	-59.2	WTG-155-A-SPI.jpg	13.1	Biological	12.8	13.6	0.8	3.0	>4 phi	>4 phi	1 to 0 phi	Stage I on III
WTG-155	B	7/21/2021	21:46:21	-59.2	WTG-155-B-SPI.jpg	15.8	Biological	15.0	16.5	1.5	3.4	>4 phi	>4 phi	1 to 0 phi	Stage II on III
WTG-156	A	7/25/2021	2:47:19	-59.1	WTG-156-A-SPI.jpg	14.7	Physical	14.0	15.3	1.3	1.2	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-156	C	7/25/2021	2:57:46	-58.8	WTG-156-C-SPI.jpg	14.4	Physical	13.5	14.5	1.0	1.3	>4 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-157	A	7/21/2021	20:04:54	-60.9	WTG-157-A-SPI.jpg	16.0	Physical	15.9	16.7	0.8	4.8	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III
WTG-157	C	7/21/2021	20:14:36	-60.8	WTG-157-C-SPI.jpg	16.9	Physical	17.0	17.4	0.4	4.3	4 to 3 phi	>4 phi	2 to 1 phi	Stage I on III

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Fecal Pellet Type	Pit Mound Presence	Infauna Count	Low DO	Mudclast Count	Mudclast Mean Diameter (cm)	Mudclast Oxidation	CMECS Subclass	CMECS Group	CMECS Subgroup	OSI
WTG-142	D	cluster(s) of rounded pellets	none	0	No	7	0.26	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-143	A	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-143	C	none	none	0	No	1	1	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-144	B	none	none	0	No	8	0.72	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-144	C	cluster(s) of rounded pellets	none	1	No	1	0.16	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-145	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-145	C	none	none	2	No	2	0.9	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-146	A	cluster(s) of rounded pellets	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-146	B	cluster(s) of rounded pellets	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-147	A	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-147	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-148	A	loose biogenic aggregates	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-148	C	cluster(s) of rounded pellets	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-149	B	none	none	0	No	2	0.9	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-149	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-150	A	loose biogenic aggregates	none	1	No	2	0.49	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-150	C	loose biogenic aggregates	none	6	No	2	0.48	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-151	B	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-151	C	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-152	A	cluster(s) of rounded pellets	none	7	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-152	C	cluster(s) of rounded pellets	none	0	No	1	0.29	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
WTG-153	A	none	Yes	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-153	C	none	Yes	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-154	A	4	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	8
WTG-154	C	none	none	2	No	2	0.56	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	6
WTG-155	A	none	none	0	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	9
WTG-155	B	none	none	1	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	10
WTG-156	A	none	none	3	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-156	C	none	none	2	No	4	0.74	0	Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	7
WTG-157	A	none	none	2	No				Fine Unconsolidated Substrate	Sandy Mud	Sandy Mud	11
WTG-157	C	none	none	0	No				Fine Unconsolidated Substrate	Mud	Mud	11

Addendum C. SPI Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station	Rep.	Comments
WTG-142	D	tan f.sand and grey/tan silt/clay. Many surface tubes and biogenic mudclasts. Deep oxidized burrow, feeding voids.
WTG-143	A	Sandy mud. Large dark patches of reduced silt in center of profile. Some feeding voids and amphipod tubes
WTG-143	C	sandy mud, amphipod tubes on surface, mud clasts on surface. some reduced silt in profile.
WTG-144	B	tan f.sand and grey/tan silt/clay. 5 mm shell. Many mudclasts and surface tubes. Feeding voids at depth.
WTG-144	C	tan f.sand and tan/grey silt/clay. Many surface tubes and fecal pellet clusters. Bright orange burrow -> iron/methane? Polychaete and feeding void visible at depth.
WTG-145	A	Sandy mud. Amphipod tubes on surface. Dark reduced patches of silt lower in profile
WTG-145	C	Sandy mud. 3 polychaetes in the profile. Mud clasts on surface. Some mixing / turbidity above sediment.
WTG-146	A	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Many surface tubes and fecal pellet clusters. Possible seastar in background. Polychaetes and feeding voids at depth.
WTG-146	B	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Many surfacetubes and fecal pellet clusters. Polychaetes and feeding voids visible at depth.
WTG-147	A	Sandy Mud, multiple polychaetes in profile. Amphipod tubes on surface. Small feeding void top left in profile.
WTG-147	B	Sandy mud, amphipod tubes on surface. Small polychaete in profile. Some bioturbation at sediment-water interface
WTG-148	A	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Surface amphipod tubes and burrows. Polychaete and feeding void visible at depth.
WTG-148	C	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Surface mudclast and drag down. Deep oxidized burrows. Surface tubes and pit. Feeding void.
WTG-149	B	Sandy mud. Amphipod tubes and mud clasts on surface.
WTG-149	C	muddy sand. Relatively smooth profile. Some amphipod tubes on surface
WTG-150	A	tan f.sand above tan/grey silt/clay. Polychaete visible at depth.
WTG-150	C	tan f.sand with tan/grey silt/clay. Many polychaetes visible at depth. Surface amphipod tubes.
WTG-151	B	Sandy mud- about 50% mud. Amphipod tubes on surface. Bioturbation at top of profile. RPD hard to discern
WTG-151	C	Sandy mud. Some amphipod tubes on surface- but barely so unsure of roughness. Shallow RPD.
WTG-152	A	tan f.sand and tan/grey silt/clay. Surface amphipod tubes, infaunal brittle star(?), sand dollar(?), and polychaetes. Feeding voids
WTG-152	C	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Surface tubes and burrows.
WTG-153	A	Sandy Mud- shallow RPD. AMphipod tubes on surface. Bioturbation and some pitting on sediment surface as well.
WTG-153	C	Starfish infauna, seemingly drug into profile by camera. Drug down RPD as well. Amphipod tubes present on surface
WTG-154	A	tan f.sand and tan/grey silt/clay. Surface amphipod tubes, seastar, clusters of fecal pellets, and burrow leading to feeding void. Deep oxidized burrow. Polychaete visible.
WTG-154	C	tan f.sand with trace biogenic carbonate, tan/grey silt/clay. Surface mudclast and amphipod tubes. Polychaetes visible at depth. Minor surface burrows
WTG-155	A	Sandy mud. Amphipod tubes on surface. Darker reduced silt in lower hald of sediment profile
WTG-155	B	Sandy Mud, large amphipod tubes/ sticks on surface. Curved polychaete in profile.
WTG-156	A	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Shallow RPD. Surface tubes. Polychaetes visible at depth and feeding voids. Deep oxidized burrow.
WTG-156	C	tan f.sand with trace biogenic carbonate grains, tan/grey silt/clay. Surface mudclasts and amphipod tubes. Polychaetes and feeding voids at depth
WTG-157	A	Mostly mud with fine sands near sediment surface. Two polychates visible in profile image. Relatively deep RPD but no feeding voids.
WTG-157	C	Mostly mud with some fine sands on top. Amphipod tubes on surface of sediment. Fairly deep RPD but no feeding voids so stage 3. Some turbidity at interface.

ADDENDUM D | PV IMAGE ANALYSES RESULTS

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-001	B	IAC-001-B-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-001	C	IAC-001-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-002	B	IAC-002-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-002	C	IAC-002-C-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-003	A	IAC-003-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-003	B	IAC-003-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-004	A	IAC-004-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-004	B	IAC-004-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-005	A	IAC-005-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-005	B	IAC-005-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-006	A	IAC-006-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-006	B	IAC-006-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-007	B	IAC-007-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-007	C	IAC-007-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-008	A	IAC-008-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-008	C	IAC-008-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-009	A	IAC-009-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-009	B	IAC-009-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-010	A	IAC-010-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-010	D	IAC-010-D-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-011	A	IAC-011-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-011	B	IAC-011-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-012	B	IAC-012-B-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-012	C	IAC-012-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-013	A	IAC-013-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-013	B	IAC-013-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-014	A	IAC-014-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-014	C	IAC-014-C-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-015	A	IAC-015-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-015	C	IAC-015-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-016	B	IAC-016-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-016	C	IAC-016-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-017	B	IAC-017-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-017	C	IAC-017-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-018	A	IAC-018-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-018	B	IAC-018-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-019	B	IAC-019-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-019	C	IAC-019-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-020	A	IAC-020-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-020	C	IAC-020-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-021	B	IAC-021-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-021	C	IAC-021-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-022	A	IAC-022-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-022	B	IAC-022-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-023	A	IAC-023-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-001	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-001	C		2 shrimp, 2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-002	B		2 shrimp, 2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-002	C		burrowing ascidiacea? 2 shrimp, 4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-003	A		hydroid 8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-003	B		1 burrowing sea star (Astropecten?), 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-004	A				Inferred Fauna		0
IAC-004	B		1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-005	A				Inferred Fauna		0
IAC-005	B		5 burrowing sea stars (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-006	A		4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-006	B		2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-007	B		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-007	C		4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-008	A		3 shrimp, 2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-008	C		3 shrimp, 7 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-009	A		1 burrowing sea star, 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-009	B				Inferred Fauna		0
IAC-010	A		6 burrowing sea stars (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-010	D		10 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-011	A		hydroid		Inferred Fauna		0
IAC-011	B		2 burrowing sea stars (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-012	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-012	C		14 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-013	A	Ceriantharia	1 Ceriantharia 1 shrimp 1 fish		Soft Sediment Fauna	Inferred Fauna	0
IAC-013	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-014	A		5 burrowing sea stars (Astropecten?), 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-014	C		2 burrowing sea stars (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-015	A		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-015	C		2 burrowing sea stars (Astropecten?), 5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-016	B				Inferred Fauna		0
IAC-016	C				Inferred Fauna		0
IAC-017	B		6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-017	C		10 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-018	A		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-018	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-019	B	Ceriantharia	2 Ceriantharia 4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-019	C	Ceriantharia	2 Ceriantharia 1 shrimp 1 fish		Soft Sediment Fauna	Inferred Fauna	0
IAC-020	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-020	C		8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-021	B		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-021	C		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-022	A		9 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-022	B		7 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-023	A		1 burrowing sea star (Astropecten?), 2 shrimp 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-001	B	5	0	no			3 shrimp	
IAC-001	C	5	0	no			2 shrimp, 2 burrowing sea stars (Astropecten?)	
IAC-002	B	10	0	no			2 shrimp, 2 burrowing sea stars (Astropecten?)	
IAC-002	C	5	0	no	burrowing ascidiacea?		2 shrimp, 4 burrowing sea stars (Astropecten?)	
IAC-003	A	5	0	no		hydroid	8 shrimp	
IAC-003	B	10	0	no			1 burrowing sea star (Astropecten?), 1 shrimp	
IAC-004	A	10	0	no				
IAC-004	B	5	0	no			1 burrowing sea star (Astropecten?)	
IAC-005	A	10	0	no				
IAC-005	B	10	0	no			5 burrowing sea stars (Astropecten?)	
IAC-006	A	10	0	no			4 burrowing sea stars (Astropecten?)	
IAC-006	B	10	0	no			2 burrowing sea stars (Astropecten?)	
IAC-007	B	10	0	no			4 shrimp	
IAC-007	C	5	0	no			4 burrowing sea stars (Astropecten?)	
IAC-008	A	1	0	no			3 shrimp, 2 burrowing sea stars (Astropecten?)	
IAC-008	C	10	0	no			3 shrimp, 7 burrowing sea stars (Astropecten?)	
IAC-009	A	5	0	no			1 burrowing sea star, 1 shrimp	
IAC-009	B	5	0	no				
IAC-010	A	5	0	no			6 burrowing sea stars (Astropecten?), 2 shrimp	
IAC-010	D	5	0	no			10 burrowing sea stars (Astropecten?)	
IAC-011	A	1	0	no		hydroid		
IAC-011	B	5	0	no			2 burrowing sea stars (Astropecten?), 2 shrimp	
IAC-012	B	1	0	no			2 shrimp	
IAC-012	C	5	0	no			14 shrimp	
IAC-013	A	5	0	yes	1 Ceriantharia		1 shrimp	
IAC-013	B	10	0	no			3 shrimp	
IAC-014	A	5	0	no			5 burrowing sea stars (Astropecten?), 3 shrimp	
IAC-014	C	10	0	no			2 burrowing sea stars (Astropecten?), 2 shrimp	
IAC-015	A	5	0	no			5 shrimp	
IAC-015	C	5	0	no			2 burrowing sea stars (Astropecten?), 5 shrimp	
IAC-016	B	5	0	no				
IAC-016	C	1	0	no				
IAC-017	B	5	0	no			6 shrimp	
IAC-017	C	5	0	no			10 shrimp	
IAC-018	A	5	0	no			5 shrimp	
IAC-018	B	5	0	no			3 shrimp	
IAC-019	B	5	0	no	2 Ceriantharia		4 shrimp	
IAC-019	C	1	0	no	2 Ceriantharia		1 shrimp	
IAC-020	A	10	0	no			1 shrimp	
IAC-020	C	10	0	no			8 shrimp	
IAC-021	B	5	0	no			4 shrimp	
IAC-021	C	5	0	no			3 shrimp	
IAC-022	A	1	0	no			9 shrimp	
IAC-022	B	1	0	no			7 shrimp	
IAC-023	A	5	0	no			1 burrowing sea star (Astropecten?), 2 shrimp	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-001	B		amphipod tube clusters, small burrows, crab tracks
IAC-001	C		amphipod tube clusters, small burrows, crab tracks
IAC-002	B		amphipod tube clusters, small burrows
IAC-002	C		amphipod tube clusters, small burrows
IAC-003	A		some amphipod tube clusters, microbial mat, 2 large burrows, crab tracks
IAC-003	B		amphipod tube clusters, few burrows, faint crab tracks
IAC-004	A		amphipod tube clusters, crab tracks
IAC-004	B		amphipod tube clusters, few small burrows, microbial mat, crab tracks
IAC-005	A		amphipod tube clusters, crab tracks
IAC-005	B	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, crab tracks
IAC-006	A		amphipod tube clusters, small burrows
IAC-006	B		amphipod tube clusters, small burrows
IAC-007	B		amphipod tube clusters, small burrows
IAC-007	C		amphipod tube clusters, small burrows, crab tracks
IAC-008	A		large and small burrows, crab tracks
IAC-008	C		amphipod tube clusters, small burrows
IAC-009	A		amphipod tube clusters, large and small burrows, crab tracks
IAC-009	B		amphipod tube clusters, small burrows, crab tracks
IAC-010	A		amphipod tube clusters, small burrows
IAC-010	D		few amphipod tube clusters, small burrows, worm castings
IAC-011	A		few amphipod tube clusters, few larger burrows, abundant Ampeliscid burrows
IAC-011	B		amphipod tube clusters, few larger burrows, abundant Ampeliscid burrows
IAC-012	B		few amphipod tube clusters, crab tracks
IAC-012	C		amphipod tube clusters, small burrows, crab tracks
IAC-013	A	1 fish	amphipod tube clusters, small burrows, crab tracks, 1 gastropod egg case
IAC-013	B		amphipod tube clusters, small burrows, crab tracks
IAC-014	A		amphipod tube clusters, small burrows, crab tracks
IAC-014	C		amphipod tube clusters, large and small burrows, crab tracks
IAC-015	A		amphipod tube clusters, small burrows, crab tracks, large patch of Ampeliscid burrows
IAC-015	C		amphipod tube clusters, small burrows, faint crab tracks, gastropod tracks
IAC-016	B		amphipod tube clusters, small burrows, crab tracks, dark photo
IAC-016	C		amphipod tube clusters, small burrows (at least one down to reduced sediment), crab tracks, large burrow/feeding void, dark photo
IAC-017	B		amphipod tube clusters, small burrows, faint crab tracks
IAC-017	C		amphipod tube clusters, small burrows, faint crab tracks
IAC-018	A		amphipod tube clusters, small burrows (at least one down to reduced sediment), crab tracks
IAC-018	B		amphipod tube clusters, small burrows (at least one down to reduced sediment), crab tracks
IAC-019	B		amphipod tube clusters, crab tracks
IAC-019	C	1 fish	few amphipod tube clusters, 2 large burrows, faint crab tracks
IAC-020	A		amphipod tube clusters, small burrows, faint tracks
IAC-020	C		amphipod tube clusters, small burrows, faint tracks
IAC-021	B		few amphipod tube clusters, small burrows, faint crab tracks
IAC-021	C		few amphipod tube clusters, small burrows
IAC-022	A		few amphipod tube clusters, small burrows, faint tracks
IAC-022	B		few amphipod tube clusters, small burrows, faint tracks
IAC-023	A	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, small burrows

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-023	B	IAC-023-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-024	A	IAC-024-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-024	B	IAC-024-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-025	A	IAC-025-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-025	C	IAC-025-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-026	B	IAC-026-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-026	C	IAC-026-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-027	A	IAC-027-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-027	C	IAC-027-C-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
IAC-028	B	IAC-028-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-028	C	IAC-028-C-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-029	A	IAC-029-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-029	B	IAC-029-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-030	A	IAC-030-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-030	C	IAC-030-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-031	A	IAC-031-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-031	C	IAC-031-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-032	B	IAC-032-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-032	C	IAC-032-C-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-033	A	IAC-033-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-033	B	IAC-033-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-033	A	IAC-033-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-033	B	IAC-033-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-034	A	IAC-034-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-034	C	IAC-034-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-035	A	IAC-035-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-035	C	IAC-035-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-036	A	IAC-036-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-036	B	IAC-036-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-037	A	IAC-037-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-037	C	IAC-037-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-038	A	IAC-038-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-038	B	IAC-038-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-039	B	IAC-039-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-039	C	IAC-039-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-040	A	IAC-040-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-040	B	IAC-040-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-041	A	IAC-041-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-041	C	IAC-041-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-042	A	IAC-042-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-042	B	IAC-042-B-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-043	A	IAC-043-A-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-043	B	IAC-043-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-044	A	IAC-044-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-044	B	IAC-044-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-045	A	IAC-045-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-045	C	IAC-045-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-023	B		3 burrowing sea stars (Astropecten?), 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-024	A		4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-024	B		2 burrowing sea stars (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-025	A		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-025	C		11 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-026	B		3 shrimp (Crangon septemspinosa?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-026	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-027	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-027	C		6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-028	B	large bivalves	2 large bivalves, 1 smaller bivalve 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-028	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-029	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-029	B				Inferred Fauna		0
IAC-030	A	Ceriantharia	2 Ceriantharia		Soft Sediment Fauna	Inferred Fauna	0
IAC-030	C		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-031	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-031	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-032	B				Inferred Fauna		0
IAC-032	C		2 shrimp 1 Lophius americanus		Soft Sediment Fauna	Inferred Fauna	0
IAC-033	A	Ceriantharia	2 Ceriantharia 12 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-033	B	Ceriantharia	2 Ceriantharia 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-034	A		2 shrimp 2 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-034	C	Ceriantharia	4 Ceriantharia 12 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-035	A	Ceriantharia	1 Ceriantharia		Soft Sediment Fauna	Inferred Fauna	0
IAC-035	C	Ceriantharia	2 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-036	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-036	B		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-037	A		8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-037	C		9 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-038	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-038	B				Inferred Fauna		0
IAC-039	B		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-039	C				Inferred Fauna		0
IAC-040	A		8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-040	B		hydroids 5 shrimp, 1 small crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-041	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-041	C				Inferred Fauna		0
IAC-042	A		hydroids 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-042	B				Inferred Fauna		0
IAC-043	A		3 shrimp		soft Sediment Fauna	Inferred Fauna	0
IAC-043	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-044	A	burrowing anemo	1 burrowing anemone 8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-044	B		5 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-045	A	Ceriantharia	2 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-045	C	Ceriantharia	1 Ceriantharia 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-023	B	15	0	no			3 burrowing sea stars (Astropecten?), 3 shrimp	
IAC-024	A	1	0	no			4 burrowing sea stars (Astropecten?)	
IAC-024	B	5	0	no			2 burrowing sea stars (Astropecten?), 2 shrimp	
IAC-025	A	5	0	no			5 shrimp	
IAC-025	C	5	0	no			11 shrimp	
IAC-026	B	30	0	no			3 shrimp (Crangon septemspinosa?)	
IAC-026	C	1	0	no			1 shrimp	
IAC-027	A	3	0	no			1 shrimp	
IAC-027	C	5	0	no			6 shrimp	
IAC-028	B	5	0	no	2 large bivalves, 1 smaller bivalve		2 shrimp	
IAC-028	C	5	0	no			1 shrimp	
IAC-029	A	0	0	no			1 shrimp	
IAC-029	B	1	0	no				
IAC-030	A	0	0	no	2 Ceriantharia			
IAC-030	C	0	0	no			2 shrimp	
IAC-031	A	0	0	no			1 shrimp	
IAC-031	C	0	0	no			1 shrimp	
IAC-032	B	0	0	no				
IAC-032	C	1	0	no			2 shrimp	
IAC-033	A	0	0	yes	2 Ceriantharia		12 shrimp	
IAC-033	B	1	0	no	2 Ceriantharia			
IAC-034	A	0	0	no			2 shrimp	
IAC-034	C	0	0	no	4 Ceriantharia		12 shrimp	
IAC-035	A	0	0	no	1 Ceriantharia			
IAC-035	C	0	0	no	2 Ceriantharia		2 shrimp	
IAC-036	A	0	0	no			1 shrimp	
IAC-036	B	0	0	no			5 shrimp	
IAC-037	A	0	0	no			8 shrimp	
IAC-037	C	0	0	no			9 shrimp	
IAC-038	A	1	0	no			2 shrimp	
IAC-038	B	0	0	no				
IAC-039	B	1	0	no			4 shrimp	
IAC-039	C	1	0	no				
IAC-040	A	5	0	no			8 shrimp	
IAC-040	B	1	0	yes		hydroids	5 shrimp, 1 small crab	
IAC-041	A	1	0	no			2 shrimp	
IAC-041	C	0	0	no				
IAC-042	A	1	0	yes		hydroids	1 shrimp	
IAC-042	B	5	0	no				
IAC-043	A	5	0	no			3 shrimp	
IAC-043	B	1	0	no			2 shrimp	
IAC-044	A	0	0	no	1 burrowing anemone		8 shrimp	
IAC-044	B	0	0	no			5 shrimp, 1 sea slug	
IAC-045	A	0	0	no	2 Ceriantharia		2 shrimp	
IAC-045	C	0	0	no	1 Ceriantharia		3 shrimp	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-023	B		amphipod tube clusters, small burrows, crab tracks
IAC-024	A		few amphipod tube clusters, large and small burrows, crab tracks, burrowing sea star trace
IAC-024	B		amphipod tube clusters, small burrows,
IAC-025	A		amphipod tube clusters, small burrows,
IAC-025	C		amphipod tube clusters, small burrows, one very large burrow/feeding void
IAC-026	B		amphipod tube clusters, small burrows, crab and gastropod tracks
IAC-026	C		few amphipod tube clusters, small burrows, one very large hole/feeding void?, crab tracks
IAC-027	A		few amphipod tube clusters, large and small burrows, faint tracks
IAC-027	C		amphipod tube clusters, small burrows, faint tracks
IAC-028	B		amphipod tube clusters, small burrows, faint crab tracks
IAC-028	C		amphipod tube clusters, small burrows, faint crab tracks
IAC-029	A		one amphipod tube cluster, numerous crab tracks
IAC-029	B		few amphipod tube clusters, numerous crab tracks
IAC-030	A		few large burrows, one very large hole/feeding void, crab tracks
IAC-030	C		few large burrows, small burrows, one very large hole/feeding void, crab tracks
IAC-031	A		2 amphipod tube clusters, few large burrows, numerous crab tracks
IAC-031	C		few large burrows, numerous crab tracks
IAC-032	B		few amphipod tube clusters, few large burrows, numerous crab tracks
IAC-032	C	1 Lophius americanus	few amphipod tube clusters, few large burrows, faint crab tracks, 1 tellinid trace
IAC-033	A		few large burrows, abundant faint crab tracks, 1 gastopod egg case
IAC-033	B	1 Pleuronectidae (Paralichthys dentatus?)	few amphipod tube clusters, few large burrows, abundant crab tracks
IAC-034	A	2 Pleuronectidae (Paralichthys dentatus?)	few amphipod tube clusters, few large burrows, abundant crab tracks
IAC-034	C		few amphipod tube clusters, few large burrows, abundant crab tracks
IAC-035	A		few amphipod tube clusters, few large burrows, crab tracks
IAC-035	C		few amphipod tube clusters, few large burrows, crab tracks
IAC-036	A		few amphipod tube clusters, few large burrows, crab tracks, 1 large hole/feeding void
IAC-036	B		few amphipod tube clusters, few large burrows, crab tracks
IAC-037	A		few amphipod tube clusters, few large burrows, crab tracks
IAC-037	C		few large burrows, crab tracks
IAC-038	A		few amphipod tube clusters, few large burrows (1 down to reduced sediment), crab tracks
IAC-038	B		few large burrows, crab tracks
IAC-039	B		few amphipod tube clusters, few large burrows, crab tracks
IAC-039	C		few amphipod tube clusters, few large burrows, crab tracks
IAC-040	A		few amphipod tube clusters, few large burrows, faint crab tracks
IAC-040	B		few large burrows, crab tracks, 5 gastropod egg cases
IAC-041	A		few amphipod tube clusters, faint crab tracks
IAC-041	C		few large and small burrows, faint crab tracks
IAC-042	A		few amphipod tube clusters, large and small burrows, 1 gastropod (?) egg case
IAC-042	B		amphipod tube clusters, small burrows, crab tracks
IAC-043	A		amphipod tube clusters, large and small burrows
IAC-043	B		amphipod tube clusters, small burrows, crab tracks
IAC-044	A		large and small burrows, crab tracks
IAC-044	B		large and small burrows, faint crab tracks
IAC-045	A		large and small burrows, faint crab tracks
IAC-045	C		large and small burrows, crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-046	A	IAC-046-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-046	B	IAC-046-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-047	A	IAC-047-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-047	B	IAC-047-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-048	A	IAC-048-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-048	C	IAC-048-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-049	B	IAC-049-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-049	C	IAC-049-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-050	A	IAC-050-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-050	B	IAC-050-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-051	A	IAC-051-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-051	C	IAC-051-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-052	A	IAC-052-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-052	B	IAC-052-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-053	A	IAC-053-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-053	B	IAC-053-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-054	A	IAC-054-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-054	B	IAC-054-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-055	A	IAC-055-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-055	B	IAC-055-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-056	A	IAC-056-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-056	B	IAC-056-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-057	A	IAC-057-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-057	C	IAC-057-C-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-058	A	IAC-058-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-058	C	IAC-058-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-059	A	IAC-059-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-059	C	IAC-059-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-060	A	IAC-060-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-060	B	IAC-060-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-061	B	IAC-061-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-061	C	IAC-061-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-062	A	IAC-062-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-062	B	IAC-062-B-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-063	A	IAC-063-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-063	B	IAC-063-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-064	A	IAC-064-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-064	B	IAC-064-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-065	A	IAC-065-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-065	B	IAC-065-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-066	A	IAC-066-A-PV.jpg	0.61	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-066	B	IAC-066-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-067	A	IAC-067-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-067	C	IAC-067-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-068	A	IAC-068-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-046	A	Ceriantharia	4 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-046	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-047	A	Ceriantharia	2 Ceriantharia 7 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-047	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-048	A		hydroid 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-048	C		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-049	B		1 Cancer irroratus		Soft Sediment Fauna	Inferred Fauna	0
IAC-049	C		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-050	A		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-050	B		7 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-051	A		10 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-051	C		9 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-052	A		8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-052	B		7 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-053	A		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-053	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-054	A				Inferred Fauna		0
IAC-054	B		1 hydroid 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-055	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-055	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-056	A		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-056	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-057	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-057	C	Ceriantharia	1 Ceriantharia 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-058	A	burrowing anemo	1 burrowing anemone 4 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-058	C		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-059	A		1 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-059	C		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-060	A		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-060	B		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-061	B		2 shrimp, 1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-061	C		1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-062	A		1 shrimp, 1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-062	B		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-063	A				Inferred Fauna		0
IAC-063	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-064	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-064	B				Inferred Fauna		0
IAC-065	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-065	B		1 shrimp, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-066	A		1 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-066	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-067	A		1 Tritia trivittata, 4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-067	C		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-068	A		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-046	A	0	0	no	4 Ceriantharia		2 shrimp	
IAC-046	B	<1	0	no			1 shrimp	
IAC-047	A	0	0	no	2 Ceriantharia		7 shrimp	
IAC-047	B	0	0	no			1 shrimp	
IAC-048	A	7	0	no		hydroid	3 shrimp	
IAC-048	C	2	0	no			3 shrimp	
IAC-049	B	5	0	no			1 Cancer irroratus	
IAC-049	C	10	0	no			2 shrimp	
IAC-050	A	15	0	no			3 shrimp	
IAC-050	B	20	0	no			7 shrimp	
IAC-051	A	5	0	no			10 shrimp	
IAC-051	C	3	0	no			9 shrimp	
IAC-052	A	2	0	no			8 shrimp	
IAC-052	B	10	0	no			7 shrimp	
IAC-053	A	5	0	no			3 shrimp	
IAC-053	B	5	0	no			3 shrimp	
IAC-054	A	1	0	no				
IAC-054	B	1	0	no		1 hydroid	2 shrimp	
IAC-055	A	1	0	no			1 shrimp	
IAC-055	B	1	0	no			3 shrimp	
IAC-056	A	5	0	no			3 shrimp	
IAC-056	B	5	0	no			1 shrimp	
IAC-057	A	5	0	no			2 shrimp	
IAC-057	C	1	0	no	1 Ceriantharia		3 shrimp	
IAC-058	A	10	0	no	1 burrowing anemone		4 shrimp, 1 sea slug	
IAC-058	C	5	0	no			4 shrimp	
IAC-059	A	5	0	no			1 shrimp, 1 sea slug	
IAC-059	C	1	0	no			4 shrimp	
IAC-060	A	5	0	no			5 shrimp	
IAC-060	B	1	0	no			4 shrimp	
IAC-061	B	1	0	no			2 shrimp, 1 Tritia trivittata	
IAC-061	C	<1	0	no			1 Tritia trivittata	
IAC-062	A	<1	0	no			1 shrimp, 1 Tritia trivittata	
IAC-062	B	0	0	no			1 Paguroidea	
IAC-063	A	0	0	no				
IAC-063	B	10	0	no			1 shrimp	
IAC-064	A	5	0	yes			1 shrimp	
IAC-064	B	5	0	no				
IAC-065	A	1	0	yes			1 shrimp	
IAC-065	B	1	0	no			1 shrimp, 1 paguroidea	
IAC-066	A	<1	0	no			1 shrimp, 1 sea slug	
IAC-066	B	<1	0	no			2 shrimp	
IAC-067	A	1	0	no			1 Tritia trivittata, 4 shrimp	
IAC-067	C	0	0	no			3 shrimp	
IAC-068	A	1	0	no			1 Paguroidea	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-046	A		large and small burrows, faint crab tracks
IAC-046	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-047	A		large and small burrows, faint crab tracks, one large hole/feeding void
IAC-047	B		large and small burrows, faint crab tracks
IAC-048	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-048	C		few amphipod tube clusters, large and small burrows, faint tracks, one very large burrow
IAC-049	B		amphipod tube clusters, large and small burrows, crab tracks
IAC-049	C		amphipod tube clusters, large and small burrows, faint tracks
IAC-050	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-050	B		amphipod tube clusters, large and small burrows, faint tracks
IAC-051	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-051	C		amphipod tube clusters, large and small burrows, faint tracks
IAC-052	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-052	B		amphipod tube clusters, large and small burrows, faint tracks
IAC-053	A		amphipod tube clusters, small burrows, faint crab tracks
IAC-053	B		amphipod tube clusters, small burrows, faint crab tracks
IAC-054	A		few amphipod tube clusters, large and small burrows, numerous crab tracks
IAC-054	B		few amphipod tube clusters, large and small burrows, numerous crab tracks
IAC-055	A		few amphipod tube clusters, small burrows, numerous crab tracks
IAC-055	B		few amphipod tube clusters, large and small burrows, numerous crab tracks
IAC-056	A		amphipod tube clusters, small burrows, numerous crab tracks
IAC-056	B		amphipod tube clusters, small burrows, crab tracks
IAC-057	A		amphipod tube clusters, small burrows, crab tracks
IAC-057	C		few amphipod tube clusters, small burrows, faint tracks
IAC-058	A		amphipod tube clusters, small burrows, faint tracks
IAC-058	C		amphipod tube clusters, large and small burrows, faint tracks
IAC-059	A		amphipod tube clusters, large and small burrows, crab tracks
IAC-059	C		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-060	A		amphipod tube clusters, large and small burrows
IAC-060	B		amphipod tube clusters, large and small burrows
IAC-061	B		few amphipod tube clusters, small burrows, crab and gastropod tracks
IAC-061	C		few amphipod tube clusters, large and small burrows, crab and gastropod tracks
IAC-062	A		few amphipod tube clusters, large and small burrows, crab and gastropod tracks
IAC-062	B		large and small burrows, faint crab and gastropod tracks
IAC-063	A		few amphipod tube clusters, small burrows, faint crab tracks
IAC-063	B		amphipod tube clusters, small burrows
IAC-064	A		amphipod tube clusters, large and small burrows, faint crab tracks, one Naticid egg case
IAC-064	B		amphipod tube clusters, large and small burrows
IAC-065	A		amphipod tube clusters, microbial mat, small burrows, 2 gastropod egg cases
IAC-065	B		few amphipod tube clusters, microbial mat, small burrows, faint crab tracks
IAC-066	A		few amphipod tube clusters, microbial mat, small burrows, crab tracks
IAC-066	B		few amphipod tube clusters, small burrows, faint crab tracks
IAC-067	A		amphipod tube clusters, large and small burrows, crab and gastropod tracks
IAC-067	C		large and small burrows, crab and gastropod tracks
IAC-068	A		few amphipod tube clusters, large and small burrows, faint crab and gastropod tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-068	B	IAC-068-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-069	A	IAC-069-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-069	C	IAC-069-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-070	A	IAC-070-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-070	B	IAC-070-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-071	A	IAC-071-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-071	B	IAC-071-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-072	A	IAC-072-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-072	C	IAC-072-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-073	A	IAC-073-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-073	B	IAC-073-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-074	A	IAC-074-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-074	C	IAC-074-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-075	B	IAC-075-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-075	C	IAC-075-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-076	B	IAC-076-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-076	C	IAC-076-C-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-077	A	IAC-077-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-077	B	IAC-077-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-078	A	IAC-078-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-078	B	IAC-078-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-078	A	IAC-078-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-078	B	IAC-078-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-079	A	IAC-079-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-079	B	IAC-079-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-080	A	IAC-080-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-080	B	IAC-080-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-081	B	IAC-081-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-081	C	IAC-081-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-082	A	IAC-082-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-082	C	IAC-082-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-083	A	IAC-083-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-083	B	IAC-083-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-084	A	IAC-084-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-084	B	IAC-084-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-085	A	IAC-085-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-085	C	IAC-085-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-086	A	IAC-086-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-086	B	IAC-086-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-087	B	IAC-087-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-087	C	IAC-087-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-088	A	IAC-088-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-088	B	IAC-088-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-089	A	IAC-089-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-089	C	IAC-089-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-090	A	IAC-090-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-090	B	IAC-090-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-068	B				Inferred Fauna		0
IAC-069	A	Ceriantharia	1 Ceriantharia		Soft Sediment Fauna	Inferred Fauna	0
IAC-069	C				Inferred Fauna		0
IAC-070	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-070	B				Inferred Fauna		0
IAC-071	A		9 Shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-071	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-072	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-072	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-073	A				Inferred Fauna		0
IAC-073	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-074	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-074	C				Inferred Fauna		0
IAC-075	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-075	C		hydroids		Soft Sediment Fauna	Inferred Fauna	0
IAC-076	B				Inferred Fauna		0
IAC-076	C		3 shrimp, 1 Cancer borealis 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-077	A				Inferred Fauna		0
IAC-077	B		1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-078	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-078	B		1 shrimp, 1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-078	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-078	B		1 shrimp, 1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-079	A				Inferred Fauna		0
IAC-079	B		hydroids 1 shrimp, 1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-080	A		1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-080	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-081	B		hydroids 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-081	C		1 Cancer sp		Soft Sediment Fauna	Inferred Fauna	0
IAC-082	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-082	C		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-083	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-083	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-084	A		1 shrimp, 2 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-084	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-085	A				Inferred Fauna		0
IAC-085	C				Inferred Fauna		0
IAC-086	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-086	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-087	B		1 Cancer borealis		Soft Sediment Fauna	Inferred Fauna	0
IAC-087	C				Inferred Fauna		0
IAC-088	A				Inferred Fauna		0
IAC-088	B		1 crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-089	A	squid eggs	hydroids		Soft Sediment Fauna	Inferred Fauna	0
IAC-089	C				Inferred Fauna		0
IAC-090	A				Inferred Fauna		0
IAC-090	B				Inferred Fauna		0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-068	B	0	0	no				
IAC-069	A	0	0	no	1 Ceriantharia			
IAC-069	C	1	0	no				
IAC-070	A	1	0	no			2 shrimp	
IAC-070	B	1	0	no				
IAC-071	A	0	0	no			9 Shrimp	
IAC-071	B	0	0	no			1 shrimp	
IAC-072	A	0	0	no			1 shrimp	
IAC-072	C	0	0	no			1 shrimp	
IAC-073	A	5	0	no				
IAC-073	B	40	0	no			2 shrimp	
IAC-074	A	1	0	no			1 shrimp	
IAC-074	C	1	0	no				
IAC-075	B	5	0	no			1 shrimp	
IAC-075	C	1	0	no		hydroids		
IAC-076	B	5	0	no				
IAC-076	C	10	0	no			3 shrimp, 1 Cancer borealis	
IAC-077	A	20	0	no				
IAC-077	B	15	0	no			1 sea slug	
IAC-078	A	15	0	no			1 shrimp	
IAC-078	B	1	0	no			1 shrimp, 1 Tritia trivittata	
IAC-079	A	10	0	no				
IAC-079	B	5	0	no		hydroids	1 shrimp, 1 Tritia trivittata	
IAC-080	A	10	0	no				
IAC-080	B	5	0	no			2 shrimp	
IAC-081	B	1	0	no		hydroids	1 shrimp	
IAC-081	C	1	0	no			1 Cancer sp	
IAC-082	A	5	0	no			2 shrimp	
IAC-082	C	1	0	no			3 shrimp	
IAC-083	A	1	0	no			1 shrimp	
IAC-083	B	1	0	no			2 shrimp	
IAC-084	A	5	0	no			1 shrimp, 2 Tritia trivittata	
IAC-084	B	1	0	no			2 shrimp	
IAC-085	A	1	0	no				
IAC-085	C	5	0	no				
IAC-086	A	5	0	no			2 shrimp	
IAC-086	B	5	0	no			3 shrimp	
IAC-087	B	10	0	no			1 Cancer borealis	
IAC-087	C	30	0	no				
IAC-088	A	20	0	no				
IAC-088	B	20	0	no			1 crab	
IAC-089	A	1	0	yes		hydroids		
IAC-089	C	15	0	no				
IAC-090	A	10	0	no				
IAC-090	B	5	0	no				

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-068	B		large and small burrows
IAC-069	A		large and small burrows, crab tracks, castings
IAC-069	C		few amphipod tube clusters, large and small burrows
IAC-070	A		few amphipod tube clusters, large and small burrows, some light/focus issues
IAC-070	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-071	A		Large Burrows, crab and gastropod tracks
IAC-071	B		Large and small burrows, crab and gastropod tracks
IAC-072	A		Large and small burrows, crab tracks
IAC-072	C		Large and small burrows (one large burrow with reduced sediment), crab tracks
IAC-073	A		amphipod tube clusters, numerous small burrows, faint crab and gastropod tracks
IAC-073	B		numerous amphipod tube clusters, large and small burrows
IAC-074	A		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-074	C		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-075	B		amphipod tube clusters, small burrows, faint crab tracks
IAC-075	C		few amphipod tube clusters, small burrows, faint crab tracks, light/focus issues
IAC-076	B		amphipod tube clusters, small burrows, faint crab tracks
IAC-076	C	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, large and small burrows, crab tracks
IAC-077	A		amphipod tube clusters, large and small burrows, gastropod tracks
IAC-077	B		amphipod tube clusters, large and small burrows (one large burrow with reduced sediment), crab tracks
IAC-078	A		amphipod tube clusters, large and small burrows, crab tracks
IAC-078	B		few amphipod tube clusters, small burrows
IAC-078	A		amphipod tube clusters, large and small burrows, crab tracks
IAC-078	B		few amphipod tube clusters, small burrows
IAC-079	A		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-079	B		amphipod tube clusters, small burrows, faint tracks
IAC-080	A	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, small burrows, faint tracks
IAC-080	B		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-081	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-081	C		few amphipod tube clusters, large and small burrows, faint crab tracks, focus issues
IAC-082	A		few amphipod tube clusters, large and small burrows, faint crab tracks, focus issues
IAC-082	C		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-083	A		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-083	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-084	A		amphipod tube clusters, large and small burrows, gastropod and crab tracks
IAC-084	B		few amphipod tube clusters, large and small burrows, gastropod tracks
IAC-085	A		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-085	C		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-086	A		amphipod tube clusters, large and small burrows
IAC-086	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-087	B		amphipod tube clusters, large and small burrows
IAC-087	C		amphipod tube clusters, large and small burrows
IAC-088	A		amphipod tube clusters, large and small burrows
IAC-088	B		amphipod tube clusters, large and small burrows
IAC-089	A		large and small burrows, crab tracks, 7 squid egg cases
IAC-089	C		amphipod tube clusters, large (one with reduced sediment) and small burrows
IAC-090	A		amphipod tube clusters, large and small burrows
IAC-090	B		amphipod tube clusters, small burrows, crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-091	A	IAC-091-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-091	B	IAC-091-B-PV.jpg	0.35	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-092	A	IAC-092-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-092	B	IAC-092-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-093	A	IAC-093-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-093	B	IAC-093-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-094	B	IAC-094-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-094	C	IAC-094-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-095	A	IAC-095-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-095	C	IAC-095-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-096	A	IAC-096-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-096	C	IAC-096-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-097	A	IAC-097-A-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-097	B	IAC-097-B-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-098	A	IAC-098-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-098	C	IAC-098-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-099	A	IAC-099-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-099	B	IAC-099-B-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-100	A	IAC-100-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-100	B	IAC-100-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-101	A	IAC-101-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-101	B	IAC-101-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-102	A	IAC-102-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-102	B	IAC-102-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-103	A	IAC-103-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-103	B	IAC-103-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-104	A	IAC-104-A-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-104	C	IAC-104-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-105	A	IAC-105-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-105	B	IAC-105-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-106	A	IAC-106-A-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-106	C	IAC-106-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-107	B	IAC-107-B-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-107	C	IAC-107-C-PV.jpg	0.35	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
IAC-108	A	IAC-108-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
IAC-108	F	IAC-108-F-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
IAC-109	A	IAC-109-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-109	B	IAC-109-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-110	B	IAC-110-B-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-110	C	IAC-110-C-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-111	A	IAC-111-A-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-111	B	IAC-111-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-112	B	IAC-112-B-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-112	C	IAC-112-C-PV.jpg	0.41	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-113	A	IAC-113-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-091	A				Inferred Fauna		0
IAC-091	B				Inferred Fauna		0
IAC-092	A				Inferred Fauna		0
IAC-092	B				Inferred Fauna		0
IAC-093	A		1 Cancer irroratus		Soft Sediment Fauna	Inferred Fauna	0
IAC-093	B				Inferred Fauna		0
IAC-094	B				Inferred Fauna		0
IAC-094	C		1 skate (Raja sp.)		Soft Sediment Fauna	Inferred Fauna	0
IAC-095	A				Inferred Fauna		0
IAC-095	C				Inferred Fauna		0
IAC-096	A				Inferred Fauna		0
IAC-096	C				Inferred Fauna		0
IAC-097	A		hydroids 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-097	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-098	A				Inferred Fauna		0
IAC-098	C		1 Cancer irroratus 1 fish		Soft Sediment Fauna	Inferred Fauna	0
IAC-099	A				Inferred Fauna		0
IAC-099	B				Inferred Fauna		0
IAC-100	A		8 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-100	B		6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-101	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-101	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-102	A		4 paguroidea, 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-102	B		2 shrimp, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-103	A				Inferred Fauna		0
IAC-103	B		5 shrimp, 1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-104	A		6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-104	C		1 paguroidea, 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-105	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-105	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-106	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-106	C		1 shrimp, 1 Cancer sp.		Soft Sediment Fauna	Inferred Fauna	0
IAC-107	B		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-107	C		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-108	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-108	F		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-109	A		1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
IAC-109	B				Inferred Fauna		0
IAC-110	B				Inferred Fauna		0
IAC-110	C				Inferred Fauna		0
IAC-111	A				Inferred Fauna		0
IAC-111	B	Bivalves	30+ Bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-112	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-112	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-113	A				Inferred Fauna		0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-091	A	1	0	no				
IAC-091	B	5	0	no				
IAC-092	A	10	0	no				
IAC-092	B	5	0	no				
IAC-093	A	5	0	no			1 Cancer irroratus	
IAC-093	B	15	0	no				
IAC-094	B	1	0	no				
IAC-094	C	5	0	no				
IAC-095	A	1	0	no				
IAC-095	C	1	0	no				
IAC-096	A	<1	0	no				
IAC-096	C	1	0	no				
IAC-097	A	5	0	yes		hydroids	1 shrimp	
IAC-097	B	<1	0	no			1 shrimp	
IAC-098	A	<1	0	no				
IAC-098	C	0	0	no			1 Cancer irroratus	
IAC-099	A	0	0	no				
IAC-099	B	0	0	no				
IAC-100	A	1	0	no			8 shrimp	
IAC-100	B	1	0	no			6 shrimp	
IAC-101	A	1	0	no			2 shrimp	
IAC-101	B	3	0	no			1 paguroidea	
IAC-102	A	1	0	no			4 paguroidea, 2 shrimp	
IAC-102	B	3	0	no			2 shrimp, 1 paguroidea	
IAC-103	A	0	0	no				
IAC-103	B	0	0	no			5 shrimp, 1 Tritia trivittata	
IAC-104	A	1	0	no			6 shrimp	
IAC-104	C	1	0	no			1 paguroidea, 1 shrimp	
IAC-105	A	1	0	no			1 paguroidea	
IAC-105	B	1	0	no			2 shrimp	
IAC-106	A	10	0	no			1 paguroidea	
IAC-106	C	5	0	no			1 shrimp, 1 Cancer sp.	
IAC-107	B	1	0	no			5 shrimp	
IAC-107	C	<1	0	no			3 shrimp	
IAC-108	A	0	0	no			1 paguroidea	
IAC-108	F	<1	0	no			5 shrimp	
IAC-109	A	10	0	no				
IAC-109	B	10	0	no				
IAC-110	B	15	0	no				
IAC-110	C	5	0	no				
IAC-111	A	5	0	no				
IAC-111	B	0	0	no	30+ Bivalves			
IAC-112	B	3	0	no			3 shrimp	
IAC-112	C	10	0	no			1 shrimp	
IAC-113	A	5	0	no				

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-091	A		amphipod tube clusters, large and small burrows
IAC-091	B		amphipod tube clusters, large and small burrows
IAC-092	A		amphipod tube clusters, large and small burrows
IAC-092	B		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-093	A		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-093	B		amphipod tube clusters, large and small burrows, crab tracks
IAC-094	B		few amphipod tube clusters, large and small burrows, one very large hole/feeding void, faint tracks
IAC-094	C	1 skate (Raja sp.)	amphipod tube clusters, small burrows
IAC-095	A		few amphipod tube clusters, large and small burrows
IAC-095	C		few amphipod tube clusters, large and small burrows, faint tracks
IAC-096	A		few amphipod tube clusters, large and small burrows, faint tracks
IAC-096	C		few amphipod tube clusters, large and small burrows, faint tracks
IAC-097	A		amphipod tube clusters, large and small burrows, faint tracks, two gastropod egg cases
IAC-097	B		few amphipod tube clusters, small burrows, faint tracks
IAC-098	A		sparse amphipod tube clusters, large and small burrows, abundant crab tracks
IAC-098	C	1 fish	large and small burrows, abundant crab tracks
IAC-099	A		large and small burrows, abundant crab tracks
IAC-099	B		large and small burrows, abundant faint tracks
IAC-100	A		few amphipod tube clusters, large and small burrows, faint tracks
IAC-100	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-101	A		few amphipod tube clusters, large and small burrows, crab tracks
IAC-101	B		few amphipod tube clusters, large and small burrows, crab tracks
IAC-102	A		few amphipod tube clusters, large and small burrows, crab tracks, dead/molt crab carapace
IAC-102	B		few amphipod tube clusters, large and small burrows, crab tracks
IAC-103	A		very few amphipod tubes, large and small burrows, abundant crab tracks
IAC-103	B		very few amphipod tubes, small burrows, abundant faint crab tracks
IAC-104	A		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-104	C		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-105	A		few amphipod tube clusters, large and small burrows, faint crab and gastropod tracks
IAC-105	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-106	A		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-106	C		amphipod tube clusters, large and small burrows, faint crab tracks
IAC-107	B		few amphipod tube clusters, small burrows
IAC-107	C		very few amphipod tubes, small burrows, crab tracks
IAC-108	A		large and small burrows, crab tracks
IAC-108	F		few amphipod tube clusters, large and small burrows
IAC-109	A	1 Triglidae	amphipod tube clusters, large and small burrows
IAC-109	B		amphipod tube clusters, large and small burrows
IAC-110	B		amphipod tube clusters, large and small burrows
IAC-110	C		amphipod tube clusters, large and small burrows
IAC-111	A		amphipod tube clusters, large and small burrows, faint tracks, dark image
IAC-111	B		large and small burrows, faint tracks
IAC-112	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-112	C		amphipod tube clusters, large and small burrows, crab tracks
IAC-113	A		amphipod tube clusters, large and small burrows, faint crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-113	B	IAC-113-B-PV.jpg	0.54	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-114	A	IAC-114-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-114	B	IAC-114-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-115	A	IAC-115-A-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-115	C	IAC-115-C-PV.jpg	0.47	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-116	A	IAC-116-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-116	C	IAC-116-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-117	A	IAC-117-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-117	B	IAC-117-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-118	A	IAC-118-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-118	C	IAC-118-C-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
IAC-119	A	IAC-119-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-119	B	IAC-119-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-120	A	IAC-120-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-120	B	IAC-120-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-121	A	IAC-121-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-121	B	IAC-121-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-122	B	IAC-122-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-122	C	IAC-122-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-123	D	IAC-123-D-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-123	E	IAC-123-E-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-124	A	IAC-124-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-124	B	IAC-124-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-125	A	IAC-125-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-125	C	IAC-125-C-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-126	A	IAC-126-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-126	B	IAC-126-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-127	A	IAC-127-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-127	B	IAC-127-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-128	A	IAC-128-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-128	B	IAC-128-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-129	A	IAC-129-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-129	B	IAC-129-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-130	A	IAC-130-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-130	B	IAC-130-B-PV.jpg	0.35	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-131	D	IAC-131-D-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-131	E	IAC-131-E-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-132	A	IAC-132-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-132	B	IAC-132-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-133	A	IAC-133-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-133	C	IAC-133-C-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-134	A	IAC-134-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-134	B	IAC-134-B-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-135	A	IAC-135-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-135	B	IAC-135-B-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-113	B				Inferred Fauna		0
IAC-114	A				Inferred Fauna		0
IAC-114	B				Inferred Fauna		0
IAC-115	A		1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
IAC-115	C				Inferred Fauna		0
IAC-116	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-116	C				Inferred Fauna		0
IAC-117	A	bivalves	bivalves 1 shrimp, 1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-117	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-118	A		1 shrimp, 2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-118	C		3 burrowing sea stars (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-119	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-119	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-120	A		1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-120	B				Inferred Fauna		0
IAC-121	A				Inferred Fauna		0
IAC-121	B				Inferred Fauna		0
IAC-122	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-122	C				Inferred Fauna		0
IAC-123	D		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-123	E		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-124	A				Inferred Fauna		0
IAC-124	B		2 shrimp, 1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-125	A				Inferred Fauna		0
IAC-125	C		1 crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-126	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-126	B	squid eggs	2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-127	A		1 Cancer irroratus		Soft Sediment Fauna	Inferred Fauna	0
IAC-127	B				Inferred Fauna		0
IAC-128	A				Inferred Fauna		0
IAC-128	B	Bivalves	numerous bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-129	A				Inferred Fauna		0
IAC-129	B				Inferred Fauna		0
IAC-130	A				Inferred Fauna		0
IAC-130	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-131	D		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-131	E	Bivalves	numerous bivalves 1 fish in a burrow		Soft Sediment Fauna	Inferred Fauna	0
IAC-132	A		1 shrimp, 2 small crabs (Heterocrypta granulata?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-132	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-133	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-133	C		2 fish (indeterminate)		Soft Sediment Fauna	Inferred Fauna	0
IAC-134	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-134	B		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-135	A	Bivalves	55+ bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-135	B	Bivalves	64+ bivalves		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-113	B	10	0	no				
IAC-114	A	1	0	no				
IAC-114	B	3	0	no				
IAC-115	A	5	0	no				
IAC-115	C	1	0	no				
IAC-116	A	1	0	no			1 shrimp	
IAC-116	C	1	0	no				
IAC-117	A	1	0	no	bivalves		1 shrimp, 1 Paguroidea	
IAC-117	B	1	0	no			1 shrimp	
IAC-118	A	1	0	no			1 shrimp, 2 burrowing sea stars (Astropecten?)	
IAC-118	C	<1	0	no			3 burrowing sea stars (Astropecten?)	
IAC-119	A	1	0	no			1 shrimp	
IAC-119	B	1	0	no			1 shrimp	
IAC-120	A	1	0	no				
IAC-120	B	1	0	no				
IAC-121	A	25	0	no				
IAC-121	B	5	0	no				
IAC-122	B	5	0	no			1 shrimp	
IAC-122	C	1	0	no				
IAC-123	D	3	0	no			1 shrimp	
IAC-123	E	1	0	no			5 shrimp	
IAC-124	A	5	0	no				
IAC-124	B	5	0	no			2 shrimp, 1 Paguroidea	
IAC-125	A	5	0	no				
IAC-125	C	5	0	no			1 crab	
IAC-126	A	2	0	no			1 shrimp	
IAC-126	B	5	0	yes			2 shrimp	
IAC-127	A	25	0	yes			1 Cancer irroratus	
IAC-127	B	20	0	no				
IAC-128	A	20	0	no				
IAC-128	B	20	0	no	numerous bivalves			
IAC-129	A	25	0	no				
IAC-129	B	10	0	no				
IAC-130	A	5	0	no				
IAC-130	B	5	0	no			1 shrimp	
IAC-131	D	10	0	no			1 shrimp	
IAC-131	E	5	0	no	numerous bivalves			
IAC-132	A	3	0	yes			1 shrimp, 2 small crabs (Heterocrypta granulata?)	
IAC-132	B	1	0	no			1 shrimp	
IAC-133	A	1	0	no			1 shrimp	
IAC-133	C	3	0	no				
IAC-134	A	5	0	no			1 shrimp	
IAC-134	B	3	0	no			4 shrimp	
IAC-135	A	1	0	no	55+ bivalves			
IAC-135	B	1	0	no	64+ bivalves			

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-113	B		amphipod tube clusters, large and small burrows
IAC-114	A		few amphipod tube clusters, large and small burrows
IAC-114	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-115	A	1 Triglidae	amphipod tube clusters, large and small burrows, crab tracks
IAC-115	C		few amphipod tube clusters, large and small burrows, crab tracks
IAC-116	A		few amphipod tube clusters, large and small burrows, one very large hole/feeding void
IAC-116	C		few amphipod tube clusters, large and small burrows
IAC-117	A		few amphipod tube clusters, large and small burrows
IAC-117	B		few amphipod tube clusters, large and small burrows
IAC-118	A		few amphipod tube clusters, large and small burrows
IAC-118	C	1 Pleuronectidae (Paralichthys dentatus?)	very few amphipod tube clusters, large and small burrows
IAC-119	A		very few amphipod tube clusters, large and small burrows
IAC-119	B		very few amphipod tube clusters, large and small burrows
IAC-120	A	1 Pleuronectidae (Paralichthys dentatus?)	few amphipod tube clusters, large and small burrows
IAC-120	B		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-121	A		abundant amphipod tube clusters, large and small burrows, crab tracks
IAC-121	B		amphipod tube clusters, large and small burrows
IAC-122	B		amphipod tube clusters, large and small burrows
IAC-122	C		few amphipod tubes, small burrows
IAC-123	D		amphipod tubes, small burrows, faint tracks
IAC-123	E		microbial mat, small burrows, two very large burrows
IAC-124	A		few amphipod tube clusters, large and small burrows, faint tracks (Triglid tracks?)
IAC-124	B		few amphipod tube clusters, large and small burrows
IAC-125	A		few amphipod tube clusters, large (one with reduced sediment) and small burrows
IAC-125	C		amphipod tube clusters, large and small burrows, microbial mat? focus issues
IAC-126	A		amphipod tube clusters, large and small burrows
IAC-126	B		amphipod tube clusters, large and small burrows, clump of 12+ squid eggs
IAC-127	A		abundant amphipod tube clusters, large and small burrows
IAC-127	B		abundant amphipod tube clusters, large and small burrows
IAC-128	A		abundant amphipod tube clusters, large and small burrows
IAC-128	B		abundant amphipod tubes, large and small burrows, one dead/molt crab carapace
IAC-129	A		abundant amphipod tube clusters, small burrows
IAC-129	B		amphipod tube clusters, large and small burrows, faint tracks
IAC-130	A		polychaete tubes, large and small burrows
IAC-130	B		amphipod and polychaete tubes, large and small burrows
IAC-131	D		amphipod tube clusters, small burrows
IAC-131	E	1 fish in a burrow	amphipod tube clusters, polychaete tubes, small burrows
IAC-132	A		few amphipod tube clusters, large and small burrows, large gastropod? egg case
IAC-132	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-133	A		few amphipod tube clusters, large (one very large) and small burrows, faint tracks (Trigidae?)
IAC-133	C	2 fish (indeterminate)	amphipod tube clusters, large and small burrows
IAC-134	A		amphipod tube clusters, large and small burrows
IAC-134	B		amphipod tube clusters, large and small burrows
IAC-135	A		few amphipod tube clusters, large and small burrows, faint tracks
IAC-135	B		few amphipod tubes, large and small burrows, one very large hole/feeding void, crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-136	A	IAC-136-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
IAC-136	B	IAC-136-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-137	A	IAC-137-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-137	C	IAC-137-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-138	A	IAC-138-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-138	B	IAC-138-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-139	A	IAC-139-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-139	B	IAC-139-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-140	A	IAC-140-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-140	B	IAC-140-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-141	A	IAC-141-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-141	C	IAC-141-C-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-142	A	IAC-142-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-142	B	IAC-142-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-143	A	IAC-143-A-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-143	B	IAC-143-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-144	A	IAC-144-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-144	B	IAC-144-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-145	A	IAC-145-A-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-145	B	IAC-145-B-PV.jpg	0.54	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-146	A	IAC-146-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-146	B	IAC-146-B-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-147	A	IAC-147-A-PV.jpg	0.61	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-147	C	IAC-147-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-148	A	IAC-148-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-148	B	IAC-148-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-149	A	IAC-149-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-149	B	IAC-149-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-150	A	IAC-150-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-150	B	IAC-150-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-151	A	IAC-151-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-151	B	IAC-151-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-152	A	IAC-152-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-152	B	IAC-152-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-153	B	IAC-153-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-153	C	IAC-153-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-154	A	IAC-154-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-154	B	IAC-154-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-155	A	IAC-155-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-155	B	IAC-155-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-156	A	IAC-156-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-156	B	IAC-156-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-157	A	IAC-157-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-157	B	IAC-157-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-158	A	IAC-158-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-136	A	Bivalves	59+ bivalves 2 sea stars, 1 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-136	B	Bivalves	bivalves 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-137	A	Bivalves	bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-137	C	Bivalves	bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-138	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-138	B				Inferred Fauna		0
IAC-139	A		1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-139	B				Inferred Fauna		0
IAC-140	A				Inferred Fauna		0
IAC-140	B				Inferred Fauna		0
IAC-141	A	Bivalves	24 large bivalves 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-141	C		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-142	A	Bivalves	93 large bivalves 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-142	B	Bivalves	13 large bivalves 1 paguroidea, 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-143	A	Bivalves	1 large bivalve		Soft Sediment Fauna	Inferred Fauna	0
IAC-143	B				Inferred Fauna		0
IAC-144	A	Ceriantharia	1 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-144	B	Bivalves	20+ large bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-145	A	Bivalves	2 large bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-145	B		1 shrimp, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-146	A	Bivalves	500 medium bivalves (estimated)		Soft Sediment Fauna	Inferred Fauna	0
IAC-146	B	Bivalves	550 medium bivalves (estimated) 1 shrimp, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-147	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-147	C				Inferred Fauna		0
IAC-148	A				Inferred Fauna		0
IAC-148	B				Inferred Fauna		0
IAC-149	A				Inferred Fauna		0
IAC-149	B				Inferred Fauna		0
IAC-150	A				Inferred Fauna		0
IAC-150	B		1 sea slug 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
IAC-151	A				Inferred Fauna		0
IAC-151	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-152	A		hydroids		Soft Sediment Fauna	Inferred Fauna	0
IAC-152	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-153	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-153	C				Inferred Fauna		0
IAC-154	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-154	B		2 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
IAC-155	A		1 small crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-155	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-156	A				Inferred Fauna		0
IAC-156	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-157	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-157	B		2 shrimp, 1 small crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-158	A				Inferred Fauna		0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-136	A	1	0	no	59+ bivalves		2 sea stars, 1 shrimp, 1 sea slug	
IAC-136	B	1	0	no	bivalves		1 shrimp	
IAC-137	A	10	0	no	bivalves			
IAC-137	C	5	0	no	bivalves			
IAC-138	A	15	0	no			1 shrimp	
IAC-138	B	5	0	no				
IAC-139	A	5	0	no			1 Tritia trivittata	
IAC-139	B	5	0	no				
IAC-140	A	2	0	no				
IAC-140	B	1	0	no				
IAC-141	A	10	0	no	24 large bivalves		2 paguroidea	
IAC-141	C	5	0	no			1 paguroidea	
IAC-142	A	<1	0	no	93 large bivalves		2 paguroidea	
IAC-142	B	1	0	no	13 large bivalves		1 paguroidea, 1 shrimp	
IAC-143	A	10	0	no	1 large bivalve			
IAC-143	B	5	0	no				
IAC-144	A	5	0	no	1 Ceriantharia		2 shrimp	
IAC-144	B	1	0	no	20+ large bivalves			
IAC-145	A	5	0	yes	2 large bivalves			
IAC-145	B	<1	0	no			1 shrimp, 1 paguroidea	
IAC-146	A	<1	0	no	500 medium bivalves (estimated)			
IAC-146	B	2	0	no	550 medium bivalves (estimated)		1 shrimp, 1 paguroidea	
IAC-147	A	1	0	no			1 paguroidea	
IAC-147	C	5	0	no				
IAC-148	A	2	0	no				
IAC-148	B	3	0	no				
IAC-149	A	3	0	no				
IAC-149	B	1	0	no				
IAC-150	A	1	0	no				
IAC-150	B	1	0	no			1 sea slug	
IAC-151	A	3	0	no				
IAC-151	B	3	0	no			1 shrimp	
IAC-152	A	1	0	no		hydroids		
IAC-152	B	1	0	no			1 shrimp	
IAC-153	B	2	0	no			1 shrimp	
IAC-153	C	1	0	no				
IAC-154	A	2	0	no			2 shrimp	
IAC-154	B	1	0	no			2 Tritia trivittata	
IAC-155	A	<1	0	no			1 small crab	
IAC-155	B	<1	0	no			1 shrimp	
IAC-156	A	<1	0	no				
IAC-156	B	1	0	no			1 shrimp	
IAC-157	A	1	0	no			2 shrimp	
IAC-157	B	1	0	no			2 shrimp, 1 small crab	
IAC-158	A	<1	0	no				

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-136	A		few amphipod tubes, large and small burrows, faint tracks
IAC-136	B		microbial mat/amphipod tubes?, large and small burrows, faint tracks, focus issues
IAC-137	A		amphipod tube clusters, large and small burrows, faint tracks, light issues
IAC-137	C		amphipod tube clusters, large and small burrows, faint tracks, light/focus issues
IAC-138	A		amphipod tube clusters, polychaete tubes, large and small burrows
IAC-138	B		amphipod tube clusters, microbial mat, large and small burrows
IAC-139	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-139	B		amphipod tube clusters, large and small burrows, faint tracks
IAC-140	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-140	B		amphipod tube clusters, large and small burrows, faint tracks
IAC-141	A		amphipod tube clusters, polychaete tubes, large and small burrows, faint tracks
IAC-141	C		amphipod tube clusters, polychaete tubes, large and small burrows, faint tracks, one very large hole/feeding void
IAC-142	A		few amphipod tubes, large and small burrows, faint tracks
IAC-142	B		few amphipod tubes, large and small burrows, faint tracks, one very large hole/feeding void
IAC-143	A		amphipod and polychaete tubes, large and small burrows, faint tracks, one very large hole/feeding void
IAC-143	B		amphipod and polychaete tubes, large and small burrows, faint tracks
IAC-144	A		amphipod tubes, large and small burrows
IAC-144	B		few amphipod tubes, large and small burrows, faint tracks
IAC-145	A		few amphipod tubes, large and small burrows, faint tracks, 1 gastropod egg case
IAC-145	B		very few amphipod tubes, large and small burrows, numerous faint tracks
IAC-146	A		few amphipod tubes, burrows, and microbial mats
IAC-146	B		few amphipod tube clusters, small burrows
IAC-147	A		amphipod tube clusters, large and small burrows, faint tracks
IAC-147	C		amphipod tube clusters, large and small burrows, faint tracks
IAC-148	A		amphipod tubes, large and small burrows, faint tracks
IAC-148	B		amphipod tubes, large and small burrows
IAC-149	A		amphipod tubes, large and small burrows
IAC-149	B		few amphipod tubes, large and small burrows
IAC-150	A		few amphipod tubes, large and small burrows, faint tracks
IAC-150	B	1 Triglidae	few amphipod tubes, large and small burrows, one large Triglid burrow
IAC-151	A		few amphipod tubes, large and small burrows
IAC-151	B		few amphipod tubes, large and small burrows
IAC-152	A		few amphipod tube clusters, large and small burrows
IAC-152	B		few amphipod tube clusters, large and small burrows
IAC-153	B		few amphipod tube clusters, large and small burrows
IAC-153	C		few amphipod and polychaete tubes, large and small burrows
IAC-154	A		few amphipod tube clusters, large and small burrows
IAC-154	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-155	A		very few amphipod tubes, small burrows. cloud of suspended sediment
IAC-155	B		very few amphipod tubes, small burrows, faint tracks
IAC-156	A		very few amphipod tubes, large and small burrows, faint tracks
IAC-156	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-157	A		few amphipod tube clusters, large and small burrows, faint tracks
IAC-157	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-158	A		few amphipod and polychaete tubes, large and small burrows, faint tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-158	B	IAC-158-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-159	A	IAC-159-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-159	B	IAC-159-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-160	A	IAC-160-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-160	B	IAC-160-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	IND	YES	IND	1
IAC-161	A	IAC-161-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-161	C	IAC-161-C-PV.jpg	0.61	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-162	A	IAC-162-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-162	B	IAC-162-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-163	A	IAC-163-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-163	B	IAC-163-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-164	A	IAC-164-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-164	B	IAC-164-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-165	B	IAC-165-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-165	C	IAC-165-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-166	A	IAC-166-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-166	B	IAC-166-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-167	A	IAC-167-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-167	C	IAC-167-C-PV.jpg	0.61	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
IAC-168	B	IAC-168-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-168	C	IAC-168-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-169	A	IAC-169-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-169	B	IAC-169-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-170	A	IAC-170-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-170	B	IAC-170-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-171	A	IAC-171-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-171	B	IAC-171-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-172	A	IAC-172-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-172	B	IAC-172-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-173	A	IAC-173-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-173	B	IAC-173-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-174	A	IAC-174-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-174	B	IAC-174-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-175	A	IAC-175-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-175	C	IAC-175-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-176	A	IAC-176-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-176	C	IAC-176-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-177	A	IAC-177-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-177	C	IAC-177-C-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-178	A	IAC-178-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-178	B	IAC-178-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-179	A	IAC-179-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-179	B	IAC-179-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-180	A	IAC-180-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-180	B	IAC-180-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-158	B		17 medium bivalves		Soft Sediment Fauna	Inferred Fauna	0
IAC-159	A				Inferred Fauna		0
IAC-159	B				Inferred Fauna		0
IAC-160	A				Inferred Fauna		0
IAC-160	B				Inferred Fauna		0
IAC-161	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-161	C				Inferred Fauna		0
IAC-162	A				Inferred Fauna		0
IAC-162	B		1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-163	A				Inferred Fauna		0
IAC-163	B		1 sea slug, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-164	A				Inferred Fauna		0
IAC-164	B				Inferred Fauna		0
IAC-165	B		2 small crabs, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-165	C		2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-166	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-166	B		1 paguroidea 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-167	A				Inferred Fauna		0
IAC-167	C		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-168	B		1 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-168	C		1 Tritia trivittata, 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-169	A				Inferred Fauna		0
IAC-169	B				Inferred Fauna		0
IAC-170	A				Inferred Fauna		0
IAC-170	B	Bivalves	200 medium bivalves (estimated) 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-171	A				Inferred Fauna		0
IAC-171	B				Inferred Fauna		0
IAC-172	A				Inferred Fauna		0
IAC-172	B				Inferred Fauna		0
IAC-173	A		1 paguroidea, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
IAC-173	B				Inferred Fauna		0
IAC-174	A		1 small crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-174	B				Inferred Fauna		0
IAC-175	A				Inferred Fauna		0
IAC-175	C				Inferred Fauna		0
IAC-176	A		1 paguroidea, 3 shrimp, 2 Echinarachnius parma, 1 large crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-176	C		3 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-177	A		3 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-177	C		1 paguroidea, 4 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-178	A				Inferred Fauna		0
IAC-178	B				Inferred Fauna		0
IAC-179	A				Inferred Fauna		0
IAC-179	B				Inferred Fauna		0
IAC-180	A				Inferred Fauna		0
IAC-180	B				Inferred Fauna		0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-158	B	1	0	no	17 medium bivalves			
IAC-159	A	1	0	no				
IAC-159	B	1	0	no				
IAC-160	A	3	0	no				
IAC-160	B	1	0	no				
IAC-161	A	1	0	no			1 paguroidea	
IAC-161	C	1	0	no				
IAC-162	A	<1	0	no				
IAC-162	B	1	0	no			1 sea slug	
IAC-163	A	1	0	no				
IAC-163	B	3	0	no			1 sea slug, 1 paguroidea	
IAC-164	A	1	0	no				
IAC-164	B	2	0	no				
IAC-165	B	5	0	no			2 small crabs, 1 paguroidea	
IAC-165	C	5	0	no			2 paguroidea	
IAC-166	A	1	0	no			1 paguroidea	
IAC-166	B	3	0	no			1 paguroidea	
IAC-167	A	1	0	no				
IAC-167	C	3	0	no			1 paguroidea	
IAC-168	B	5	0	no			1 shrimp, 1 sea slug	
IAC-168	C	1	0	no			1 Tritia trivittata, 2 paguroidea	
IAC-169	A	1	0	no				
IAC-169	B	2	0	no				
IAC-170	A	3	0	no				
IAC-170	B	3	0	yes	200 medium bivalves (estimated)		2 paguroidea	
IAC-171	A	5	0	no				
IAC-171	B	5	0	no				
IAC-172	A	3	0	no				
IAC-172	B	1	0	no				
IAC-173	A	1	0	no			1 paguroidea, 1 sea slug	
IAC-173	B	1	0	no				
IAC-174	A	5	0	no			1 small crab	
IAC-174	B	3	0	no				
IAC-175	A	1	0	no				
IAC-175	C	1	0	no				
IAC-176	A	0	0	no			1 paguroidea, 3 shrimp, 2 Echinarachnius parma, 1 large crab	
IAC-176	C	0	0	no			3 E. parma	
IAC-177	A	0	0	no			3 E. parma	
IAC-177	C	0	0	no			1 paguroidea, 4 E. parma	
IAC-178	A	3	0	no				
IAC-178	B	3	0	no				
IAC-179	A	7	0	no				
IAC-179	B	3	0	no				
IAC-180	A	10	0	no				
IAC-180	B	3	0	no				

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-158	B		few amphipod and polychaete tubes, large and small burrows, faint tracks
IAC-159	A		few amphipod tube clusters, large and small burrows
IAC-159	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-160	A		few amphipod tube clusters, large and small burrows
IAC-160	B		few amphipod tube clusters, large and small burrows
IAC-161	A		few amphipod tube clusters, large and small burrows
IAC-161	C		few amphipod tube clusters, large and small burrows, faint tracks
IAC-162	A		few amphipod and polychaete tubes, large and small burrows
IAC-162	B		few amphipod tubes/microbial mat, large and small burrows
IAC-163	A		few amphipod tube clusters, large and small burrows
IAC-163	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-164	A		few amphipod tube clusters, large and small burrows
IAC-164	B		few amphipod tube clusters, large and small burrows
IAC-165	B		Amphipod tube clusters, large and small burrows
IAC-165	C		Amphipod tube clusters, large and small burrows
IAC-166	A		Amphipod tube clusters, large and small burrows
IAC-166	B	1 Pleuronectidae (Paralichthys dentatus?)	Amphipod tube clusters, microbial mat, large and small burrows, worm castings
IAC-167	A		Amphipod tube clusters, large and small burrows, abundant faint tracks (crab?)
IAC-167	C		Amphipod tube clusters, large and small burrows, abundant faint tracks (crab?), three large holes/feeding voids
IAC-168	B		Amphipod tube clusters, large (one with reduced sediment) and small burrows, abundant faint tracks (crab?)
IAC-168	C		Amphipod tube clusters, large and small burrows
IAC-169	A		few amphipod tube clusters, large and small burrows
IAC-169	B		few amphipod tube clusters, large and small burrows
IAC-170	A		few amphipod tube clusters, large and small burrows, faint tracks
IAC-170	B		few amphipod tube clusters, large and small burrows, 1 gastropod egg case
IAC-171	A		few amphipod and polychaete tubes, large and small burrows, faint tracks
IAC-171	B		few amphipod tube clusters, large and small burrows, faint tracks
IAC-172	A		few amphipod tube clusters, large and small burrows
IAC-172	B		few amphipod tube clusters, large and small burrows
IAC-173	A		few amphipod tube clusters, large and small burrows
IAC-173	B		few amphipod and polychaete tubes, large and small burrows
IAC-174	A		amphipod tubes, small burrows
IAC-174	B		amphipod tubes, small burrows
IAC-175	A		few amphipod tube clusters, large and small burrows, faint crab tracks
IAC-175	C		few amphipod tube clusters, large and small burrows
IAC-176	A		small burrows
IAC-176	C		large and small burrows
IAC-177	A		large and small burrows
IAC-177	C		large and small burrows
IAC-178	A		amphipod tubes, large and small burrows
IAC-178	B		amphipod tubes, large and small burrows
IAC-179	A		amphipod tubes, large and small burrows
IAC-179	B		amphipod tubes, large and small burrows
IAC-180	A		amphipod tube clusters, large and small burrows
IAC-180	B		amphipod tube clusters, large and small burrows

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-181	A	IAC-181-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-181	C	IAC-181-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-182	A	IAC-182-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-182	C	IAC-182-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-183	B	IAC-183-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-183	C	IAC-183-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-184	B	IAC-184-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
IAC-184	C	IAC-184-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-185	B	IAC-185-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-185	C	IAC-185-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-186	A	IAC-186-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-186	B	IAC-186-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-187	A	IAC-187-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	IND	1
IAC-187	B	IAC-187-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-188	A	IAC-188-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-188	B	IAC-188-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
IAC-189	A	IAC-189-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-189	B	IAC-189-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-190	A	IAC-190-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-190	B	IAC-190-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-191	A	IAC-191-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-191	B	IAC-191-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-192	A	IAC-192-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-192	B	IAC-192-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-193	A	IAC-193-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-193	B	IAC-193-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-194	A	IAC-194-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-194	C	IAC-194-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-195	A	IAC-195-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-195	B	IAC-195-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-196	A	IAC-196-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-196	B	IAC-196-B-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-197	A	IAC-197-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-197	B	IAC-197-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-198	A	IAC-198-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-198	B	IAC-198-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-199	A	IAC-199-A-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-199	B	IAC-199-B-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-200	A	IAC-200-A-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-200	B	IAC-200-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-201	A	IAC-201-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-201	B	IAC-201-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
IAC-202	B	IAC-202-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-202	C	IAC-202-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	YES	1
IAC-203	A	IAC-203-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-181	A		2 paguroidea 1 skate (Raja), buried		Soft Sediment Fauna	Inferred Fauna	0
IAC-181	C				Inferred Fauna		0
IAC-182	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-182	C	Scallop	3 paguroidea, 1 scallop		Soft Sediment Fauna	Inferred Fauna	0
IAC-183	B		2 paguroidea, 2 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-183	C		2 sea slugs, 2 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-184	B		10 paguroidea, 8 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-184	C		1387 E. parma, 5 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-185	B		239 E. parma, 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-185	C		265 E. parma 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-186	A		376 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-186	B		378 E. parma		Soft Sediment Fauna	Inferred Fauna	0
IAC-187	A		210 E. parma, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-187	B		134 E. parma, 7 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-188	A		1219 E. parma, 3 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-188	B		1245 E. parma, 2 paguroidea, 1 Cancer irroratus		Soft Sediment Fauna	Inferred Fauna	0
IAC-189	A		1 E. parma, 2 small crabs		Soft Sediment Fauna	Inferred Fauna	0
IAC-189	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-190	A				Inferred Fauna		0
IAC-190	B		2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-191	A				Inferred Fauna		0
IAC-191	B				Inferred Fauna		0
IAC-192	A	burrowing anemo	1 burrowing anemone 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-192	B		3 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-193	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-193	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
IAC-194	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-194	C				Inferred Fauna		0
IAC-195	A				Inferred Fauna		0
IAC-195	B				Inferred Fauna		0
IAC-196	A				Inferred Fauna		0
IAC-196	B		1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
IAC-197	A				Inferred Fauna		0
IAC-197	B				Inferred Fauna		0
IAC-198	A		7 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-198	B		8 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-199	A				Inferred Fauna		0
IAC-199	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-200	A		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-200	B				Inferred Fauna		0
IAC-201	A		2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-201	B		2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-202	B		2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-202	C		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-203	A				Inferred Fauna		0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-181	A	1	0	no			2 paguroidea	
IAC-181	C	1	0	no				
IAC-182	A	1	0	no			1 paguroidea	
IAC-182	C	1	0	yes			3 paguroidea, 1 scallop	
IAC-183	B	0	0	no			2 paguroidea, 2 E. parma	
IAC-183	C	0	0	no			2 sea slugs, 2 E. parma	
IAC-184	B	0	0	no			10 paguroidea, 8 E. parma	
IAC-184	C	0	0	no			1387 E. parma, 5 paguroidea	
IAC-185	B	0	0	no			239 E. parma, 2 paguroidea	
IAC-185	C	0	0	no			265 E. parma	
IAC-186	A	0	0	no			376 E. parma	
IAC-186	B	0	0	no			378 E. parma	
IAC-187	A	0	0	yes			210 E. parma, 1 paguroidea	
IAC-187	B	0	0	no			134 E. parma, 7 paguroidea	
IAC-188	A	0	0	no			1219 E. parma, 3 paguroidea	
IAC-188	B	0	0	no			1245 E. parma, 2 paguroidea, 1 Cancer irroratus	
IAC-189	A	0	0	no			1 E. parma, 2 small crabs	
IAC-189	B	0	0	no			1 paguroidea	
IAC-190	A	0	0	no				
IAC-190	B	0	0	no			2 paguroidea	
IAC-191	A	1	0	no				
IAC-191	B	15	0	no				
IAC-192	A	5	0	no	1 burrowing anemone		1 paguroidea	
IAC-192	B	5	0	no			3 paguroidea	
IAC-193	A	5	0	no			1 paguroidea	
IAC-193	B	7	0	no			1 shrimp	
IAC-194	A	1	0	yes			1 paguroidea	
IAC-194	C	1	0	no				
IAC-195	A	10	0	no				
IAC-195	B	5	0	no				
IAC-196	A	5	0	no				
IAC-196	B	5	0	no				
IAC-197	A	1	0	no				
IAC-197	B	3	0	no				
IAC-198	A	1	0	no			7 paguroidea	
IAC-198	B	3	0	no			8 paguroidea	
IAC-199	A	0	0	no				
IAC-199	B	0	0	no			1 paguroidea	
IAC-200	A	0	0	no			1 paguroidea	
IAC-200	B	1	0	yes				
IAC-201	A	1	0	yes			2 paguroidea	
IAC-201	B	1	0	no			2 paguroidea	
IAC-202	B	1	0	no			2 paguroidea	
IAC-202	C	1	0	yes			1 paguroidea	
IAC-203	A	15	0	no				

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-181	A	1 skate (Raja), buried	amphipod tubes, large and small burrows
IAC-181	C		amphipod tubes, large and small burrows
IAC-182	A		amphipod tubes, large and small burrows, faint tracks
IAC-182	C		amphipod tubes, large and small burrows, 1 naticid egg case, one large bivalve (dead)
IAC-183	B		small burrows, faint tracks
IAC-183	C		small burrows, faint tracks
IAC-184	B		small burrows, faint tracks, 4 large empy Mercenaria valves
IAC-184	C		few small burrows, bottom paved with E. parma
IAC-185	B		few small burrows
IAC-185	C	1 Pleuronectidae (Paralichthys dentatus?)	few small burrows
IAC-186	A		few small burrows
IAC-186	B		few small burrows
IAC-187	A		one Naticidae egg case, cloud of suspended sediment obscuring roughly 25% of photo
IAC-187	B		2 large Mercenaria valves (dead)
IAC-188	A		few small burrows, bottom paved with E. parma
IAC-188	B		bottom paved with E. parma
IAC-189	A		few small burrows
IAC-189	B		small burrows, faint tracks
IAC-190	A		small burrows, microbial mat?
IAC-190	B		small burrows, faint tracks
IAC-191	A		amphipod tubes, large and small burrows
IAC-191	B		amphipod tubes, large and small burrows
IAC-192	A		amphipod tubes, large and small burrows
IAC-192	B		amphipod tubes, large and small burrows
IAC-193	A		amphipod tubes, large and small burrows
IAC-193	B		amphipod tubes, large and small burrows
IAC-194	A		few amphipod tubes, large and small burrows, 1 gastropod egg case
IAC-194	C		amphipod tubes, large and small burrows
IAC-195	A		amphipod tubes, large and small burrows
IAC-195	B		amphipod tubes, large and small burrows
IAC-196	A		amphipod tubes, large and small burrows
IAC-196	B	1 Triglidae	amphipod tubes, large and small burrows
IAC-197	A		amphipod tubes, large and small burrows
IAC-197	B		amphipod tubes, large and small burrows
IAC-198	A		amphipod tubes, small burrows
IAC-198	B		amphipod tubes, small burrows
IAC-199	A		large and small burrows, focus issues
IAC-199	B		large and small burrows
IAC-200	A		large and small burrows, focus issues
IAC-200	B		few amphipod tubes, large and small burrows, 1 naticid egg case, view obscured by suspended particles
IAC-201	A		few amphipod tubes, large and small burrows, 1 naticid egg case, view obscured by suspended particles
IAC-201	B		few amphipod tubes, large and small burrows, view obscured by suspended particles
IAC-202	B		few amphipod tubes, large and small burrows, view obscured by suspended particles
IAC-202	C		few amphipod tubes, large and small burrows, 1 naticid egg case, view obscured by suspended particles
IAC-203	A		amphipod tubes, large and small burrows

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
IAC-203	B	IAC-203-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-204	A	IAC-204-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-204	C	IAC-204-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-205	B	IAC-205-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	IND	1
IAC-205	C	IAC-205-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-206	A	IAC-206-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-206	B	IAC-206-B-PV.jpg	0.96	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-207	A	IAC-207-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-207	C	IAC-207-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-208	A	IAC-208-A-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-208	C	IAC-208-C-PV.jpg		Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-209	A	IAC-209-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-209	B	IAC-209-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
IAC-210	A	IAC-210-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-210	B	IAC-210-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-211	A	IAC-211-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-211	C	IAC-211-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-212	E	IAC-212-E-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
IAC-212	F	IAC-212-F-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-213	B	IAC-213-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-213	C	IAC-213-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
IAC-214	B	IAC-214-B-PV.jpg	0.96	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-214	C	IAC-214-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-215	B	IAC-215-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-215	C	IAC-215-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
IAC-216	A	IAC-216-A-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-216	B	IAC-216-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
IAC-217	B	IAC-217-B-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-217	C	IAC-217-C-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
IAC-218	B	IAC-218-B-PV.jpg	0.41	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
IAC-218	C	IAC-218-C-PV.jpg	0.47	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-001	A	WTG-001-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-001	B	WTG-001-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-002	A	WTG-002-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	NO	NO	IND	1
WTG-002	B	WTG-002-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
WTG-003	A	WTG-003-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
WTG-003	B	WTG-003-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
WTG-004	A	WTG-004-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-004	C	WTG-004-C-PV.jpg	0.61	Muddy sand	IND	Small ripples	Both	YES	YES	YES	NO	1
WTG-005	A	WTG-005-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
WTG-005	B	WTG-005-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
WTG-006	A	WTG-006-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-006	C	WTG-006-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-007	A	WTG-007-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-007	C	WTG-007-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
IAC-203	B				Inferred Fauna		0
IAC-204	A				Inferred Fauna		0
IAC-204	C				Inferred Fauna		0
IAC-205	B				Inferred Fauna		0
IAC-205	C				Inferred Fauna		0
IAC-206	A	sponge	yellw sponge, 8 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-206	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	<1
IAC-207	A				Inferred Fauna		0
IAC-207	C		5 paguroidea 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-208	A		3 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-208	C		8 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-209	A	Bivalves	135 medium bivalves (estimated)		Soft Sediment Fauna	Inferred Fauna	0
IAC-209	B		1 medium crab		Soft Sediment Fauna	Inferred Fauna	0
IAC-210	A		1 paguroidea 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-210	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-211	A				Inferred Fauna		0
IAC-211	C				Inferred Fauna		0
IAC-212	E		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-212	F				Inferred fauna		0
IAC-213	B		3 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-213	C		100 medium bivalves (estimated)		Soft Sediment Fauna	Inferred Fauna	0
IAC-214	B				Inferred Fauna		0
IAC-214	C		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
IAC-215	B	Bivalves	400 medium bivalves (estimated)		Soft Sediment Fauna	Inferred Fauna	0
IAC-215	C		40 medium bivalves (estimated)		Soft Sediment Fauna	Inferred Fauna	0
IAC-216	A		hydroids 10 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-216	B		10 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
IAC-217	B				Soft Sediment Fauna	Inferred Fauna	0
IAC-217	C				Soft Sediment Fauna	Inferred Fauna	0
IAC-218	B		1 fish		Soft Sediment Fauna	Inferred Fauna	0
IAC-218	C				Inferred Fauna		0
WTG-001	A		12 Echinarachnius parma 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-001	B		14 Echinarachnius parma 1 Cancer irroratus, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-002	A		104 Echinarachnius parma		Soft Sediment Fauna		0
WTG-002	B		23 Echinarachnius parma 1 Paguroidea		Soft Sediment Fauna		0
WTG-003	A		2 paguroidea		Inferred Fauna	Soft Sediment Fauna	0
WTG-003	B		4 Echinarachnius parma 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-004	A				Inferred Fauna		0
WTG-004	C	sponge	yellow sponge, 1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	3
WTG-005	A		2 paguroidea		Soft Sediment Fauna		0
WTG-005	B		2 paguroidea		Soft Sediment Fauna		0
WTG-006	A				Inferred Fauna		0
WTG-006	C		2 Echinarachnius parma, 2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-007	A		2 Echinarachnius parma, 4 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-007	C	sponge	yellow sponge, 2 shrimp, 1 paguroidea, 1 Cancer sp.		Soft Sediment Fauna	Inferred Fauna	2

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
IAC-203	B	5	0	no				
IAC-204	A	5	0	no				
IAC-204	C	5	0	no				
IAC-205	B	5	0	no				
IAC-205	C	1	0	no				
IAC-206	A	10	0	no		yellow sponge	6 paguroidea	
IAC-206	B	50	0	no			1 paguroidea	
IAC-207	A	<1	0	no				
IAC-207	C	<1	0	no			5 paguroidea	
IAC-208	A	5	0	no			3 paguroidea	
IAC-208	C	5	0	no			8 paguroidea	
IAC-209	A	5	0	no	135 medium bivalves (estimated)			
IAC-209	B	1	0	no			1 medium crab	
IAC-210	A	1	0	no			1 paguroidea	
IAC-210	B	1	0	no			1 paguroidea	
IAC-211	A	1	0	no				
IAC-211	C	1	0	no				
IAC-212	E	1	0	no			1 paguroidea	
IAC-212	F	1	0	no				
IAC-213	B	10	0	no			3 paguroidea	
IAC-213	C	1	0	no	100 medium bivalves (estimated)			
IAC-214	B	1	0	yes				
IAC-214	C	1	0	no			1 paguroidea	
IAC-215	B	2	0	no	400 medium bivalves (estimated)			
IAC-215	C	<1	0	no	40 medium bivalves (estimated)			
IAC-216	A	20	0	no		hydroids	10 burrowing sea stars (Astropecten?)	
IAC-216	B	15	0	no			10 burrowing sea stars (Astropecten?)	
IAC-217	B	5	0	no			1 shrimp, 1 burrowing sea star (Astropecten?)	
IAC-217	C	5	0	no			3 shrimp, 1 burrowing sea star (Astropecten?)	
IAC-218	B	15	0	no				
IAC-218	C	5	0	yes				
WTG-001	A	0	0	no	12 Echinarachnius parma		2 paguroidea	
WTG-001	B	0	0	no	14 Echinarachnius parma		1 Cancer irroratus, 1 paguroidea	
WTG-002	A	0	0	no	104 Echinarachnius parma			
WTG-002	B	0	0	no	23 Echinarachnius parma		1 Paguroidea	
WTG-003	A	0	0	no			2 paguroidea	
WTG-003	B	0	0	no	4 Echinarachnius parma			
WTG-004	A	0	0	no				
WTG-004	C	0	0	no		yellow sponge	1 Paguroidea	
WTG-005	A	0	0	no			2 paguroidea	
WTG-005	B	0	0	no			2 paguroidea	
WTG-006	A	0	0	no				
WTG-006	C	0	0	no			2 Echinarachnius parma, 2 paguroidea	
WTG-007	A	1	0	no			2 Echinarachnius parma, 4 paguroidea	
WTG-007	C	1	0	no		yellow sponge	2 shrimp, 1 paguroidea, 1 Cancer sp.	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
IAC-203	B		amphipod and polychaete tubes, large and small burrows
IAC-204	A		amphipod and polychaete tubes, large and small burrows
IAC-204	C		amphipod and polychaete tubes, large and small burrows, 1 dead crab
IAC-205	B		amphipod tubes, large and small burrows, view obscured by suspended particles
IAC-205	C		amphipod and polychaete tubes, small burrows, view obscured by suspended particles
IAC-206	A		amphipod tubes, small burrows, crab tracks, shell hash, small yellow sponge
IAC-206	B		amphipod tubes, small burrows, view obscured by suspended particles
IAC-207	A		few amphipod tubes, small burrows
IAC-207	C	1 Pleuronectidae (Paralichthys dentatus?)	few amphipod tubes, small burrows
IAC-208	A		amphipod tubes, large and small burrows
IAC-208	C		amphipod tubes, large and small burrows, one glove
IAC-209	A		amphipod tubes, large and small burrows
IAC-209	B		amphipod tubes, large and small burrows
IAC-210	A	1 Pleuronectidae (Paralichthys dentatus?)	few amphipod tubes, small burrows, view obscured by suspended particles
IAC-210	B		few amphipod tubes, small burrows, view obscured by suspended particles
IAC-211	A		amphipod and polychaete tubes, small burrows
IAC-211	C		amphipod and polychaete tubes, large and small burrows
IAC-212	E		amphipod and polychaete tubes, large and small burrows
IAC-212	F		small burrows. Light and focus issues prevent better analysis
IAC-213	B		amphipod and polychaete tubes, large and small burrows
IAC-213	C		few amphipod tubes, large and small burrows
IAC-214	B		few amphipod tubes, large and small burrows, 5 gastropod egg cases
IAC-214	C		few amphipod tubes, large and small burrows
IAC-215	B		few amphipod tubes, large and small burrows
IAC-215	C		few amphipod tubes, large and small burrows
IAC-216	A		amphipod tube clusters, small burrows
IAC-216	B		amphipod tube clusters, small burrows
IAC-217	B		amphipod tube clusters, small burrows
IAC-217	C		amphipod tube clusters, small burrows
IAC-218	B	1 fish	amphipod tube clusters, small burrows
IAC-218	C		amphipod tube clusters, small burrows, 1 gastropod egg case
WTG-001	A		small single burrows, 1 large Crustacean? Burrow
WTG-001	B		large burrow
WTG-002	A		>88 Echinarachnius parma, turbid water
WTG-002	B		>13 Echinarachnius parma, turbid water
WTG-003	A		crab tracks, 2 Echinarachnius parma traces, crustacean burrow
WTG-003	B	1 Triglidae	3 small burrows
WTG-004	A		Crustacean burrow, small burrows/traces
WTG-004	C		1 yellow spomge, 3 shrimp, crab tracks
WTG-005	A		2 paguroidea, few small burrows, turbid water
WTG-005	B		2 paguroidea
WTG-006	A		numerous crab tracks, small burrows
WTG-006	C		crab tracks, large burrow
WTG-007	A		few amphipod tube clusters, few small burrows, sand dollar traces
WTG-007	C		few small burrows

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-008	A	WTG-008-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-008	C	WTG-008-C-PV.jpg	0.87	Muddy sand	IND	None	Physical	IND	NO	NO	YES	1
WTG-009	B	WTG-009-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-009	C	WTG-009-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-010	A	WTG-010-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-010	B	WTG-010-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-011	D	WTG-011-D-PV.jpg	0.69	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-011	E	WTG-011-E-PV.jpg	0.78	Muddy sand	IND	None	Physical	IND	NO	NO	YES	1
WTG-012	A	WTG-012-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
WTG-012	B	WTG-012-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
WTG-013	A	WTG-013-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
WTG-013	B	WTG-013-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-014	A	WTG-014-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-014	B	WTG-014-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-015	A	WTG-015-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
WTG-015	B	WTG-015-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
WTG-016	A	WTG-016-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-016	B	WTG-016-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-017	A	WTG-017-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
WTG-017	C	WTG-017-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
WTG-018	B	WTG-018-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-018	C	WTG-018-C-PV.jpg	0.96	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-019	A	WTG-019-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-019	B	WTG-019-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-020	A	WTG-020-A-PV.jpg	0.78	Muddy sand	IND	None	Physical	IND	YES	YES	YES	1
WTG-020	B	WTG-020-B-PV.jpg	0.78	Muddy sand	IND	None	Physical	IND	NO	NO	YES	1
WTG-021	A	WTG-021-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	IND	NO	YES	YES	1
WTG-021	C	WTG-021-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	IND	YES	IND	1
WTG-022	A	WTG-022-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-022	C	WTG-022-C-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-023	B	WTG-023-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-023	C	WTG-023-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-024	B	WTG-024-B-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-024	C	WTG-024-C-PV.jpg	1.27	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-025	A	WTG-025-A-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	NO	NO	NO	1
WTG-025	B	WTG-025-B-PV.jpg	0.61	Muddy sand	IND	None	Physical	IND	NO	NO	YES	1
WTG-026	B	WTG-026-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
WTG-026	C	WTG-026-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-027	A	WTG-027-A-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	YES	YES	YES	1
WTG-027	B	WTG-027-B-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	YES	YES	YES	1
WTG-028	A	WTG-028-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-028	B	WTG-028-B-PV.jpg	0.61	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-029	B	WTG-029-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-029	C	WTG-029-C-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
WTG-030	A	WTG-030-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-008	A				Inferred Fauna		0
WTG-008	C		1 Paguroidea		Soft Sediment Fauna		0
WTG-009	B				Inferred Fauna		0
WTG-009	C		3 fish		Inferred Fauna		0
WTG-010	A				Inferred Fauna		0
WTG-010	B		1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-011	D				Soft Sediment Fauna	Inferred Fauna	0
WTG-011	E		3 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-012	A				Inferred Fauna		0
WTG-012	B				Inferred Fauna		0
WTG-013	A		1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-013	B				Inferred Fauna		0
WTG-014	A				Inferred Fauna		0
WTG-014	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-015	A				Soft Sediment Fauna	Inferred Fauna	0
WTG-015	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-016	A		1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-016	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-017	A				Soft Sediment Fauna	Inferred Fauna	0
WTG-017	C	burrowing anemo	1 burrowing anemone		Soft Sediment Fauna	Inferred Fauna	0
WTG-018	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-018	C		18 paguroidea, 1 small crab		Soft Sediment Fauna	Inferred Fauna	0
WTG-019	A				Inferred Fauna		0
WTG-019	B		5 paguroidea, 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-020	A				Soft Sediment Fauna	Inferred Fauna	0
WTG-020	B				Soft Sediment Fauna	Inferred Fauna	0
WTG-021	A		2 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-021	C				Soft Sediment Fauna	Inferred Fauna	
WTG-022	A				Inferred Fauna		0
WTG-022	C				Inferred Fauna		0
WTG-023	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-023	C		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-024	B				Inferred Fauna		0
WTG-024	C		1 crab		Soft Sediment Fauna	Inferred Fauna	0
WTG-025	A				Soft Sediment Fauna	Inferred Fauna	0
WTG-025	B		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-026	B				Inferred Fauna		0
WTG-026	C		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-027	A				Inferred Fauna		0
WTG-027	B				Inferred Fauna		0
WTG-028	A		2 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-028	B		1 shrimp, 2 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-029	B		1 Paguroidea 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-029	C		5 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-030	A		1 shrimp (Crangon septemspinosa?)		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-008	A	0	0	no				
WTG-008	C	0	0	no			1 Paguroidea	
WTG-009	B	0	0	no				
WTG-009	C	0	0	no				
WTG-010	A	5	0	no				
WTG-010	B	1	0	no			1 sea slug	
WTG-011	D	20	0	no				
WTG-011	E	5	0	no			3 Paguroidea	
WTG-012	A	1	0	no				
WTG-012	B	3	0	no				
WTG-013	A	1	0	no			1 sea slug	
WTG-013	B	1	0	no				
WTG-014	A	5	0	no				
WTG-014	B	5	0	no			2 shrimp	
WTG-015	A	25	0	no				
WTG-015	B	20	0	no			1 paguroidea	
WTG-016	A	5	0	no			1 sea slug	
WTG-016	B	5	0	no			1 paguroidea	
WTG-017	A	30	0	no				
WTG-017	C	25	0	no	1 burrowing anemone			
WTG-018	B	1	0	no			1 shrimp	
WTG-018	C	0	0	no			18 paguroidea, 1 small crab	
WTG-019	A	5	0	no				
WTG-019	B	5	0	no			5 paguroidea, 1 shrimp	
WTG-020	A	5	0	no				
WTG-020	B	5	0	no				
WTG-021	A	15	0	no			2 paguroidea	
WTG-021	C	10	0	no				
WTG-022	A	5	0	no				
WTG-022	C	5	0	yes				
WTG-023	B	5	0	no			1 paguroidea	
WTG-023	C	5	0	no			1 paguroidea	
WTG-024	B	0	0	no				
WTG-024	C	5	0	no			1 crab	
WTG-025	A	5	0	no				
WTG-025	B	10	0	no			1 Paguroidea	
WTG-026	B	0	0	no				
WTG-026	C	1	0	no			1 Paguroidea	
WTG-027	A	25	0	no				
WTG-027	B	15	0	no				
WTG-028	A	5	0	no			2 Paguroidea	
WTG-028	B	5	0	no			1 shrimp, 2 Paguroidea	
WTG-029	B	10	0	no			1 Paguroidea	
WTG-029	C	10	0	no			5 Paguroidea	
WTG-030	A	1	0	no			1 shrimp (Crangon septemspinosa?)	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-008	A		numerous burrows, no epifauna
WTG-008	C		1 paguroidea, skate upper left, small burrows
WTG-009	B		large and small burrows, crab tracks
WTG-009	C	3 fish	large and small burrows, one large feeding void
WTG-010	A		Amphipod tube clusters,small burrows
WTG-010	B		microbial mat, amphipod tube clusters,small burrows
WTG-011	D		numerous amphipod tubes
WTG-011	E		several amphipod tube clusters, dark photo
WTG-012	A		few small burrows and tubes, two large empty bivalve shells
WTG-012	B		few small burrows and tubes
WTG-013	A		microbial mat, small burrows
WTG-013	B		microbial mat, small burrows, faint crab tracks
WTG-014	A		Amphipod tube clusters,small burrows, faint crab tracks
WTG-014	B		Amphipod tube clusters,small burrows, faint crab tracks
WTG-015	A		numerous clusters of amphipod tubes
WTG-015	B		numerous clusters of amphipod tubes,
WTG-016	A		Amphipod tube clusters,small burrows
WTG-016	B		Amphipod tube clusters,large and small burrows
WTG-017	A		numerous clusters of amphipod tubes
WTG-017	C		numerous clusters of amphipod tubes, crab tracks,
WTG-018	B		few amphipod tube clusters,large and small burrows
WTG-018	C		large and small burrows, faint crab tracks, 1 dead/molt Cancer irroratus
WTG-019	A		Amphipod tube clusters,large and small burrows
WTG-019	B		Amphipod tube clusters,large and small burrows
WTG-020	A		some clusters of amphipod tubes, large crustacean? Burrows, out of focus
WTG-020	B		some clusters of amphipod tubes, large crustacean? Burrows, out of focus
WTG-021	A		clusters of amphipod tubes, out of focus
WTG-021	C		clusters of amphipod tubes, out of focus
WTG-022	A		Amphipod tube clusters,large and small burrows, faint crab tracks
WTG-022	C		Amphipod tube clusters,large and small burrows, faint crab tracks, naticid egg case
WTG-023	B		Amphipod tube clusters,large and small burrows
WTG-023	C		Amphipod tube clusters,large and small burrows, faint crab tracks
WTG-024	B		Few burrows, crab tracks
WTG-024	C		Amphipod tube clusters, few burrows, faint crab tracks
WTG-025	A		sparse amphipod tubes, some burrows
WTG-025	B		some amphipod tubes
WTG-026	B		Caprellid amphipods visible from SPI photo, few small burrows
WTG-026	C		few amphipod tubes, Caprellid amphipods visible from SPI photo, few small burrows
WTG-027	A		numerous burrows and large tubes, one deep burrow (reduced sediment brought to surface)
WTG-027	B		numerous burrows and large tubes
WTG-028	A		Amphipod tube clusters, large and small burrows, crab tracks
WTG-028	B		Amphipod tube clusters, large and small burrows, crab tracks
WTG-029	B	1 Triglidae	numerous clusters of amphipod tubes, numerous polychaete/bivalve burrows
WTG-029	C		some clusters of amphipod tubes, polychaete/bivalve burrows
WTG-030	A		Amphipod tube clusters, large and small burrows, crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-030	B	WTG-030-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-031	A	WTG-031-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-031	B	WTG-031-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-032	A	WTG-032-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-032	C	WTG-032-C-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-033	D	WTG-033-D-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	IND	YES	YES	1
WTG-033	E	WTG-033-E-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	IND	YES	YES	1
WTG-034	A	WTG-034-A-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	IND	YES	YES	1
WTG-034	C	WTG-034-C-PV.jpg	0.61	Muddy sand	IND	None	Physical	IND	NO	NO	YES	1
WTG-035	A	WTG-035-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-035	B	WTG-035-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-036	A	WTG-036-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-036	B	WTG-036-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-037	B	WTG-037-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-037	C	WTG-037-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-038	A	WTG-038-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-038	B	WTG-038-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-039	A	WTG-039-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-039	B	WTG-039-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-040	A	WTG-040-A-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	IND	YES	YES	1
WTG-040	B	WTG-040-B-PV.jpg	0.78	Muddy sand	IND	None	IND	IND	IND	IND	IND	1
WTG-040	A	WTG-040-A-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	IND	YES	YES	1
WTG-040	B	WTG-040-B-PV.jpg	0.78	Muddy sand	IND	None	IND	IND	IND	IND	IND	1
WTG-041	B	WTG-041-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-041	C	WTG-041-C-PV.jpg	0.61	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-042	A	WTG-042-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-042	B	WTG-042-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-043	A	WTG-043-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-043	B	WTG-043-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-044	A	WTG-044-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-044	C	WTG-044-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-045	A	WTG-045-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-045	B	WTG-045-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-046	A	WTG-046-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-046	C	WTG-046-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-047	A	WTG-047-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-047	C	WTG-047-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-048	A	WTG-048-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-048	B	WTG-048-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-049	A	WTG-049-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-049	C	WTG-049-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	IND	YES	YES	YES	1
WTG-050	A	WTG-050-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-050	B	WTG-050-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-051	A	WTG-051-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-051	B	WTG-051-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-052	A	WTG-052-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-052	C	WTG-052-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-030	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-031	A		11 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-031	B		16 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-032	A				Soft Sediment Fauna	Inferred Fauna	0
WTG-032	C				Soft Sediment Fauna	Inferred Fauna	0
WTG-033	D		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-033	E				Soft Sediment Fauna	Inferred Fauna	0
WTG-034	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-034	C		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-035	A		1 Tritia trivittata		Soft Sediment Fauna	Inferred Fauna	0
WTG-035	B				Inferred Fauna		0
WTG-036	A	Large Bivalves	Large Bivalves 2 Paguroidea 1 fish (not in DUP)		Soft Sediment Fauna	Inferred Fauna	0
WTG-036	B	Large Bivalves	Large Bivalves 2 Paguroidea 1 pleuronectidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-037	B				Soft Sediment Fauna	Inferred Fauna	0
WTG-037	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-038	A		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-038	B				Inferred Fauna		0
WTG-039	A				Inferred Fauna	Soft Sediment Fauna	0
WTG-039	B				Inferred Fauna	Soft Sediment Fauna	0
WTG-040	A	squid eggs	1 Paguroidea, 1 sea slug 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-040	B	squid eggs	1 indeterminate fish		Inferred Fauna	Soft Sediment Fauna	0
WTG-041	B		1 indeterminate fish		Inferred Fauna	Soft Sediment Fauna	0
WTG-041	C		4 shrimp 2 fish		Soft Sediment Fauna	Inferred Fauna	0
WTG-042	A	Large Bivalve	1 bivalve 1 Paguroidea, 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-042	B		1 Paguroidea, 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-043	A				Inferred Fauna		0
WTG-043	B	large bivalves	226 large bivalves 2 Cancer irroratus, 1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-044	A	Large Bivalves	large bivalves (at least 14) 3 Paguroidea, 3 shrimp 1 Lophius americanus, 1 fish		Soft Sediment Fauna	Inferred Fauna	0
WTG-044	C		numerous medium bivalves 3 Paguroidea, 6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-045	A				Inferred Fauna	Soft Sediment Fauna	0
WTG-045	B		1 Paguroidea		Inferred Fauna	Soft Sediment Fauna	0
WTG-046	A		1 paguroidea, 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-046	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-047	A		1 Cancer borealis 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-047	C		4 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-048	A		1 Paguroidea		Inferred Fauna	Soft Sediment Fauna	0
WTG-048	B		1 Pleuronectidae (Paralichthys dentatus?)		Inferred Fauna	Soft Sediment Fauna	0
WTG-049	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-049	C		1 starfish (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-050	A				Inferred Fauna		0
WTG-050	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-051	A	large bivalves	Large Bivalves 2 shrimp 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-051	B				Inferred Fauna		0
WTG-052	A		small bivalves		Soft Sediment Fauna	Inferred Fauna	0
WTG-052	C		numerous small bivalves		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-030	B	1	0	no			1 shrimp	
WTG-031	A	1	0	no			11 shrimp	
WTG-031	B	5	0	no			16 shrimp	
WTG-032	A	10	0	no				
WTG-032	C	20	0	no				
WTG-033	D	10	0	no			1 shrimp	
WTG-033	E	10	0	no				
WTG-034	A	20	0	no			1 shrimp	
WTG-034	C	10	0	no			1 Paguroidea	
WTG-035	A	1	0	no			1 Tritia trivittata	
WTG-035	B	1	0	no				
WTG-036	A	0	0	no	Large Bivalves		2 Paguroidea	
WTG-036	B	0	0	no	Large Bivalves		2 Paguroidea	
WTG-037	B	10	0	no				
WTG-037	C	15	0	no			1 shrimp	
WTG-038	A	1	0	no			1 Paguroidea	
WTG-038	B	5	0	no				
WTG-039	A	1	0	no				
WTG-039	B	1	0	no				
WTG-040	A	1	0	yes			1 Paguroidea, 1 sea slug	
WTG-040	B	1	0	yes				
WTG-041	B	1	0	no				
WTG-041	C	5	0	no			4 shrimp	
WTG-042	A	15	0	no	1 bivalve		1 Paguroidea, 2 shrimp	
WTG-042	B	25	0	no			1 Paguroidea, 1 shrimp	
WTG-043	A	10	0	no				
WTG-043	B	10	0	yes	226 large bivalves		2 Cancer irroratus, 1 paguroidea	
WTG-044	A	5	0	no	large bivalves (at least 14)		3 Paguroidea, 3 shrimp	
WTG-044	C	5	0	yes	numerous medium bivalves		3 Paguroidea, 6 shrimp	
WTG-045	A	5	0	no				
WTG-045	B	5	0	yes			1 Paguroidea	
WTG-046	A	1	0	no			1 paguroidea, 2 shrimp	
WTG-046	C	1	0	no			1 shrimp	
WTG-047	A	5	0	yes			1 Cancer borealis	
WTG-047	C	5	0	yes			4 shrimp, 1 sea slug	
WTG-048	A	1	0	no			1 Paguroidea	
WTG-048	B	1	0	no				
WTG-049	A	1	0	yes			1 shrimp	
WTG-049	C	5	0	yes			1 starfish (Astropecten?)	
WTG-050	A	5	0	yes				
WTG-050	B	5	0	no			2 shrimp	
WTG-051	A	10	0	no	Large Bivalves		2 shrimp	
WTG-051	B	10	0	no				
WTG-052	A	1	0	yes	small bivalves			
WTG-052	C	1	0	no	numerous small bivalves			

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-030	B		Amphipod tube clusters, large and small burrows, crab tracks
WTG-031	A		Amphipod tube clusters, large and small burrows, crab tracks
WTG-031	B		Amphipod tube clusters, large and small burrows
WTG-032	A		some clusters of amphipod tubes, scattered burrows
WTG-032	C		some clusters of amphipod tubes, scattered burrows
WTG-033	D		some clusters of amphipod tubes, scattered burrows
WTG-033	E		some clusters of amphipod tubes, scattered burrows
WTG-034	A		some clusters of amphipod tubes, scattered burrows
WTG-034	C		some clusters of amphipod tubes, scattered burrows
WTG-035	A		Amphipod tube clusters, small burrows, crab tracks, Caprellids visible in SPI photo
WTG-035	B		Amphipod tube clusters, large and small burrows
WTG-036	A	1 fish (not in DUP)	numerous clam siphons (potentially sensitive taxa?)
WTG-036	B	1 pleuronectidae	numerous clam siphons (potentially sensitive taxa?)
WTG-037	B		clusters of amphipod tubes
WTG-037	C		clusters of amphipods tubes
WTG-038	A		few amphipod tubes, large and small burrows, faint crab tracks
WTG-038	B		amphipod (Ericthtonius?) tube clusters, large and small burrows, faint crab tracks
WTG-039	A		Numerous burrows, some amphipod tube clusters, no visible epifauna
WTG-039	B		Numerous burrows, some amphipod tube clusters, no visible epifauna
WTG-040	A	1 Pleuronectidae (Paralichthys dentatus?)	Squid eggs present, adult squid visible, some amphipod tube clusters
WTG-040	B	1 indeterminate fish	Squid egg, few amphipod tube clusters, burrow traces, out of focus.
WTG-041	B	1 indeterminate fish	few amphipod tube clusters, large and small burrows
WTG-041	C	2 fish	Amphipod tube clusters, large and small burrows
WTG-042	A		amphipod tube clusters, one clam siphon visible
WTG-042	B		amphipod tube clusters, other traces and burrows
WTG-043	A		amphipod tube clusters, large and small burrows present
WTG-043	B		amphipod tube clusters, large and small burrows present, 1 gastropod egg case
WTG-044	A	1 Lophius americanus, 1 fish	few amphipod tube clusters, large and small burrows, faint crab tracks
WTG-044	C		few amphipod tube clusters, large and small burrows, faint crab tracks, 2 gastropod egg cases
WTG-045	A		no visible epifauna, some amphipod tubes, numerous burrows and traces
WTG-045	B		some amphipod tubes and traces, 3 egg cases (probably gastropod)
WTG-046	A		few amphipod tubes, large and small burrows, faint crab tracks, three very large burrows/feeding voids
WTG-046	C		few amphipod tubes, large and small burrows, faint crab tracks
WTG-047	A	1 Pleuronectidae (Paralichthys dentatus?)	2 gastropod egg cases, scattered amphipod tube clusters, crab tracks, some burrows
WTG-047	C		2 gastropod egg cases, scattered amphipod tube clusters, some burrows
WTG-048	A		Some amphipod tube clusters, traces and burrows.
WTG-048	B	1 Pleuronectidae (Paralichthys dentatus?)	Some amphipod tube clusters, traces and burrows.
WTG-049	A		2 gastropod egg cases, Some amphipod tube clusters, traces and burrows.
WTG-049	C		1 gastropod egg case, Some amphipod tube clusters, traces and burrows.
WTG-050	A		1 gastropod egg case, amphipod tube clusters, large and small burrows.
WTG-050	B		amphipod tube clusters, large and small burrows, faint crab tracks, one large feeding void?
WTG-051	A	1 Triglidae	some large bivalves, Some amphipod tube clusters, traces and burrows.
WTG-051	B		crab tracks, some amphipod tube clusters, traces and burrows.
WTG-052	A		1 gastropod egg case, few amphipod tubes, large and small burrows
WTG-052	C		few amphipod tubes, large and small burrows, faint crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-053	A	WTG-053-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	IND	YES	1
WTG-053	B	WTG-053-B-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	IND	YES	1
WTG-054	A	WTG-054-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-054	B	WTG-054-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-055	B	WTG-055-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-055	C	WTG-055-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-056	A	WTG-056-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-056	C	WTG-056-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-057	B	WTG-057-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-057	C	WTG-057-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-058	A	WTG-058-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-058	B	WTG-058-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	IND	YES	YES	1
WTG-059	D	WTG-059-D-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-059	E	WTG-059-E-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-060	D	WTG-060-D-PV.jpg	0.72	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-060	E	WTG-060-E-PV.jpg	0.83	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-061	A	WTG-061-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-061	C	WTG-061-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
WTG-062	A	WTG-062-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-062	B	WTG-062-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-063	B	WTG-063-B-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-063	C	WTG-063-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-064	A	WTG-064-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-064	B	WTG-064-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-065	A	WTG-065-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
WTG-065	B	WTG-065-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-066	B	WTG-066-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-066	C	WTG-066-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-067	D	WTG-067-D-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	IND	YES	YES	1
WTG-067	E	WTG-067-E-PV.jpg	0.96	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-068	A	WTG-068-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-068	F	WTG-068-F-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-069	A	WTG-069-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-069	C	WTG-069-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-070	A	WTG-070-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-070	B	WTG-070-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-071	A	WTG-071-A-PV.jpg		Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-071	C	WTG-071-C-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-072	A	WTG-072-A-PV.jpg		Muddy sand	IND	None	Biological	NO	IND	YES	IND	1
WTG-072	B	WTG-072-B-PV.jpg	0.69	Muddy sand	IND	IND	IND	IND	IND	YES	IND	1
WTG-073	A	WTG-073-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-073	B	WTG-073-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-074	A	WTG-074-A-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	NO	NO	IND	1
WTG-074	B	WTG-074-B-PV.jpg	0.69	Muddy sand	IND	None	Physical	IND	NO	NO	IND	1
WTG-075	A	WTG-075-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-053	A		5 shrimp, 1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-053	B				Soft Sediment Fauna	Inferred Fauna	0
WTG-054	A				Inferred Fauna		0
WTG-054	B		1 Paguroidea, 3 Shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-055	B				Inferred Fauna		0
WTG-055	C				Inferred Fauna		0
WTG-056	A				Inferred Fauna		0
WTG-056	C				Inferred Fauna		0
WTG-057	B				Inferred Fauna		0
WTG-057	C				Inferred Fauna		0
WTG-058	A				Inferred Fauna		0
WTG-058	B				Inferred Fauna		0
WTG-059	D		3 small bivalves 1 shrimp, 1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-059	E	large bivalves	5 large bivalves 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-060	D				Soft Sediment Fauna	Inferred Fauna	0
WTG-060	E				Soft Sediment Fauna	Inferred Fauna	0
WTG-061	A	large bivalves	numerous large bivalves 2 small Paguroidea, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-061	C	large bivalves	Large Bivalves		Inferred Fauna		0
WTG-062	A		1 shrimp 1 fish		Soft Sediment Fauna	Inferred Fauna	0
WTG-062	B		2 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-063	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-063	C		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-064	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-064	B		few small bivalves		Soft Sediment Fauna	Inferred Fauna	0
WTG-065	A				Inferred Fauna		0
WTG-065	B				Inferred Fauna		0
WTG-066	B	Ceriantharia	4 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-066	C	Ceriantharia	5 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-067	D		1 burrowing starfish (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-067	E		1 burrowing starfish (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-068	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-068	F				Inferred Fauna		0
WTG-069	A		1 Cancer, 14 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-069	C		11 shrimp 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-070	A				Inferred Fauna		0
WTG-070	B				Inferred Fauna		0
WTG-071	A				Inferred Fauna		0
WTG-071	C				Inferred Fauna		0
WTG-072	A				Inferred Fauna		0
WTG-072	B				Inferred Fauna		0
WTG-073	A		small bivalves 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-073	B		1 Cancer irroratus, 1 tiny sea star, 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-074	A	Bivalves	Numerous (750 estimated) Bivalves		Soft Sediment Fauna	Inferred Fauna	0
WTG-074	B				Inferred Fauna		0
WTG-075	A		numerous small bivalves		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-053	A	5	0	no			5 shrimp, 1 Paguroidea	
WTG-053	B	20	0	no				
WTG-054	A	1	0	no				
WTG-054	B	5	0	no			1 Paguroidea, 3 Shrimp, 1 sea slug	
WTG-055	B	1	0	yes				
WTG-055	C	1	0	yes				
WTG-056	A	5	0	yes				
WTG-056	C	5	0	yes				
WTG-057	B	5	0	no				
WTG-057	C	5	0	no				
WTG-058	A	5	0	no				
WTG-058	B	10	0	no				
WTG-059	D	15	0	no	3 small bivalves		1 shrimp, 1 Paguroidea	
WTG-059	E	5	0	no	5 large bivalves		1 shrimp	
WTG-060	D	1	0	no				
WTG-060	E	1	0	no				
WTG-061	A	5	0	no	numerous large bivalves		2 small Paguroidea, 1 sea slug	
WTG-061	C	10	0	no	Large Bivalves			
WTG-062	A	5	0	no			1 shrimp	
WTG-062	B	5	0	no				
WTG-063	B	5	0	no			1 shrimp	
WTG-063	B	5	0	no			1 shrimp	
WTG-063	C	10	0	no			1 shrimp	
WTG-064	A	5	0	no			1 shrimp	
WTG-064	B	5	0	no	few small bivalves			
WTG-065	A	0	0	no				
WTG-065	B	10	0	no				
WTG-066	B	5	0	yes	4 Ceriantharia		2 shrimp	
WTG-066	C	5	0	no	5 Ceriantharia		2 shrimp	
WTG-067	D	1	0	no			1 burrowing starfish (Astropecten?)	
WTG-067	E	1	0	no			1 burrowing starfish (Astropecten?)	
WTG-068	A	5	0	no			2 shrimp	
WTG-068	F	1	0	no				
WTG-069	A	0	0	no			1 Cancer, 14 shrimp	
WTG-069	C	5	0	no			11 shrimp	
WTG-070	A	10	0	no				
WTG-070	B	10	0	no				
WTG-071	A	10	0	no				
WTG-071	C	10	0	no				
WTG-072	A	10	0	no				
WTG-072	B	10	0	no				
WTG-073	A	5	0	no	small bivalves			
WTG-073	B	5	0	no			1 Cancer irroratus, 1 tiny sea star, 1 shrimp	
WTG-074	A	0	0	no	Numerous (750 estimated) Bivalves			
WTG-074	B	10	0	no				
WTG-075	A	0	0	no	numerous small bivalves			

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-053	A		some scattered amphipod tubes
WTG-053	B		scattered amphipod tubes
WTG-054	A		Some amphipod tube clusters, traces and burrows.
WTG-054	B		crab tracks, Some amphipod tube clusters, traces and burrows.
WTG-055	B		1 gastropod egg case, small burrows, 2 very large burrows/feeding voids, focus issues
WTG-055	C		1 gastropod egg case, large and small burrows, focus issues
WTG-056	A		1 gastropod egg case, some amphipod tube clusters, faint crab tracks, large burrows, one large feeding void?
WTG-056	C		2 gastropod egg cases, some amphipod tube clusters, faint crab tracks, large and small burrows
WTG-057	B		amphipod (Ericthtonius?) tube clusters, large and small burrows, faint crab tracks, focus issues
WTG-057	C		amphipod (Ericthtonius?) tube clusters, large and small burrows, faint crab tracks, focus issues
WTG-058	A		some amphipod tube clusters, one large burrow and several large feeding voids?
WTG-058	B		amphipod tube clusters
WTG-059	D		amphipod tube clusters, small and large burrows
WTG-059	E		some amphipod tube clusters, crab tracks, large and small burrows, one large feeding void?
WTG-060	D		Amphipod tube clusters, some large and small burrows, faint crab tracks
WTG-060	E		Amphipod tube clusters, some large and small burrows, faint crab tracks
WTG-061	A		Amphipod tube clusters, some large and small burrows, dense bed of large bivalves
WTG-061	C		Amphipod tube clusters, some large and small burrows, few large bivalves
WTG-062	A	1 fish	Amphipod tube clusters, numerous small burrows, 2 very large burrow
WTG-062	B	2 Triglidae	Amphipod tube clusters, numerous small burrows
WTG-063	B		Amphipod tube clusters, numerous small burrows, few large burrows
WTG-063	C		Amphipod tube clusters, numerous small burrows, few large burrows, crab tracks
WTG-064	A		Amphipod tube clusters, numerous small burrows, one large burrow/feeding void, crab tracks
WTG-064	B		Amphipod tube clusters, large and small burrows, crab tracks, focus issues
WTG-065	A		bottom roughened, no clear tubes or burrows, focus issues?
WTG-065	B		Amphipod tube clusters, some large and small burrows
WTG-066	B		2 gastropod egg cases, scattered amphipod tubes, several large burrows
WTG-066	C		scattered amphipod tubes, several large burrows
WTG-067	D		few amphipod tubes, some small burrows
WTG-067	E		few amphipod tubes, some small burrows
WTG-068	A		crab tracks, some amphipod tube clusters
WTG-068	F		no visible epifauna, few amphipod tubes.
WTG-069	A		large and small burrows, crab tracks
WTG-069	C	1 Triglidae	amphipod tube clusters, large and small burrows
WTG-070	A		amphipod tube clusters, large and small burrows
WTG-070	B		amphipod tube clusters, large and small burrows
WTG-071	A		amphipod tube clusters, some large and small burrows, focus issues, no epifauna visible
WTG-071	C		amphipod tube clusters, some large and small burrows, focus issues, no epifauna visible
WTG-072	A		crab tracks, amphipod tube clusters, some large and small burrows, focus issues, no epifauna visible
WTG-072	B		crab tracks, amphipod tube clusters, some large and small burrows, one very large burrow/feeding void?, focus and light issues, no epifauna visible
WTG-073	A	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, small burrows, crab tracks
WTG-073	B		amphipod tube clusters, large and small burrows, crab tracks
WTG-074	A		crab tracks
WTG-074	B		amphipod tube clusters, some large and small burrows, focus and light issues, no epifauna visible
WTG-075	A		crab tracks, 1 feeding void?

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-075	B	WTG-075-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-076	A	WTG-076-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-076	B	WTG-076-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-077	A	WTG-077-A-PV.jpg	0.96	Muddy sand	IND	None	IND	IND	NO	YES	IND	1
WTG-077	B	WTG-077-B-PV.jpg	0.69	Muddy sand	IND	Large ripples	Physical	YES	IND	YES	IND	1
WTG-078	A	WTG-078-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-078	B	WTG-078-B-PV.jpg	0.96	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-079	A	WTG-079-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-079	C	WTG-079-C-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	IND	YES	NO	1
WTG-080	A	WTG-080-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-080	B	WTG-080-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-081	A	WTG-081-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-081	B	WTG-081-B-PV.jpg	0.87	Muddy sand	IND	IND	IND	IND	IND	YES	IND	1
WTG-082	A	WTG-082-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-082	B	WTG-082-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-083	A	WTG-083-A-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-083	C	WTG-083-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	IND	YES	IND	1
WTG-084	A	WTG-084-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-084	B	WTG-084-B-PV.jpg	0.69	Muddy sand	IND	IND	IND	IND	IND	YES	IND	1
WTG-085	A	WTG-085-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Both	YES	YES	YES	YES	1
WTG-085	C	WTG-085-C-PV.jpg	0.87	Muddy sand	IND	IND	IND	IND	YES	YES	IND	1
WTG-086	A	WTG-086-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-086	B	WTG-086-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-087	A	WTG-087-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-087	B	WTG-087-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-088	A	WTG-088-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-088	C	WTG-088-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-089	A	WTG-089-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-089	B	WTG-089-B-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-090	A	WTG-090-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-090	C	WTG-090-C-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-091	A	WTG-091-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-091	C	WTG-091-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-092	A	WTG-092-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-092	C	WTG-092-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-093	A	WTG-093-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-093	C	WTG-093-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-094	A	WTG-094-A-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-094	B	WTG-094-B-PV.jpg		Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-095	A	WTG-095-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-095	B	WTG-095-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-096	A	WTG-096-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-096	B	WTG-096-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-097	A	WTG-097-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-097	B	WTG-097-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-075	B		1 Cancer borealis		Soft Sediment Fauna	Inferred Fauna	0
WTG-076	A		1 shrimp		Inferred Fauna	Soft Sediment Fauna	0
WTG-076	B		1 burrowing starfish (Astropecten?)		Inferred Fauna	Soft Sediment Fauna	0
WTG-077	A		3 shrimp, 1 large crab		Soft Sediment Fauna	Inferred Fauna	0
WTG-077	B		2 shrimp		Soft Sediment Fauna		0
WTG-078	A				Soft Sediment Fauna	Inferred Fauna	0
WTG-078	B				Soft Sediment Fauna	Inferred Fauna	0
WTG-079	A				Inferred Fauna		0
WTG-079	C		1 large crab		Soft Sediment Fauna	Inferred Fauna	0
WTG-080	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-080	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-081	A		1 Paguroidea 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-081	B		1 fish		Soft Sediment Fauna	Inferred Fauna	0
WTG-082	A		1 fish		Soft Sediment Fauna	Inferred Fauna	0
WTG-082	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-083	A	Ceriantharia	1 Ceriantharia 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-083	C		1 Cancer borealis		Soft Sediment Fauna	Inferred Fauna	0
WTG-084	A				Inferred Fauna		0
WTG-084	B				Inferred Fauna		0
WTG-085	A	Ceriantharia	1 Ceriantharia, small bivalves 1 sea slug, 1 shrimp, 2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-085	C		1 Cancer borealis, 1 burrowing sea star (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-086	A		1 shrimp		Inferred Fauna		0
WTG-086	B				Inferred Fauna		0
WTG-087	A		2 Ceriantharia, small bivalves 1 large crab, partially buried		Soft Sediment Fauna	Inferred Fauna	0
WTG-087	B		small bivalves 2 sea slugs		Soft Sediment Fauna	Inferred Fauna	0
WTG-088	A				Inferred Fauna		0
WTG-088	C				Inferred Fauna		0
WTG-089	A		5 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-089	B	squid eggs	1 Loligo peali		Soft Sediment Fauna	Inferred Fauna	0
WTG-090	A		1 sea slug, 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-090	C		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-091	A				Inferred Fauna		0
WTG-091	C		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-092	A				Inferred Fauna		0
WTG-092	C				Inferred Fauna		0
WTG-093	A		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-093	C				Inferred Fauna		0
WTG-094	A		2 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-094	B				Inferred Fauna		0
WTG-095	A	Ceriantharia	1 Ceriantharia 1 Paguroidea, 1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-095	B		1 paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-096	A		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-096	B		1 Cancer borealis, 3 shrimp 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-097	A				Inferred Fauna		0
WTG-097	B				Inferred Fauna		0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-075	B	5	0	no			1 Cancer borealis	
WTG-076	A	15	0	no			1 shrimp	
WTG-076	B	15	0	no			1 burrowing starfish (Astropecten?)	
WTG-077	A	0	0	no			3 shrimp, 1 large crab	
WTG-077	B	0	0	no			2 shrimp	
WTG-078	A	20	0	no				
WTG-078	B	25	0	no				
WTG-079	A	5	0	no				
WTG-079	C	10	0	no			1 large crab	
WTG-080	A	10	0	no			1 shrimp	
WTG-080	B	5	0	no			1 shrimp	
WTG-081	A	10	0	no			1 Paguroidea	
WTG-081	B	10	0	no				
WTG-082	A	5	0	no				
WTG-082	B	5	0	no			3 shrimp	
WTG-083	A	1	0	no	1 Ceriantharia		1 sea slug	
WTG-083	C	5	0	no			1 Cancer borealis	
WTG-084	A	1	0	no				
WTG-084	B	1	0	no				
WTG-085	A	20	0	no	1 Ceriantharia, small bivalves		1 sea slug, 1 shrimp, 2 burrowing sea stars (Astropecten?)	
WTG-085	C	10	0	no			1 Cancer borealis, 1 burrowing sea star (Astropecten?)	
WTG-086	A	5	0	no			1 shrimp	
WTG-086	B	1	0	yes				
WTG-087	A	10	0	yes	2 Ceriantharia, small bivalves		1 large crab, partially buried	
WTG-087	B	5	0	no	small bivalves		2 sea slugs	
WTG-088	A	10	0	no				
WTG-088	C	10	0	no				
WTG-089	A	10	0	no			5 shrimp, 1 sea slug	
WTG-089	B	10	0	yes			1 Loligo peali	
WTG-090	A	10	0	no			1 sea slug, 3 shrimp	
WTG-090	C	10	0	no			2 shrimp	
WTG-091	A	5	0	yes				
WTG-091	C	10	0	no			5 shrimp	
WTG-092	A	5	0	no				
WTG-092	C	5	0	no				
WTG-093	A	1	0	no			1 Paguroidea	
WTG-093	C	1	0	no				
WTG-094	A	1	0	no			2 Paguroidea	
WTG-094	B	1	0	no				
WTG-095	A	1	0	no	1 Ceriantharia		1 Paguroidea, 1 burrowing sea star (Astropecten?)	
WTG-095	B	1	0	no			1 paguroidea	
WTG-096	A	1	0	no			5 shrimp	
WTG-096	B	1	0	no			1 Cancer borealis, 3 shrimp	
WTG-097	A	1	0	no				
WTG-097	B	1	0	no				

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-075	B		amphipod tube clusters, small and large burrows
WTG-076	A		amphipod tube clusters, large burrows
WTG-076	B		amphipod tube clusters, large burrows
WTG-077	A		large crab at very edge of photo, faint crab tracks present
WTG-077	B		2 shrimp, amphipod tubes, crab tracks
WTG-078	A		numerous amphipod tube clusters, large burrows, some with signs of reduced sediment.
WTG-078	B		numerous amphipod tube clusters, large burrows
WTG-079	A		Some amphipod tube clusters, few small burrows. No visible epifauna.
WTG-079	C		Some amphipod tube clusters, few small burrows.
WTG-080	A		Some amphipod tube clusters, few small burrows, faint crab tracks.
WTG-080	B		Some amphipod tube clusters, few small burrows.
WTG-081	A	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, large burrows
WTG-081	B	1 fish	lighting/focus insufficient for fish ID, amphipod tube clusters, large burrows
WTG-082	A	1 fish	amphipod tube clusters, small and large burrows
WTG-082	B		amphipod tube clusters, small and large burrows
WTG-083	A		few amphipod tube clusters, small burrows
WTG-083	C		few amphipod tube clusters, small burrows, one large burrow
WTG-084	A		crab tracks, few amphipod tubes and burrows
WTG-084	B		crab tracks, few amphipod tubes and burrows
WTG-085	A		amphipod tube clusters, small and large burrows
WTG-085	C	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, large burrows. Picture not well focused, details of smaller structures missing.
WTG-086	A		few amphipod tubes, some large and small burrows
WTG-086	B		few amphipod tubes, some large and small burrows, Naticid egg case
WTG-087	A		2 gastropod egg cases, amphipod tube clusters, large and small burrows
WTG-087	B		amphipod tube clusters, large and small burrows
WTG-088	A		amphipod tube clusters, small burrows
WTG-088	C		amphipod tube clusters, small burrows, crab tracks
WTG-089	A		amphipod tube clusters, small burrows, crab tracks
WTG-089	B		amphipod tube clusters, small burrows, crab tracks
WTG-090	A		amphipod tube clusters, large burrows
WTG-090	C		amphipod tube clusters, large burrows
WTG-091	A		1 gastropod egg case, some amphipod tube clusters, faint crab tracks, large burrows
WTG-091	C		amphipod tube clusters, faint crab tracks, large and small burrows
WTG-092	A		amphipod tube clusters, faint crab tracks, large and small burrows
WTG-092	C		amphipod tube clusters, faint crab tracks, large and small burrows
WTG-093	A		few amphipod tube clusters, crab tracks, large and small burrows
WTG-093	C		few amphipod tube clusters, crab tracks, large and small burrows
WTG-094	A		few amphipod tube clusters, crab tracks, large and small burrows
WTG-094	B		few amphipod tube clusters, crab tracks, large and small burrows
WTG-095	A		crab tracks, amphipod tube clusters
WTG-095	B		crab and gastropod tracks, amphipod tube clusters, some burrows.
WTG-096	A		sparse amphipod tubes, some burrows
WTG-096	B	1 Pleuronectidae (Paralichthys dentatus?)	sparse amphipod tubes, some burrows
WTG-097	A		Large and small burrows, few amphipod tubes
WTG-097	B		Large and small burrows, few amphipod tubes

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-098	A	WTG-098-A-PV.jpg	0.61	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
WTG-098	B	WTG-098-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
WTG-099	A	WTG-099-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-099	B	WTG-099-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-100	A	WTG-100-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-100	B	WTG-100-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-101	A	WTG-101-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
WTG-101	B	WTG-101-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
WTG-102	A	WTG-102-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-102	B	WTG-102-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-103	A	WTG-103-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	NO	1
WTG-103	B	WTG-103-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-104	A	WTG-104-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-104	B	WTG-104-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-105	B	WTG-105-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-105	C	WTG-105-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-106	B	WTG-106-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-106	C	WTG-106-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-107	A	WTG-107-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-107	B	WTG-107-B-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-108	B	WTG-108-B-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-108	C	WTG-108-C-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
WTG-109	A	WTG-109-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-109	B	WTG-109-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-110	A	WTG-110-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-110	C	WTG-110-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-111	A	WTG-111-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-111	C	WTG-111-C-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-112	B	WTG-112-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-112	C	WTG-112-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-113	A	WTG-113-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-113	B	WTG-113-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-114	A	WTG-114-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-114	C	WTG-114-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-115	A	WTG-115-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-115	B	WTG-115-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
WTG-116	A	WTG-116-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
WTG-116	D	WTG-116-D-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	NO	1
WTG-117	G	WTG-117-G-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	NO	NO	YES	1
WTG-117	I	WTG-117-I-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
WTG-118	A	WTG-118-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-118	B	WTG-118-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-119	A	WTG-119-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-119	C	WTG-119-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-120	A	WTG-120-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-098	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-098	B		2 Paguroidea, 4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-099	A		1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-099	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-100	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-100	B		1 sea slug, 1 crangonid		Soft Sediment Fauna	Inferred Fauna	0
WTG-101	A	Ceriantharia	3 Ceriantharia		Soft Sediment Fauna	Inferred Fauna	0
WTG-101	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-102	A				Inferred Fauna		0
WTG-102	B				Inferred Fauna		0
WTG-103	A				Inferred Fauna		0
WTG-103	B		1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-104	A	Ceriantharia	1 Ceriantharia 2 shrimp 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-104	B				Inferred Fauna		0
WTG-105	B		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-105	C		1 pleuronectidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-106	B				Inferred Fauna		0
WTG-106	C	burrowing anemo	1 burrowing anemone		Soft Sediment Fauna	Inferred Fauna	0
WTG-107	A	Ceriantharia	1 Ceriantharia 1 sea slug, 1 Paguroidea		Soft Sediment Fauna	Inferred Fauna	0
WTG-107	B	Ceriantharia	1 Ceriantharia		Soft Sediment Fauna	Inferred Fauna	0
WTG-108	B		1 juvenile crab		Soft Sediment Fauna	Inferred Fauna	0
WTG-108	C		2 Cancer borealis/irroratus		Soft Sediment Fauna	Inferred Fauna	0
WTG-109	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-109	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-110	A				Inferred Fauna		0
WTG-110	C				inferred Fauna		0
WTG-111	A				Inferred Fauna		0
WTG-111	C				Inferred Fauna		0
WTG-112	B		1 Cancer borealis		Soft Sediment Fauna	Inferred Fauna	0
WTG-112	C		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-113	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-113	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-114	A				Inferred Fauna		0
WTG-114	C				Inferred Fauna		0
WTG-115	A		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-115	B		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-116	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-116	D				Inferred Fauna		0
WTG-117	G		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-117	I				Inferred Fauna		0
WTG-118	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-118	B		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-119	A		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-119	C		1 shrimp, 1 sea slug		Soft Sediment Fauna	Inferred Fauna	0
WTG-120	A		1 large crab, 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-098	A	25	0	no			2 shrimp	
WTG-098	B	25	0	no			2 Paguroidea, 4 shrimp	
WTG-099	A	15	0	no			1 sea slug	
WTG-099	B	15	0	no			2 shrimp	
WTG-100	A	5	0	no			2 shrimp	
WTG-100	B	5	0	no			1 sea slug, 1 crangonid	
WTG-101	A	10	0	no	3 Ceriantharia			
WTG-101	B	5	0	no			1 shrimp	
WTG-102	A	1	0	no				
WTG-102	B	1	0	no				
WTG-103	A	1	0	no				
WTG-103	B	1	0	no			1 Paguroidea	
WTG-104	A	1	0	no	1 Ceriantharia		2 shrimp	
WTG-104	B	1	0	no				
WTG-105	B	5	0	no			4 shrimp	
WTG-105	C	5	0	no				
WTG-106	B	1	0	no				
WTG-106	C	1	0	no	1 burrowing anemone			
WTG-107	A	0	0	no	1 Ceriantharia		1 sea slug, 1 Paguroidea	
WTG-107	B	0	0	no	1 Ceriantharia			
WTG-108	B	20	0	no			1 juvenile crab	
WTG-108	C	15	0	no			2 Cancer borealis/irroratus	
WTG-109	A	20	0	no			1 shrimp	
WTG-109	B	15	0	no			3 shrimp	
WTG-110	A	5	0	no				
WTG-110	C	10	0	no				
WTG-111	A	10	0	no				
WTG-111	C	5	0	no				
WTG-112	B	5	0	no			1 Cancer borealis	
WTG-112	C	5	0	no			2 shrimp	
WTG-113	A	1	0	no			2 shrimp	
WTG-113	B	1	0	no			1 shrimp	
WTG-114	A	1	0	no				
WTG-114	C	1	0	no				
WTG-115	A	0	0	no			3 shrimp	
WTG-115	B	0	0	no			5 shrimp	
WTG-116	A	0	0	no			2 shrimp	
WTG-116	D	0	0	no				
WTG-117	G	0	0	no			2 shrimp	
WTG-117	I	0	0	no				
WTG-118	A	25	0	no			1 shrimp	
WTG-118	B	25	0	no			5 shrimp	
WTG-119	A	5	0	no			3 shrimp	
WTG-119	C	10	0	no			1 shrimp, 1 sea slug	
WTG-120	A	5	0	no			1 large crab, 3 shrimp	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-098	A		numerous amphipod tube clusters, large burrows
WTG-098	B		numerous amphipod tube clusters, large burrows
WTG-099	A		numerous amphipod tube clusters, faint crab track, large and small burrows
WTG-099	B		numerous amphipod tube clusters, faint crab track, large and small burrows
WTG-100	A		amphipod tube clusters, faint crab track, large and small burrows
WTG-100	B		amphipod tube clusters, faint crab track, large and small burrows
WTG-101	A		amphipod tube clusters, some small burrows present
WTG-101	B		some amphipod tube clusters, faint crab tracks
WTG-102	A		one large, few small burrows
WTG-102	B		faint crab tracks, few small burrows
WTG-103	A		few large and small burrows
WTG-103	B		few amphipod tube clusters, few large and small burrows
WTG-104	A	1 Triglidae	crab tracks, large burrows, few amphipod tube clusters
WTG-104	B		crab tracks, large burrows (one with reduced sediment), few amphipod tube clusters
WTG-105	B		few amphipod tube clusters, small burrows
WTG-105	C	1 pleuronectidae	few amphipod tube d(Erichthonius?) clusters, crab tracks, focus/lighting a little off
WTG-106	B		few amphipod tube clusters, large burrows, crab tracks, focus/lighting a little off
WTG-106	C		few amphipod tube clusters, large burrows, crab tracks, focus/lighting a little off
WTG-107	A		crab tracks, large burrows
WTG-107	B		crab tracks, large burrows
WTG-108	B		abundant amphipod tube clusters, crab tracks, small burrows
WTG-108	C		abundant amphipod tube clusters, crab tracks, small burrows
WTG-109	A		amphipod tube clusters, crab tracks, large and small burrows
WTG-109	B		amphipod tube clusters, crab tracks, large and small burrows, large tubes
WTG-110	A		amphipod tube clusters, faint crab tracks, large and small burrows
WTG-110	C		amphipod tube clusters, faint crab tracks, small burrows
WTG-111	A		amphipod tube clusters, large and small burrows
WTG-111	C		amphipod tube clusters, large and small burrows, crab tracks
WTG-112	B		few amphipod tube clusters, small burrows, crab tracks
WTG-112	C		few amphipod tube clusters, small burrows, crab tracks
WTG-113	A		sparse amphipod tubes, crab tracks, some small burrows
WTG-113	B		sparse amphipod tubes, crab tracks, some small burrows
WTG-114	A		sparse amphipod tubes, abundantcrab tracks, few burrows
WTG-114	C		sparse amphipod tubes, abundantcrab tracks, few burrows
WTG-115	A		1 large burrow
WTG-115	B		crab tracks
WTG-116	A		crab tracks, few large burrows
WTG-116	D		crab tracks, few large burrows, some light and focus issues
WTG-117	G		crab tracks, few large burrows
WTG-117	I		crab tracks, few large burrows, some light and focus issues
WTG-118	A		abundant amphipod tube clusters, small burrows
WTG-118	B		abundant amphipod tube clusters, large and small burrows
WTG-119	A		some amphipod tube clusters, small burrows, crab tracks
WTG-119	C		some amphipod tube clusters, small burrows, crab tracks
WTG-120	A		amphipod tube clusters, large and small burrows, crab tracks

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-120	C	WTG-120-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-121	A	WTG-121-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-121	B	WTG-121-B-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-122	A	WTG-122-A-PV.jpg	0.69	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-122	B	WTG-122-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1
WTG-123	A	WTG-123-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-123	D	WTG-123-D-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-124	A	WTG-124-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-124	C	WTG-124-C-PV.jpg	0.61	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-125	A	WTG-125-A-PV.jpg	0.61	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-125	B	WTG-125-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-126	A	WTG-126-A-PV.jpg	0.61	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-126	C	WTG-126-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-127	A	WTG-127-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-127	C	WTG-127-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-128	A	WTG-128-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-128	B	WTG-128-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-129	A	WTG-129-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-129	B	WTG-129-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-130	A	WTG-130-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-130	B	WTG-130-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-131	A	WTG-131-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-131	B	WTG-131-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-132	A	WTG-132-A-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-132	B	WTG-132-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-133	A	WTG-133-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-133	B	WTG-133-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-134	A	WTG-134-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
WTG-134	B	WTG-134-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	NO	1
WTG-135	A	WTG-135-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-135	C	WTG-135-C-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-136	A	WTG-136-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-136	B	WTG-136-B-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-137	A	WTG-137-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-137	B	WTG-137-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	IND	1
WTG-138	A	WTG-138-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-138	C	WTG-138-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-139	A	WTG-139-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-139	C	WTG-139-C-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-140	A	WTG-140-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-140	C	WTG-140-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-141	B	WTG-141-B-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-141	C	WTG-141-C-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-142	H	WTG-142-H-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-142	I	WTG-142-I-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-120	C		13 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-121	A		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-121	B				Inferred Fauna		0
WTG-122	A				Inferred Fauna		0
WTG-122	B				Inferred Fauna		0
WTG-123	A				Inferred Fauna		0
WTG-123	D		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-124	A				Inferred Fauna		0
WTG-124	C				Inferred Fauna		0
WTG-125	A				Inferred Fauna		0
WTG-125	B				Inferred Fauna		0
WTG-126	A		4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-126	C		burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-127	A		1 shrimp, 2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-127	C		2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-128	A				Inferred Fauna		0
WTG-128	B				Inferred Fauna		0
WTG-129	A		6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-129	B		1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-130	A	burrowing anemo	1 burrowing anemone 3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-130	B		6 shrimp 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-131	A	Ceriantharia	1 Ceriantharia		Soft Sediment Fauna	Inferred Fauna	0
WTG-131	B		1 shrimp 1 Triglidae		Soft Sediment Fauna	Inferred Fauna	0
WTG-132	A	Ceriantharia	1 Ceriantharia 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-132	B		5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-133	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-133	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-134	A	Ceriantharia	2 Ceriantharia 1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-134	B		1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-135	A		1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-135	C	Ceriantharia	5 Ceriantharia 3 shrimp, 1 burrowing sea star (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-136	A		85 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-136	B		152 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-137	A				Inferred Fauna		0
WTG-137	B	burrowing anemo	1 burrowing anemone		Soft Sediment Fauna	Inferred Fauna	0
WTG-138	A		6 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-138	C				Inferred Fauna		0
WTG-139	A		4 burrowing sea stars (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-139	C		3 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-140	A		3 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-140	C	burrowing anemo	1 burrowing anemone		Soft Sediment Fauna	Inferred Fauna	0
WTG-141	B	burrowing anemo	1 burrowing anemone 5 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-141	C	Ceriantharia	1 Ceriantharia 1 shrimp, 4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-142	H		2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-142	I		1 Cancer borealis 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-120	C	5	0	yes			13 shrimp	
WTG-121	A	10	0	no			1 shrimp	
WTG-121	B	10	0	no				
WTG-122	A	20	0	no				
WTG-122	B	15	0	no				
WTG-123	A	10	0	no				
WTG-123	D	20	0	no			1 shrimp	
WTG-124	A	1	0	no				
WTG-124	C	1	0	no				
WTG-125	A	1	0	no				
WTG-125	B	1	0	no				
WTG-126	A	>1	0	no			4 burrowing sea stars (Astropecten?)	
WTG-126	C	>1	0	no			burrowing sea star (Astropecten?)	
WTG-127	A	20	0	no			1 shrimp, 2 burrowing sea stars (Astropecten?)	
WTG-127	C	5	0	no			2 burrowing sea stars (Astropecten?)	
WTG-128	A	15	0	no				
WTG-128	B	25	0	no				
WTG-129	A	5	0	no			6 shrimp	
WTG-129	B	5	0	no				
WTG-130	A	10	0	no	1 burrowing anemone		3 shrimp	
WTG-130	B	10	0	no			6 shrimp	
WTG-131	A	5	0	no	1 Ceriantharia			
WTG-131	B	10	0	yes			1 shrimp	
WTG-132	A	20	0	no	1 Ceriantharia		2 shrimp	
WTG-132	B	10	0	no			5 shrimp	
WTG-133	A	10	0	no			2 shrimp	
WTG-133	B	5	0	no			1 shrimp	
WTG-134	A	25	0	no	2 Ceriantharia		1 burrowing sea star (Astropecten?)	
WTG-134	B	25	0	no			1 shrimp	
WTG-135	A	25	0	no			1 burrowing sea star (Astropecten?)	
WTG-135	C	25	0	no	5 Ceriantharia		3 shrimp, 1 burrowing sea star (Astropecten?)	
WTG-136	A	30	0	no			85 shrimp	
WTG-136	B	30	0	no			152 shrimp	
WTG-137	A	10	0	no				
WTG-137	B	15	0	no	1 burrowing anemone			
WTG-138	A	15	0	no			6 shrimp	
WTG-138	C	10	0	no				
WTG-139	A	10	0	no			4 burrowing sea stars (Astropecten?), 2 shrimp	
WTG-139	C	5	0	no			3 burrowing sea stars (Astropecten?)	
WTG-140	A	15	0	no			3 burrowing sea stars (Astropecten?)	
WTG-140	C	5	0	no	1 burrowing anemone			
WTG-141	B	5	0	no	1 burrowing anemone		5 burrowing sea stars (Astropecten?)	
WTG-141	C	10	0	no	1 Ceriantharia		1 shrimp, 4 burrowing sea stars (Astropecten?)	
WTG-142	H	10	0	no			2 burrowing sea stars (Astropecten?)	
WTG-142	I	5	0	no			1 Cancer borealis	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-120	C		amphipod tube clusters, large and small burrows, 1 skate egg case, 1 large feeding void/burrow
WTG-121	A		amphipod tube clusters, large and small burrows
WTG-121	B		amphipod tube clusters, large and small burrows, crab tracks
WTG-122	A		amphipod tube clusters, crab tracks
WTG-122	B		amphipod tube clusters, faint crab tracks, 1 large burrow
WTG-123	A		amphipod tube clusters, crab tracks
WTG-123	D		amphipod tube clusters, crab tracks
WTG-124	A		few amphipod tube clusters, some burrows, crab tracks
WTG-124	C		few amphipod tube clusters, some burrows, crab tracks, out of focus
WTG-125	A		some amphipod tube clusters, some burrows, crab tracks. One dead Cancer carapace
WTG-125	B		some amphipod tube clusters, some burrows, crab and gastropod tracks.
WTG-126	A		few amphipod tube clusters, crab tracks, sea star trace
WTG-126	C		few amphipod tube clusters, crab tracks, sea star trace, out of focus
WTG-127	A		amphipod tube clusters, small burrows, microbial mats?
WTG-127	C		amphipod tube clusters, small burrows
WTG-128	A		amphipod tube clusters, numerous small burrows
WTG-128	B		amphipod tube clusters, small burrows, crab tracks
WTG-129	A		amphipod tube clusters, small burrows, few crab tracks
WTG-129	B	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, small burrows, crab tracks
WTG-130	A		amphipod tube clusters, large and small burrows, crab tracks
WTG-130	B	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, large and small burrows, crab tracks
WTG-130	B	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, large and small burrows, crab tracks
WTG-131	A		amphipod tube clusters, large and small burrows, crab tracks
WTG-131	B	1 Triglidae	1 gastropod egg case, amphipod tube clusters, large and small burrows, crab tracks
WTG-132	A		amphipod tube clusters, small burrows, crab tracks
WTG-132	B		amphipod tube clusters, small burrows, crab tracks
WTG-133	A		amphipod tube clusters, small burrows, crab tracks
WTG-133	B		amphipod tube clusters, small burrows, crab tracks
WTG-134	A		abundant amphipod tube clusters
WTG-134	B		abundant amphipod tube clusters
WTG-135	A		abundant amphipod tube clusters, microbial mat?
WTG-135	C	1 Pleuronectidae (Paralichthys dentatus?)	abundant amphipod tube clusters, microbial mat?, 2 large burrows/feeding voids
WTG-136	A		abundant amphipod tube clusters
WTG-136	B		abundant amphipod tube clusters
WTG-137	A		amphipod tube clusters, small burrows, crab tracks
WTG-137	B		amphipod tube clusters, small burrows, crab tracks
WTG-138	A		amphipod tube clusters, small burrows
WTG-138	C		amphipod tube clusters, small burrows
WTG-139	A		Amphipod tube (Erichthonius) clusters, 1 large burrow, small burrows, crab tracks, burrowing sea star traces.
WTG-139	C		Amphipod tube clusters, small burrows, gastropod track. Some focus issues
WTG-140	A		Amphipod tube (Ericthtonius?) clusters, small burrows, faint crab? tracks
WTG-140	C		Amphipod tube (Ericthtonius?) clusters, small burrows
WTG-141	B		Amphipod tube clusters, small burrows, small patch of Ampeliscid amphipod burrows
WTG-141	C		Amphipod tube clusters, small burrows
WTG-142	H		Amphipod tube clusters, small burrows
WTG-142	I	1 Pleuronectidae (Paralichthys dentatus?)	sparse amphipod tube clusters, small burrows, crab tracks, one large feeding void/burrow

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	PV Image ID	PV Field of View (m²)	Substrate Group	Substrate Subgroup	Bedforms	Bedform origin (Biological / Physical)	Mobile Bed	Burrows presence (yes/no)	Tubes presence (yes/no)	Lebensspuren	EFH Habitat Designation
WTG-143	A	WTG-143-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-143	C	WTG-143-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-144	A	WTG-144-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-144	B	WTG-144-B-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-145	B	WTG-145-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-145	C	WTG-145-C-PV.jpg	7.80	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-146	A	WTG-146-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-146	C	WTG-146-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-147	A	WTG-147-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-147	B	WTG-147-B-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-148	A	WTG-148-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-148	C	WTG-148-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-149	A	WTG-149-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-149	C	WTG-149-C-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-150	A	WTG-150-A-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-150	C	WTG-150-C-PV.jpg	0.87	Muddy sand	IND	None	Biological	NO	YES	YES	YES	1
WTG-151	A	WTG-151-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-151	B	WTG-151-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-152	A	WTG-152-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-152	B	WTG-152-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-153	B	WTG-153-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-153	C	WTG-153-C-PV.jpg	0.87	Muddy sand	IND	Small ripples	Physical	YES	NO	YES	YES	1
WTG-154	A	WTG-154-A-PV.jpg	0.69	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-154	B	WTG-154-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-155	A	WTG-155-A-PV.jpg		Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-155	B	WTG-155-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-156	A	WTG-156-A-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	YES	YES	1
WTG-156	B	WTG-156-B-PV.jpg	0.78	Muddy sand	IND	Small ripples	Physical	YES	YES	NO	YES	1
WTG-157	A	WTG-157-A-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	NO	YES	YES	1
WTG-157	B	WTG-157-B-PV.jpg	0.78	Muddy sand	IND	None	Biological	NO	YES	YES	IND	1

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Potentially Vulnerable Species	Type of Common Taxa	Type of Non-Native Taxa	Biotic Subclass	Co-occurring Biotic Subclass	Percent Cover of All Attached Fauna
WTG-143	A		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-143	C		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-144	A		12 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-144	B		2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-145	B		3 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-145	C		Hydroid 3 shrimp 2 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-146	A	Ceriantharia	1 Ceriantharia 4 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-146	C		4 burrowing sea stars (Astropecten?), 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-147	A		1 burrowing sea star (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-147	B		2 burrowing sea star (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-148	A		4 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-148	C	Ceriantharia	3 Ceriantharia Hydroid 1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-149	A		1 burrowing sea star (Astropecten?), 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-149	C		1 burrowing sea star (Astropecten?), 5 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-150	A		Hydroid 7 burrowing sea stars (Astropecten?), 1 Crangon septempsinosa		Soft Sediment Fauna	Inferred Fauna	0
WTG-150	C		10 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-151	A		7 burrowing sea stars (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-151	B		8 burrowing sea stars (Astropecten?), 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-152	A				Inferred Fauna		0
WTG-152	B		1 Ceriantharia 1 burrowing sea star (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-153	B		1 shrimp, 7 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-153	C		Hydroid 7 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-154	A		13 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-154	B		10 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-155	A		3 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-155	B		1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-156	A	Ceriantharia	3 Ceriantharia 1 burrowing sea star (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-156	B		2 burrowing sea stars (Astropecten?)		Soft Sediment Fauna	Inferred Fauna	0
WTG-157	A		3 burrowing sea stars (Astropecten?), 1 shrimp		Soft Sediment Fauna	Inferred Fauna	0
WTG-157	B		1 burrowing sea star (Astropecten?), 2 shrimp		Soft Sediment Fauna	Inferred Fauna	0

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Percent Cover of Emergent Taxa	Percent Cover of Macroalgae and/or SAV	Presence of Eggs	Infauna	Sessile Epifauna	Mobile Epifauna	Flora
WTG-143	A	35	0	no			2 shrimp	
WTG-143	C	30	0	no			3 shrimp	
WTG-144	A	25	0	no			12 shrimp	
WTG-144	B	15	0	no			2 shrimp	
WTG-145	B	10	0	no			3 shrimp	
WTG-145	C	15	0	no		Hydroid	3 shrimp	
WTG-146	A	30	0	no	1 Ceriantharia		4 burrowing sea stars (Astropecten?)	
WTG-146	C	5	0	no			4 burrowing sea stars (Astropecten?), 1 shrimp	
WTG-147	A	10	0	no			1 burrowing sea star (Astropecten?), 2 shrimp	
WTG-147	B	15	0	no			2 burrowing sea star (Astropecten?), 2 shrimp	
WTG-148	A	5	0	no			4 shrimp	
WTG-148	C	15	0	no	3 Ceriantharia	Hydroid	1 burrowing sea star (Astropecten?)	
WTG-149	A	15	0	no			1 burrowing sea star (Astropecten?), 1 shrimp	
WTG-149	C	15	0	no			1 burrowing sea star (Astropecten?), 5 shrimp	
WTG-150	A	10	0	no		Hydroid	7 burrowing sea stars (Astropecten?), 1 Crangon septempsinosa	
WTG-150	C	20	0	no			10 burrowing sea stars (Astropecten?)	
WTG-151	A	10	0	no			7 burrowing sea stars (Astropecten?), 2 shrimp	
WTG-151	B	10	0	no			8 burrowing sea stars (Astropecten?), 1 shrimp	
WTG-152	A	15	0	no				
WTG-152	B	5	0	no	1 Ceriantharia		1 burrowing sea star (Astropecten?)	
WTG-153	B	5	0	no			1 shrimp, 7 burrowing sea stars (Astropecten?)	
WTG-153	C	5	0	no		Hydroid	7 burrowing sea stars (Astropecten?)	
WTG-154	A	10	0	no			13 burrowing sea stars (Astropecten?)	
WTG-154	B	10	0	no			10 burrowing sea stars (Astropecten?)	
WTG-155	A	5	0	no			3 burrowing sea stars (Astropecten?)	
WTG-155	B	5	0	no			1 burrowing sea star (Astropecten?)	
WTG-156	A	1	0	no	3 Ceriantharia		1 burrowing sea star (Astropecten?)	
WTG-156	B	1	0	no			2 burrowing sea stars (Astropecten?)	
WTG-157	A	5	0	no			3 burrowing sea stars (Astropecten?), 1 shrimp	
WTG-157	B	5	0	no			1 burrowing sea star (Astropecten?), 2 shrimp	

Addendum D. PV Image Analyses Results for the Beacon Wind Lease Area Survey 2021

Station ID	Replicate	Fish	Comments
WTG-143	A		abundant amphipod tube clusters, large and small burrows
WTG-143	C		abundant amphipod tube clusters, large and small burrows
WTG-144	A		abundant amphipod tube clusters, large and small burrows
WTG-144	B		abundant amphipod tube clusters, large and small burrows, out of focus
WTG-145	B		amphipod tube clusters, small burrows, faint crab tracks
WTG-145	C	2 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, small burrows, faint crab tracks
WTG-146	A		amphipod tube clusters, small burrows
WTG-146	C		amphipod tube clusters, large and small burrows
WTG-147	A		amphipod tube clusters, large and small burrows, crab tracks
WTG-147	B		amphipod tube clusters, large and small burrows, crab tracks
WTG-148	A		amphipod tube clusters, small burrows, crab tracks
WTG-148	C		amphipod tube clusters, small burrows
WTG-149	A		amphipod tube clusters, small burrows
WTG-149	C		amphipod tube clusters, small burrows
WTG-150	A		Amphipod tube clusters, small burrows/tubes
WTG-150	C		Amphipod tube clusters, small burrows/tubes
WTG-151	A		Amphipod tube clusters, small burrows/tubes, microbial mat?
WTG-151	B		Amphipod tube clusters, small burrows/tubes, microbial mat?
WTG-152	A		amphipod tube clusters, some small burrows present
WTG-152	B	1 Pleuronectidae (Paralichthys dentatus?)	amphipod tube clusters, some small burrows present, crab tracks
WTG-153	B		amphipod tube clusters, some small burrows present, crab tracks
WTG-153	C		amphipod tube clusters, some small burrows present, crab tracks, microbial mat
WTG-154	A		amphipod tube clusters, some small burrows present
WTG-154	B		amphipod tube clusters, some small burrows present, crab tracks
WTG-155	A		large burrows, faint crab tracks, some amphipod tube clusters
WTG-155	B		large burrows, some amphipod tube clusters
WTG-156	A		sparse amphipod tube clusters, burrows, crab and gastropod tracks
WTG-156	B		sparse amphipod tube clusters, burrows
WTG-157	A		amphipod tube clusters, some small burrows present
WTG-157	B		amphipod tube clusters, some small burrows present

Addendum E

SPI and PV Images Catalog
for
WTG (Foundation) Stations

Plan-View Image

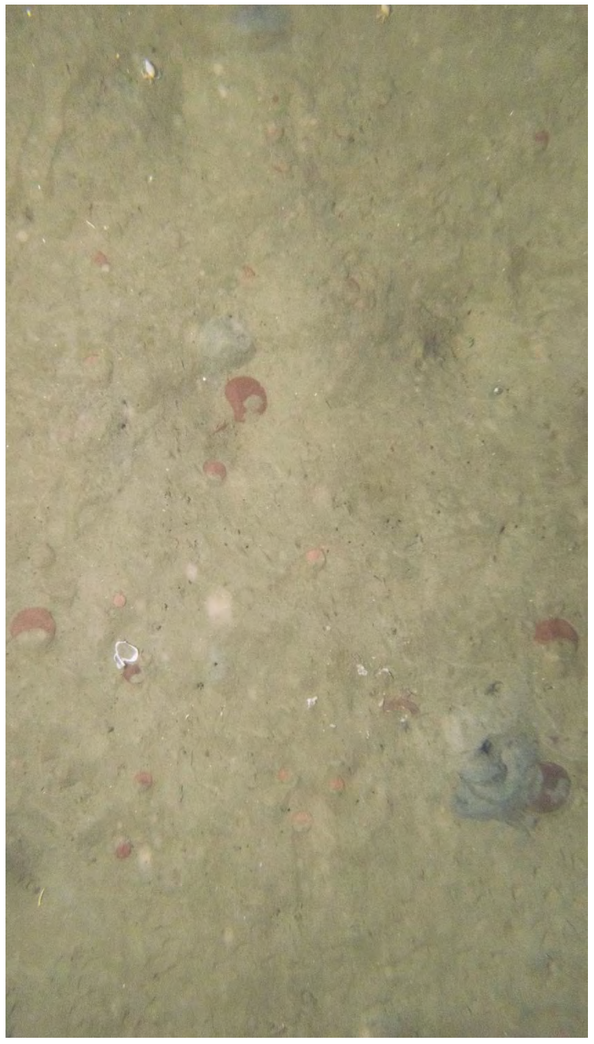


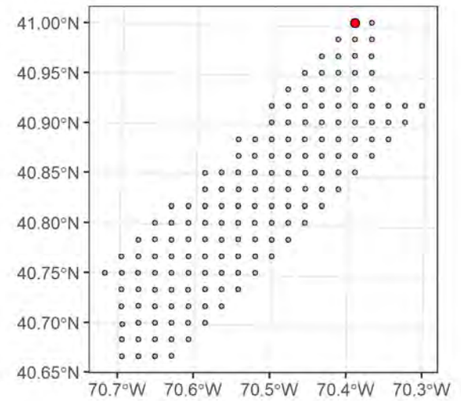
Figure E-1: WTG-001-A-PV

Sediment Profile Image



Figure E-2: WTG-001-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 02:47
Station (Replicate):	WTG-001 (1 of 2)
Depth (m):	-38.6
Prism Penetration (cm):	11.8
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	12 Echinarachnius parma 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small single burrows, 1 large Crustacean? Burrow

Plan-View Image



Figure E-3: WTG-001-B-PV

Sediment Profile Image

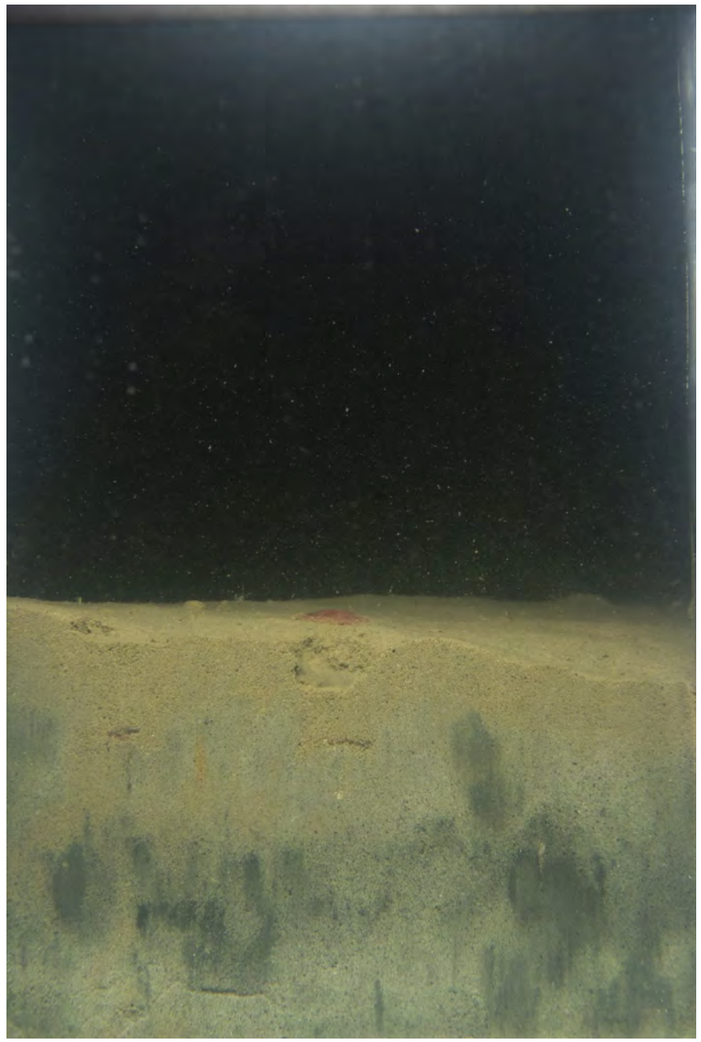
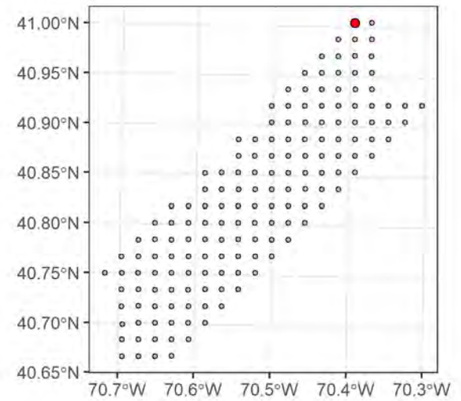


Figure E-4: WTG-001-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 02:59
Station (Replicate):	WTG-001 (2 of 2)
Depth (m):	-38.5
Prism Penetration (cm):	8.3
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	14 Echinarachnius parma 1 Cancer irroratus, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large burrow

Plan-View Image



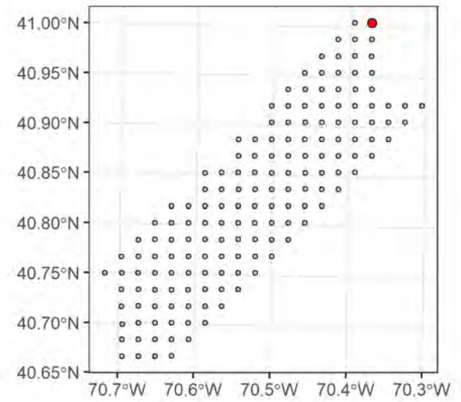
Figure E-5: WTG-002-B-PV

Sediment Profile Image



Figure E-6: WTG-002-B-SPI

Location



Attributes

Date Time (EST):	07/17/21 23:31
Station (Replicate):	WTG-002 (1 of 2)
Depth (m):	-38.9
Prism Penetration (cm):	4.7
aRPD Mean Depth (cm):	0.8
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	23 Echinarachnius parma 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	None
Comments:	>13 Echinarachnius parma, turbid water

Plan-View Image



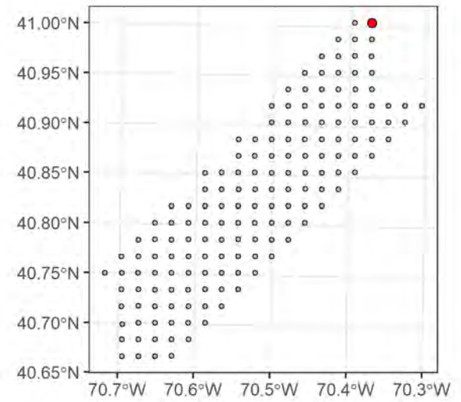
Figure E-7: WTG-002-A-PV

Sediment Profile Image



Figure E-8: WTG-002-C-SPI

Location



Attributes

Date Time (EST):	07/17/21 23:36
Station (Replicate):	WTG-002 (2 of 2)
Depth (m):	-38.9
Prism Penetration (cm):	9.3
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	104 Echinarachnius parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	None
Comments:	>88 Echinarachnius parma, turbid water

Plan-View Image



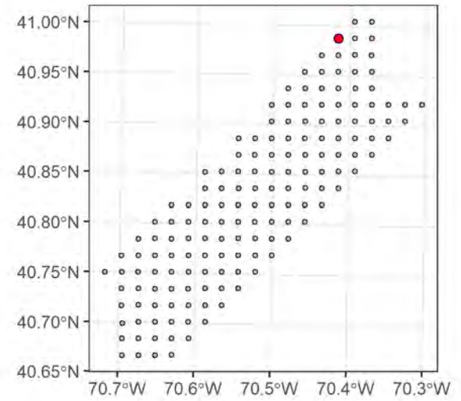
Figure E-9: WTG-003-B-PV

Sediment Profile Image



Figure E-10: WTG-003-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 02:06
Station (Replicate):	WTG-003 (1 of 2)
Depth (m):	-41.1
Prism Penetration (cm):	11.4
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	4 Echinarachnius parma 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	3 small burrows

Plan-View Image



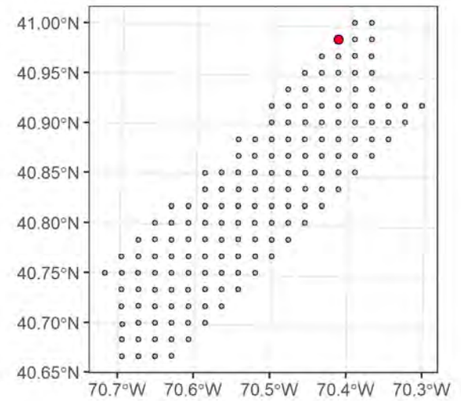
Figure E-11: WTG-003-A-PV

Sediment Profile Image



Figure E-12: WTG-003-C-SPI

Location



Attributes

Date Time (EST):	07/18/21 02:12
Station (Replicate):	WTG-003 (2 of 2)
Depth (m):	-40.9
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	crab tracks, 2 Echinarachnius parma traces, crustacean burrow

Plan-View Image



Figure E-13: WTG-004-A-PV

Sediment Profile Image

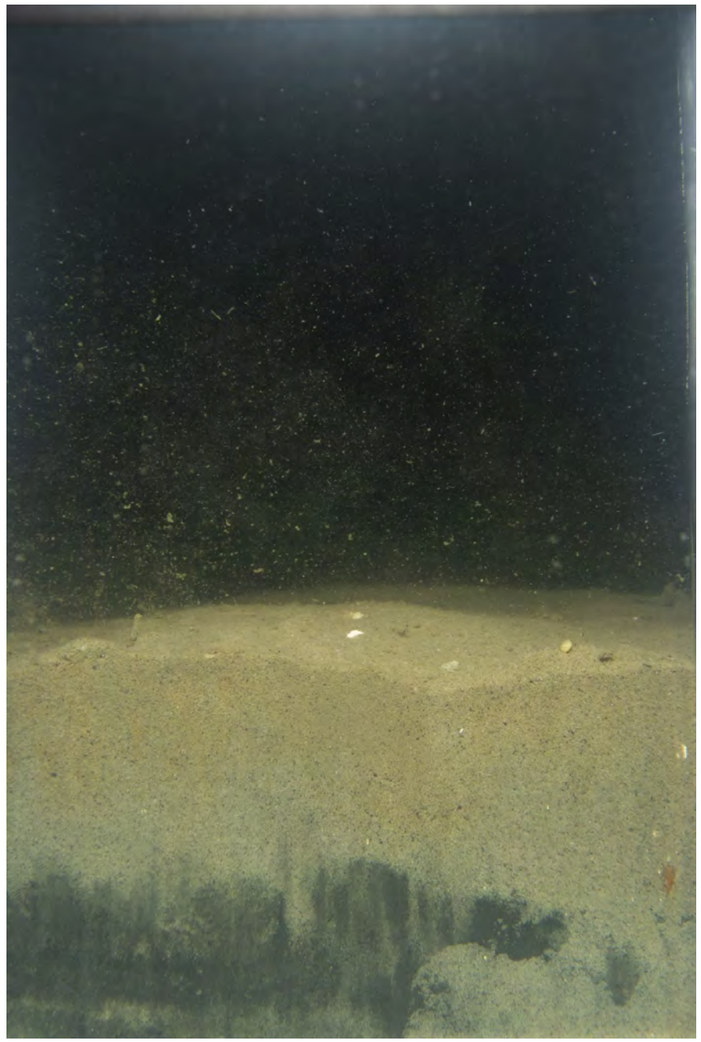
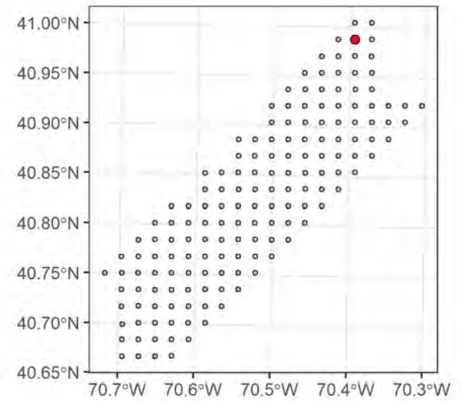


Figure E-14: WTG-004-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 01:21
Station (Replicate):	WTG-004 (1 of 2)
Depth (m):	-38
Prism Penetration (cm):	7.7
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Crustacean burrow, small burrows/traces

Plan-View Image



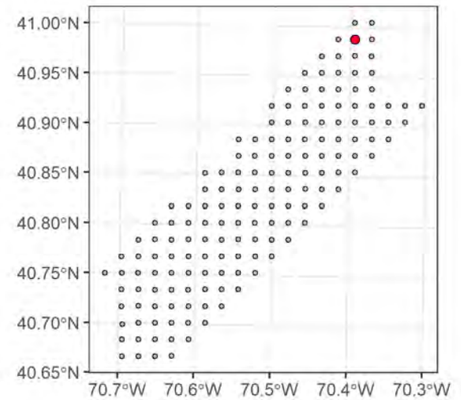
Figure E-15: WTG-004-C-PV

Sediment Profile Image



Figure E-16: WTG-004-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 01:26
Station (Replicate):	WTG-004 (2 of 2)
Depth (m):	-38.1
Prism Penetration (cm):	8.5
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	yellow sponge, 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	1 yellow sponge, 3 shrimp, crab tracks

Plan-View Image



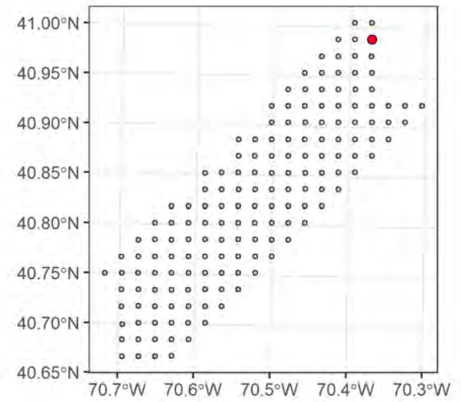
Figure E-17: WTG-005-A-PV

Sediment Profile Image



Figure E-18: WTG-005-A-SPI

Location



Attributes

Date Time (EST):	07/18/21 09:41
Station (Replicate):	WTG-005 (1 of 2)
Depth (m):	-37.2
Prism Penetration (cm):	5.7
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	None
Comments:	2 paguroidea, few small burrows, turbid water

Plan-View Image

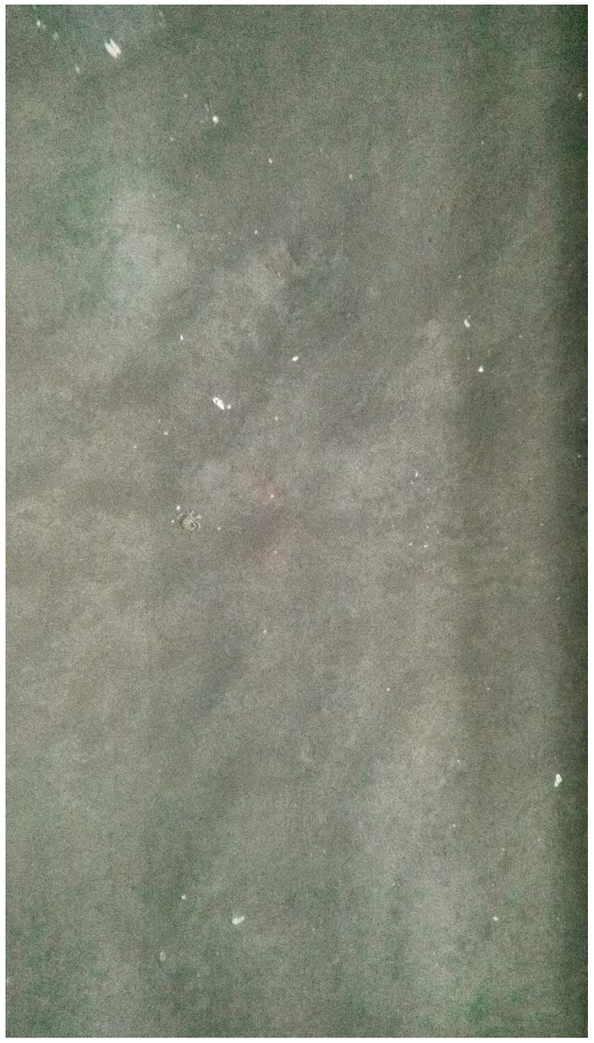


Figure E-19: WTG-005-B-PV

Sediment Profile Image

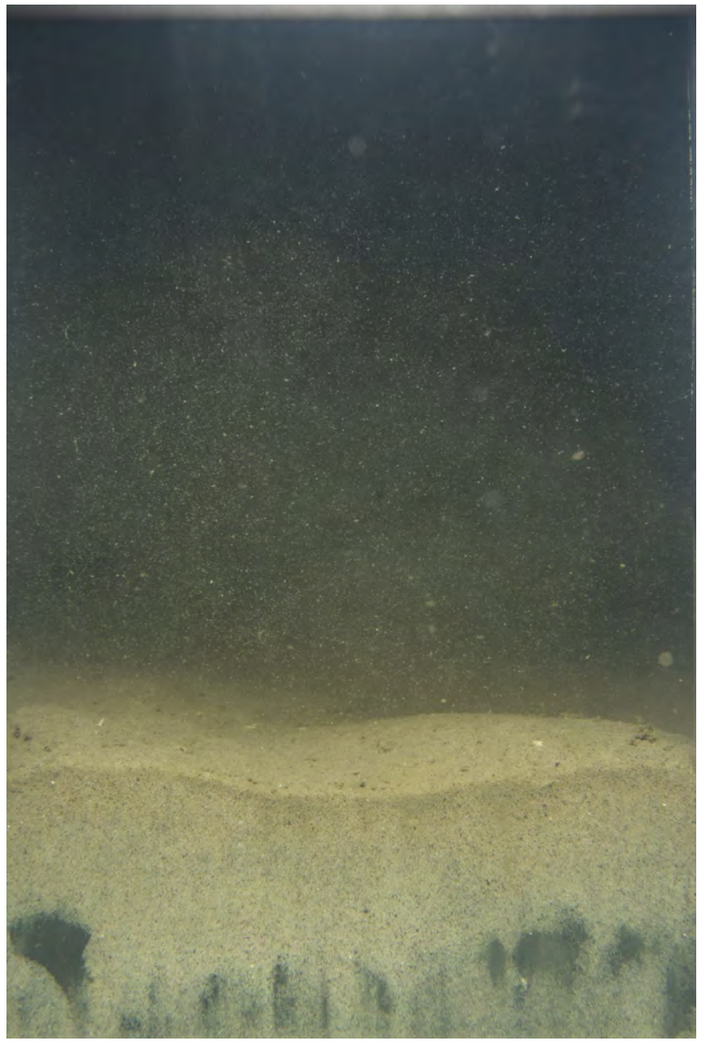
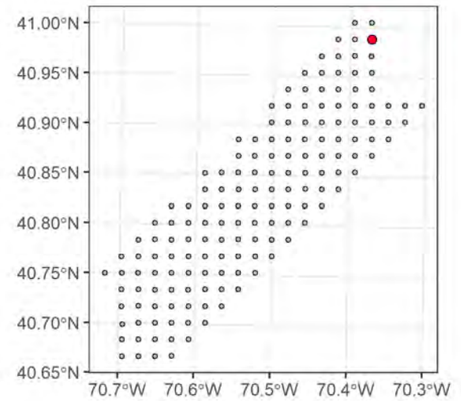


Figure E-20: WTG-005-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 09:46
Station (Replicate):	WTG-005 (2 of 2)
Depth (m):	-37
Prism Penetration (cm):	5.4
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	None
Comments:	2 paguroidea

Plan-View Image



Figure E-21: WTG-006-A-PV

Sediment Profile Image

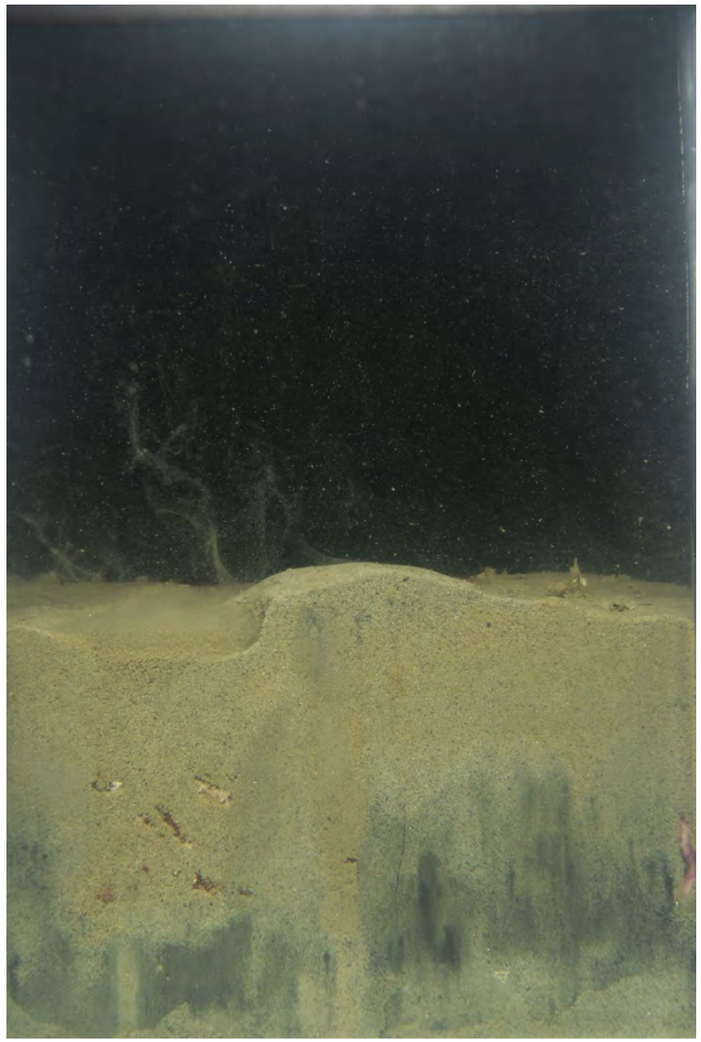
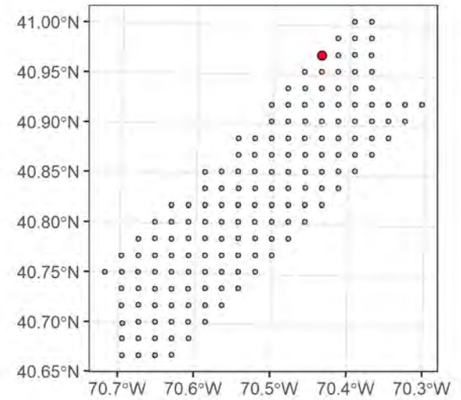


Figure E-22: WTG-006-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 04:45
Station (Replicate):	WTG-006 (1 of 2)
Depth (m):	-41.2
Prism Penetration (cm):	8.8
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	numerous crab tracks, small burrows

Plan-View Image

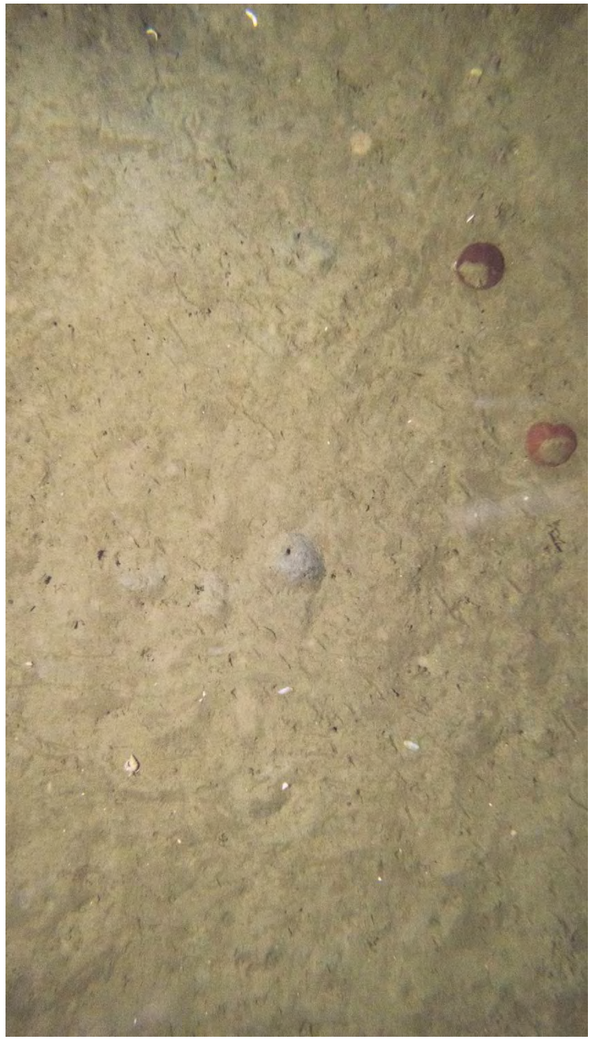


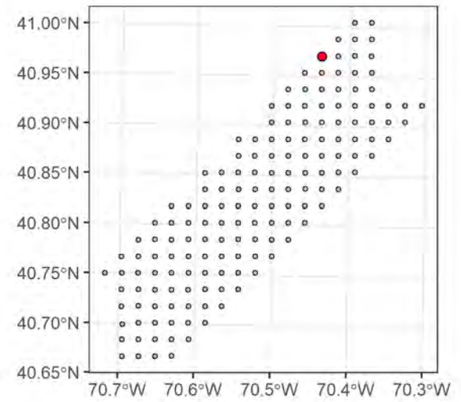
Figure E-23: WTG-006-C-PV

Sediment Profile Image



Figure E-24: WTG-006-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 04:52
Station (Replicate):	WTG-006 (2 of 2)
Depth (m):	-41.3
Prism Penetration (cm):	10.5
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 Echinarachnius parma, 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, large burrow

Plan-View Image



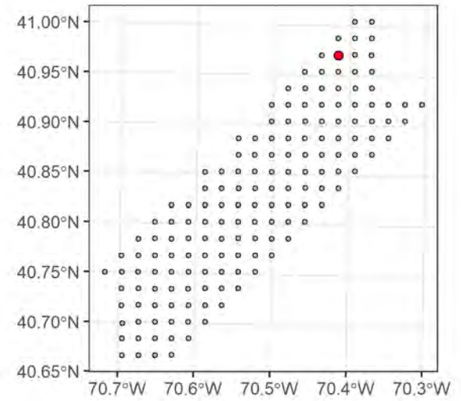
Figure E-25: WTG-007-A-PV

Sediment Profile Image



Figure E-26: WTG-007-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 04:05
Station (Replicate):	WTG-007 (1 of 2)
Depth (m):	-41
Prism Penetration (cm):	11.3
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Echinarachnius parma, 4 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few small burrows, sand dollar traces

Plan-View Image



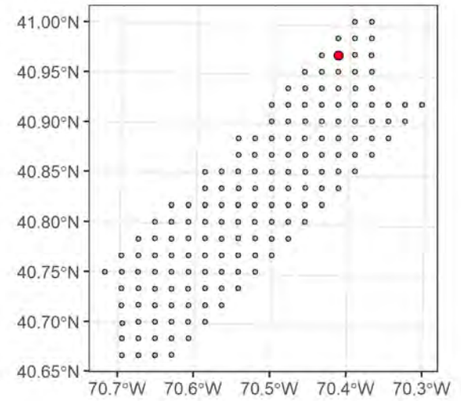
Figure E-27: WTG-007-C-PV

Sediment Profile Image



Figure E-28: WTG-007-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 04:10
Station (Replicate):	WTG-007 (2 of 2)
Depth (m):	-40.9
Prism Penetration (cm):	9.9
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	yellow sponge, 2 shrimp, 1 paguroidea, 1 Cancer sp.
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows

Plan-View Image

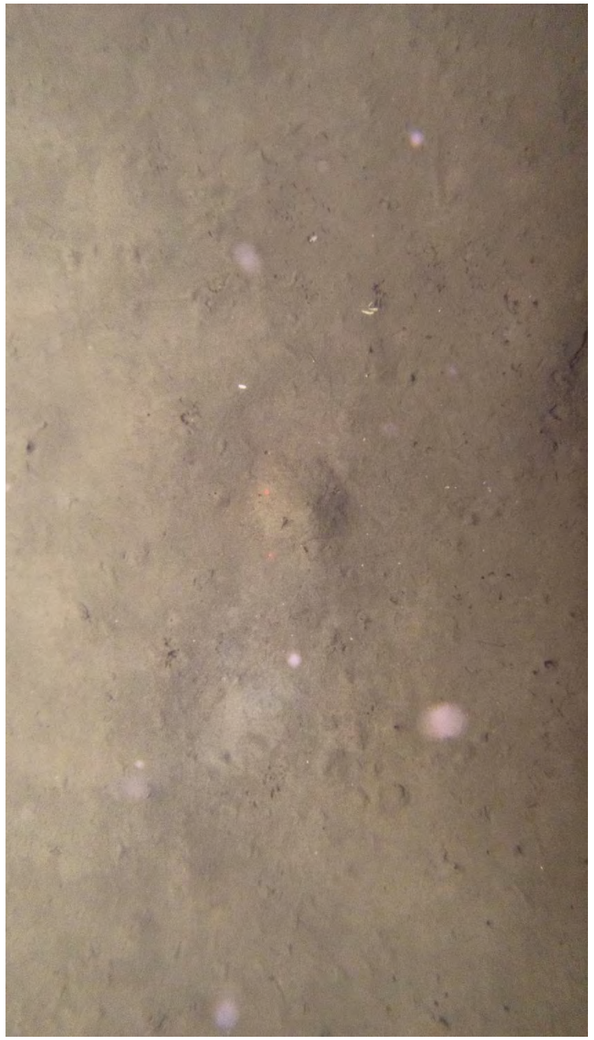


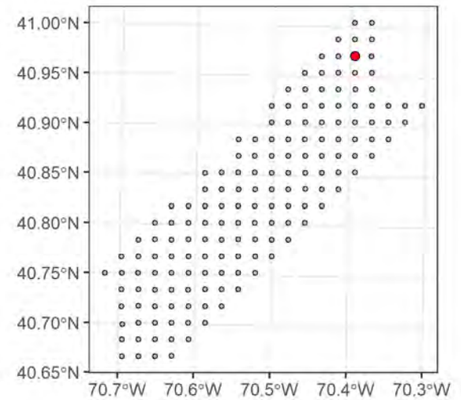
Figure E-29: WTG-008-A-PV

Sediment Profile Image



Figure E-30: WTG-008-A-SPI

Location



Attributes

Date Time (EST):	07/18/21 04:30
Station (Replicate):	WTG-008 (1 of 2)
Depth (m):	-40.3
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	numerous burrows, no epifauna

Plan-View Image



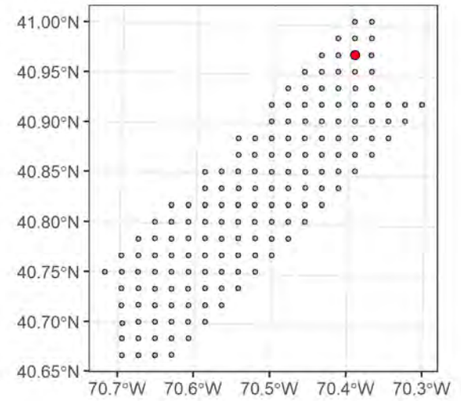
Figure E-31: WTG-008-C-PV

Sediment Profile Image



Figure E-32: WTG-008-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 04:35
Station (Replicate):	WTG-008 (2 of 2)
Depth (m):	-40.3
Prism Penetration (cm):	11.6
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	None
Comments:	1 paguroidea, skate upper left, small burrows

Plan-View Image

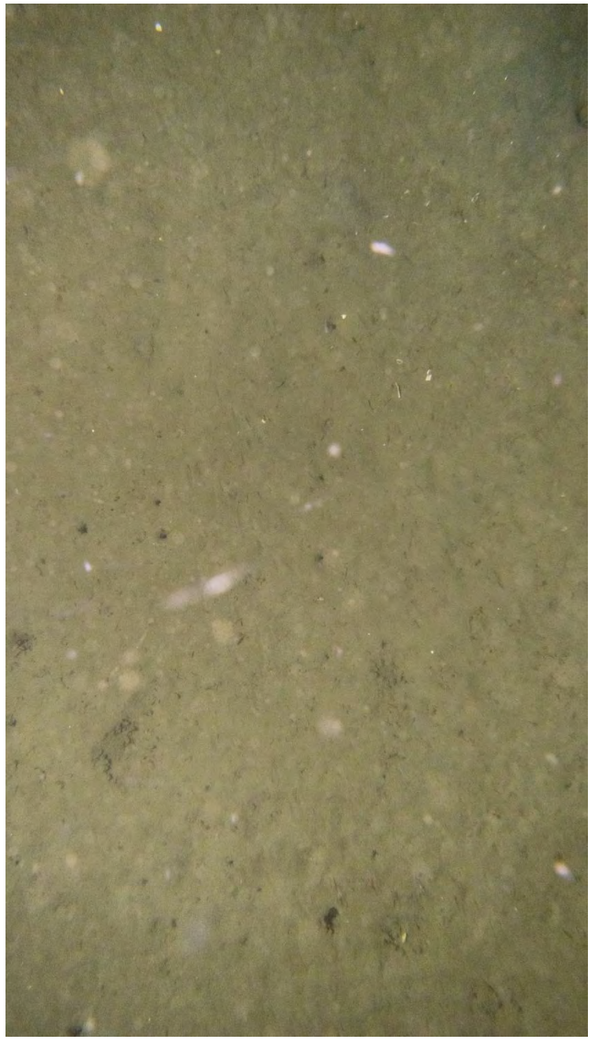


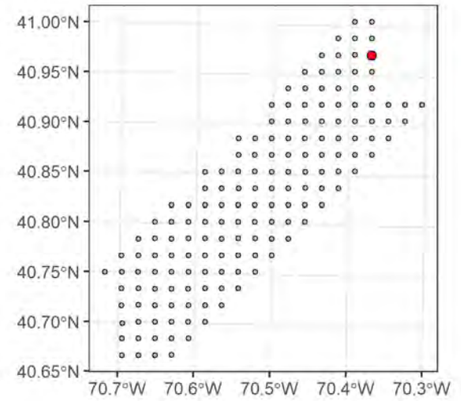
Figure E-33: WTG-009-B-PV

Sediment Profile Image



Figure E-34: WTG-009-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 01:08
Station (Replicate):	WTG-009 (1 of 2)
Depth (m):	-40.5
Prism Penetration (cm):	12.7
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	large and small burrows, crab tracks

Plan-View Image



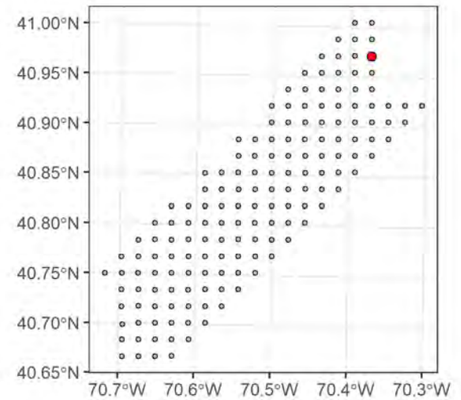
Figure E-35: WTG-009-C-PV

Sediment Profile Image



Figure E-36: WTG-009-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 01:18
Station (Replicate):	WTG-009 (2 of 2)
Depth (m):	-40.5
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 fish
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	large and small burrows, one large feeding void

Plan-View Image



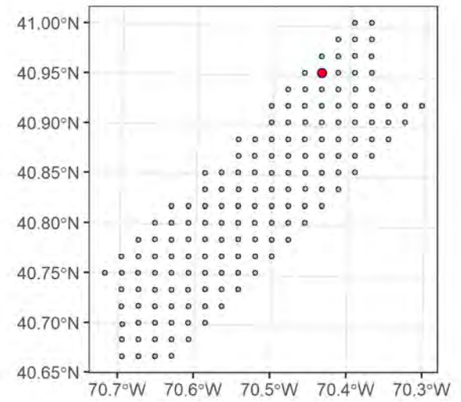
Figure E-37: WTG-010-B-PV

Sediment Profile Image



Figure E-38: WTG-010-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 19:30
Station (Replicate):	WTG-010 (1 of 2)
Depth (m):	-42.1
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	microbial mat, amphipod tube clusters, small burrows

Plan-View Image



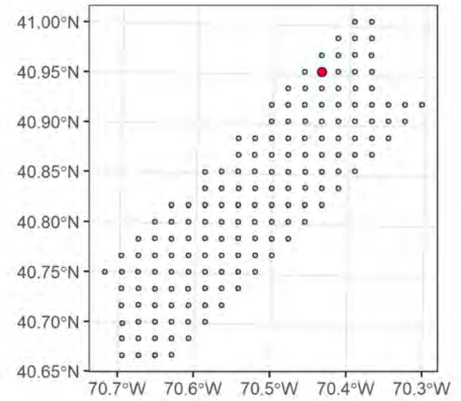
Figure E-39: WTG-010-A-PV

Sediment Profile Image



Figure E-40: WTG-010-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 19:35
Station (Replicate):	WTG-010 (2 of 2)
Depth (m):	-41.9
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, small burrows

Plan-View Image



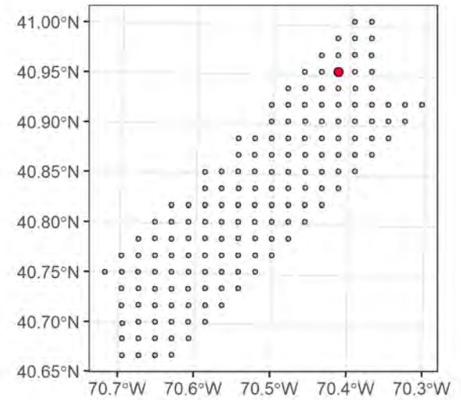
Figure E-41: WTG-011-D-PV

Sediment Profile Image



Figure E-42: WTG-011-C-SPI

Location



Attributes

Date Time (EST):	07/18/21 07:32
Station (Replicate):	WTG-011 (1 of 2)
Depth (m):	-40.9
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tubes

Plan-View Image



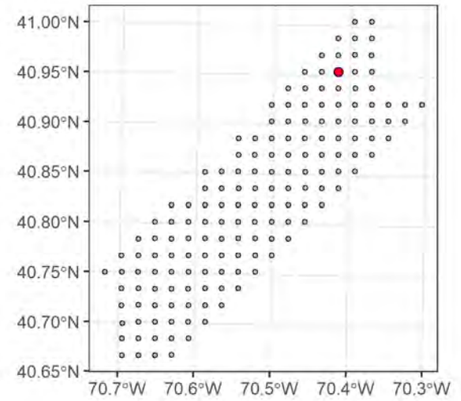
Figure E-43: WTG-011-E-PV

Sediment Profile Image



Figure E-44: WTG-011-F-SPI

Location



Attributes

Date Time (EST):	07/18/21 11:34
Station (Replicate):	WTG-011 (2 of 2)
Depth (m):	-41.4
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	several amphipod tube clusters, dark photo

Plan-View Image

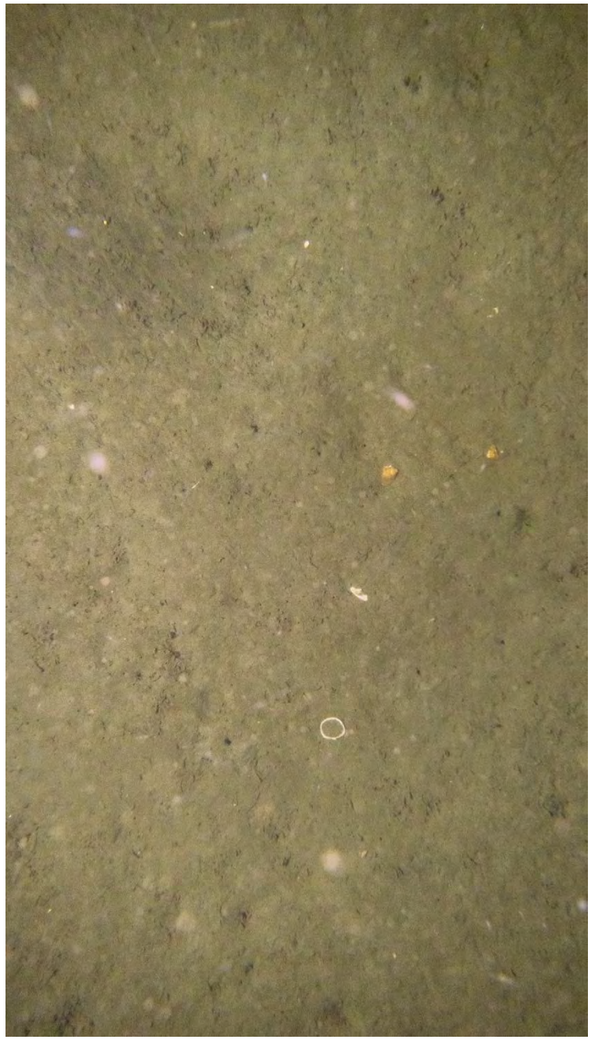


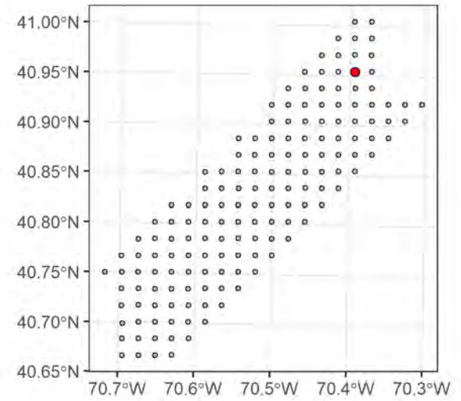
Figure E-45: WTG-012-A-PV

Sediment Profile Image



Figure E-46: WTG-012-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 02:35
Station (Replicate):	WTG-012 (1 of 2)
Depth (m):	-42.4
Prism Penetration (cm):	12.7
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few small burrows and tubes, two large empty bivalve shells

Plan-View Image



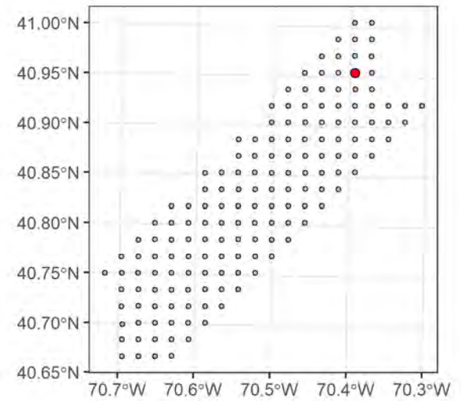
Figure E-47: WTG-012-B-PV

Sediment Profile Image



Figure E-48: WTG-012-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 02:40
Station (Replicate):	WTG-012 (2 of 2)
Depth (m):	-42.4
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few small burrows and tubes

Plan-View Image



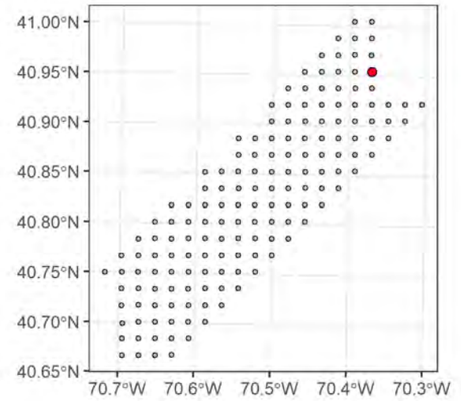
Figure E-49: WTG-013-A-PV

Sediment Profile Image



Figure E-50: WTG-013-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 23:28
Station (Replicate):	WTG-013 (1 of 2)
Depth (m):	-40.5
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	microbial mat, small burrows

Plan-View Image



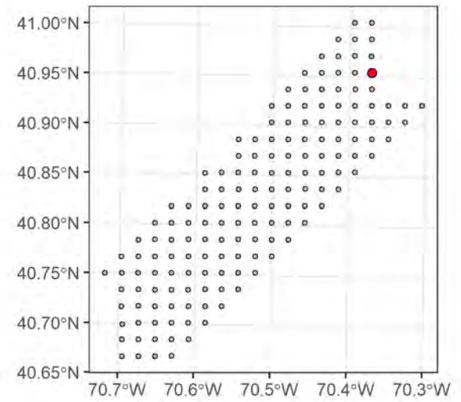
Figure E-51: WTG-013-B-PV

Sediment Profile Image



Figure E-52: WTG-013-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 23:36
Station (Replicate):	WTG-013 (2 of 2)
Depth (m):	-40.5
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	microbial mat, small burrows, faint crab tracks

Plan-View Image



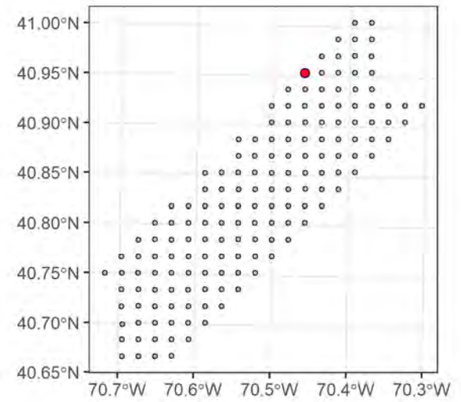
Figure E-53: WTG-014-B-PV

Sediment Profile Image



Figure E-54: WTG-014-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 17:47
Station (Replicate):	WTG-014 (1 of 2)
Depth (m):	-42.9
Prism Penetration (cm):	12
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



Figure E-55: WTG-014-A-PV

Sediment Profile Image

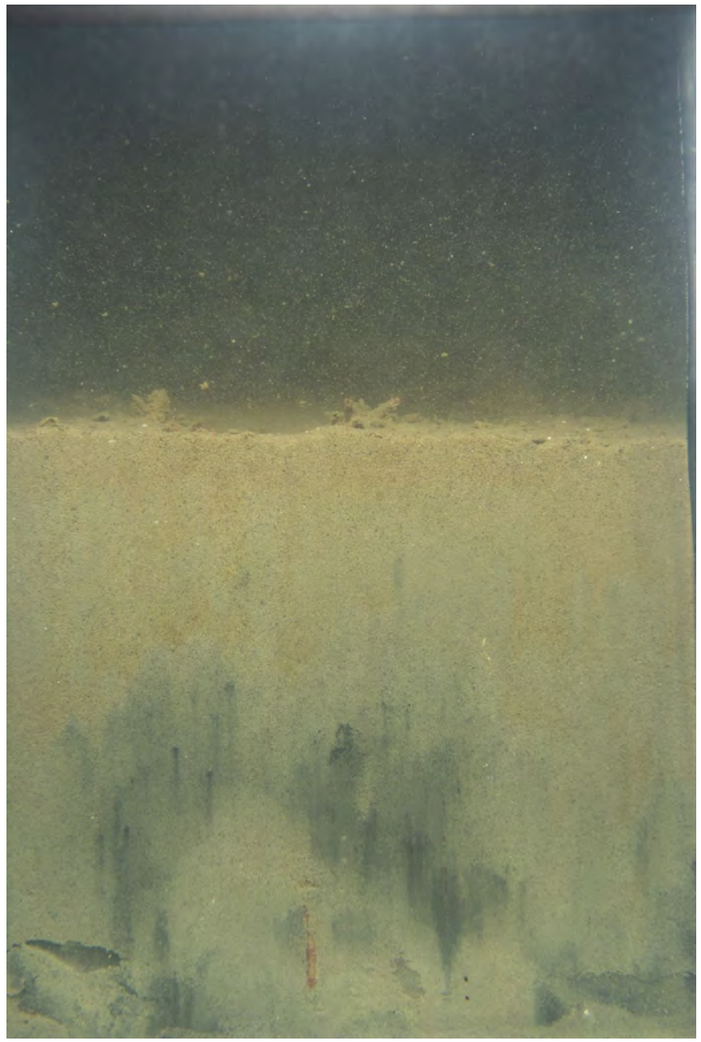
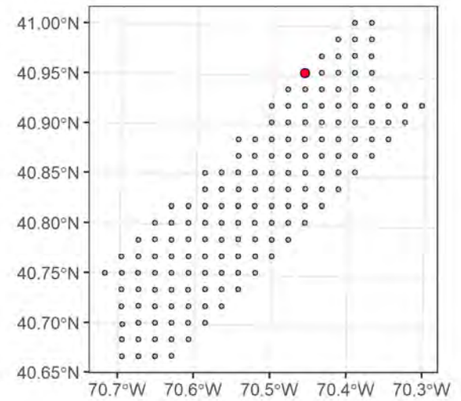


Figure E-56: WTG-014-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 17:52
Station (Replicate):	WTG-014 (2 of 2)
Depth (m):	-42.9
Prism Penetration (cm):	12.5
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



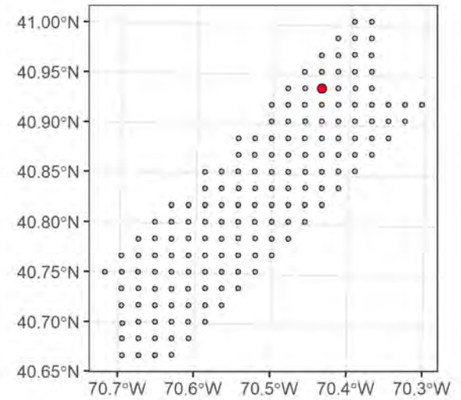
Figure E-57: WTG-015-B-PV

Sediment Profile Image



Figure E-58: WTG-015-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 06:46
Station (Replicate):	WTG-015 (1 of 2)
Depth (m):	-43.6
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clusters of amphipod tubes,

Plan-View Image



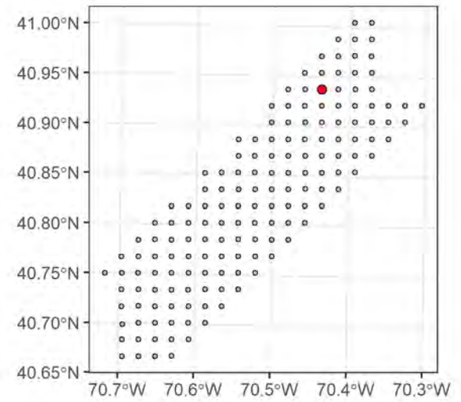
Figure E-59: WTG-015-A-PV

Sediment Profile Image



Figure E-60: WTG-015-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 06:52
Station (Replicate):	WTG-015 (2 of 2)
Depth (m):	-43.6
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clusters of amphipod tubes

Plan-View Image



Figure E-61: WTG-016-B-PV

Sediment Profile Image

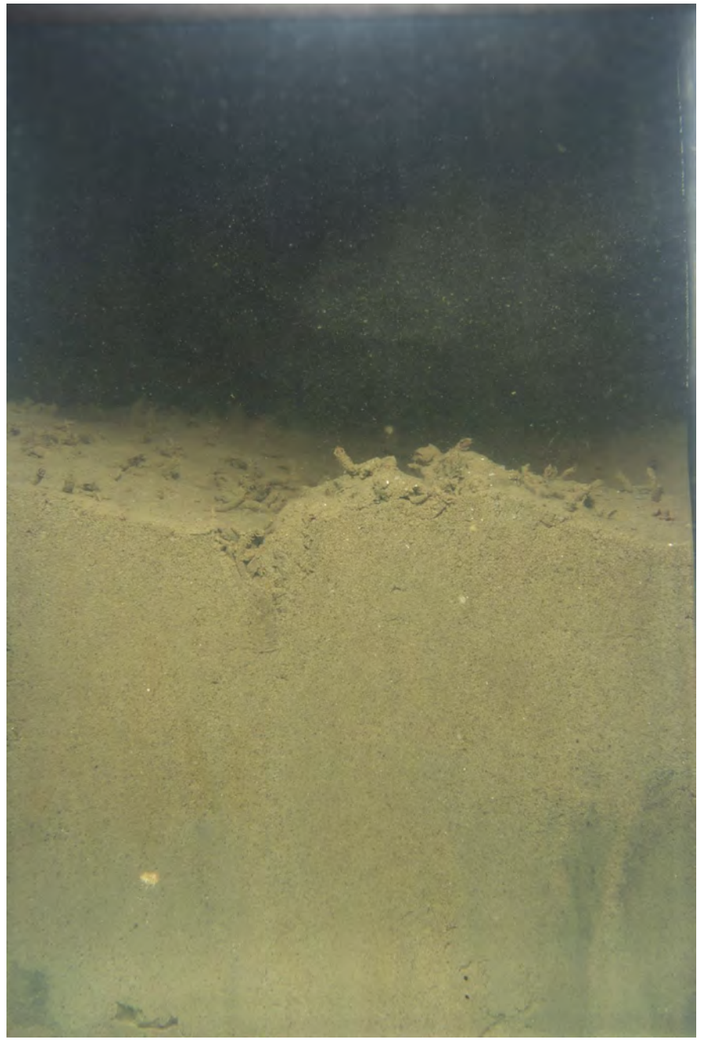
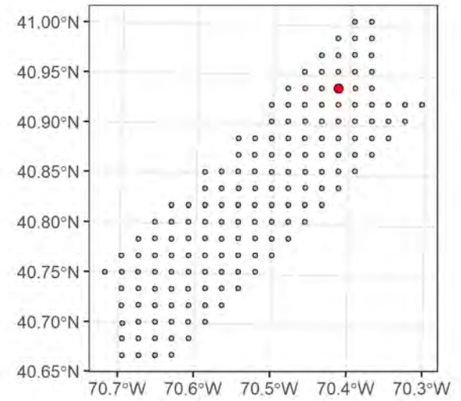


Figure E-62: WTG-016-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 20:53
Station (Replicate):	WTG-016 (1 of 2)
Depth (m):	-42.2
Prism Penetration (cm):	10.9
aRPD Mean Depth (cm):	5.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



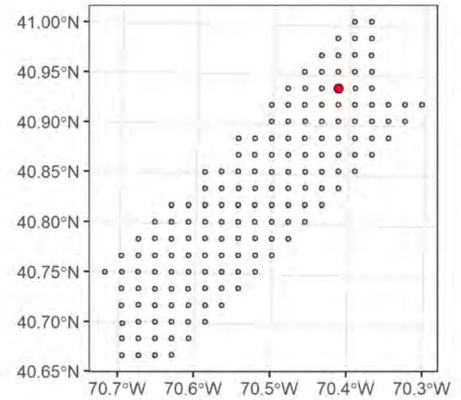
Figure E-63: WTG-016-A-PV

Sediment Profile Image



Figure E-64: WTG-016-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 20:57
Station (Replicate):	WTG-016 (2 of 2)
Depth (m):	-42.3
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows

Plan-View Image



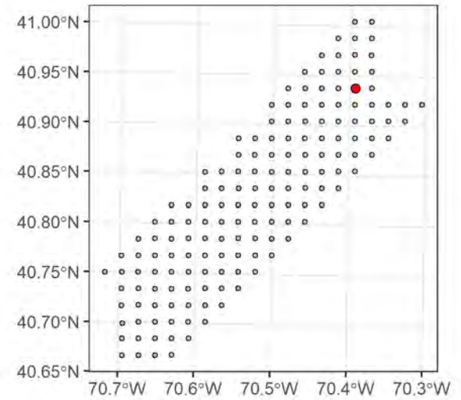
Figure E-65: WTG-017-A-PV

Sediment Profile Image



Figure E-66: WTG-017-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 23:26
Station (Replicate):	WTG-017 (1 of 2)
Depth (m):	-41.8
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clusters of amphipod tubes

Plan-View Image



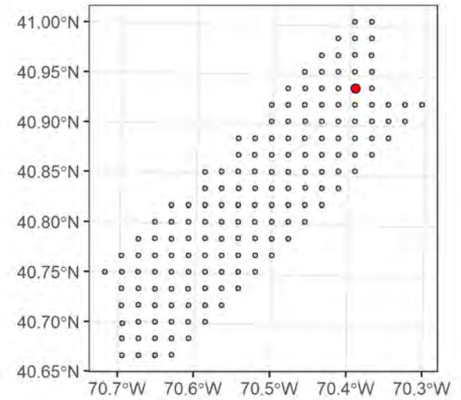
Figure E-67: WTG-017-C-PV

Sediment Profile Image



Figure E-68: WTG-017-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 23:31
Station (Replicate):	WTG-017 (2 of 2)
Depth (m):	-41.6
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 burrowing anemone
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clusters of amphipod tubes, crab tracks,

Plan-View Image



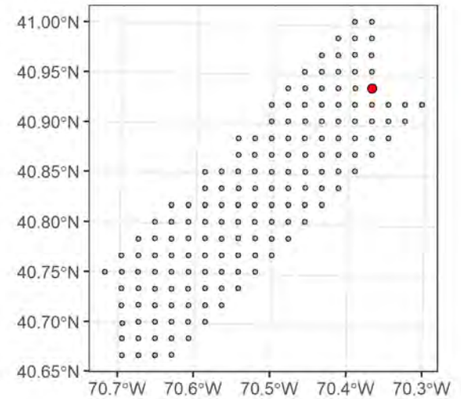
Figure E-69: WTG-018-C-PV

Sediment Profile Image



Figure E-70: WTG-018-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 22:17
Station (Replicate):	WTG-018 (1 of 2)
Depth (m):	-41.3
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	18 paguroidea, 1 small crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab tracks, 1 dead/molt Cancer irroratus

Plan-View Image



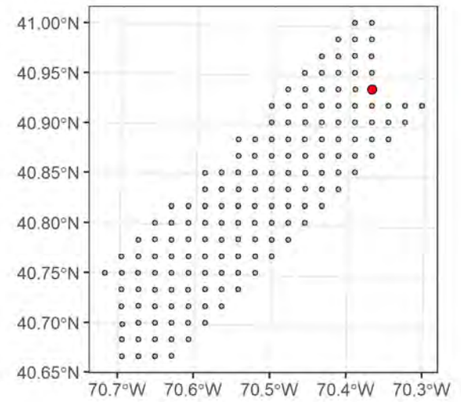
Figure E-71: WTG-018-B-PV

Sediment Profile Image



Figure E-72: WTG-018-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 22:21
Station (Replicate):	WTG-018 (2 of 2)
Depth (m):	-41.3
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



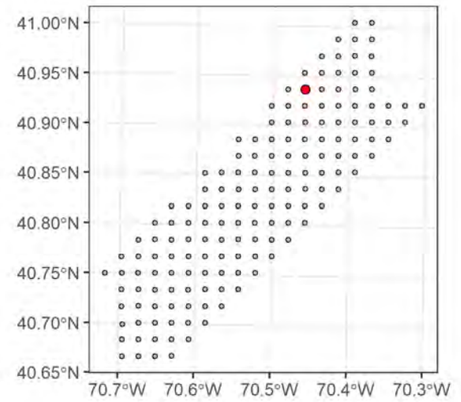
Figure E-73: WTG-019-A-PV

Sediment Profile Image



Figure E-74: WTG-019-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 16:24
Station (Replicate):	WTG-019 (1 of 2)
Depth (m):	-44
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



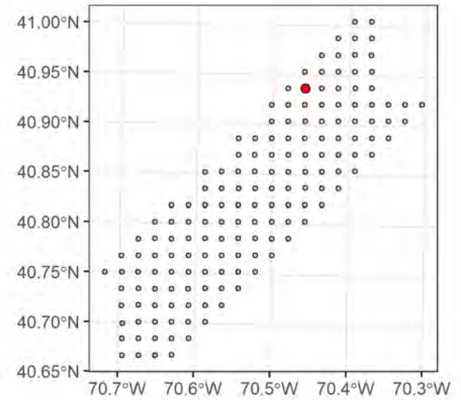
Figure E-75: WTG-019-B-PV

Sediment Profile Image



Figure E-76: WTG-019-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 16:32
Station (Replicate):	WTG-019 (2 of 2)
Depth (m):	-44.1
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 paguroidea, 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



Figure E-77: WTG-020-B-PV

Sediment Profile Image

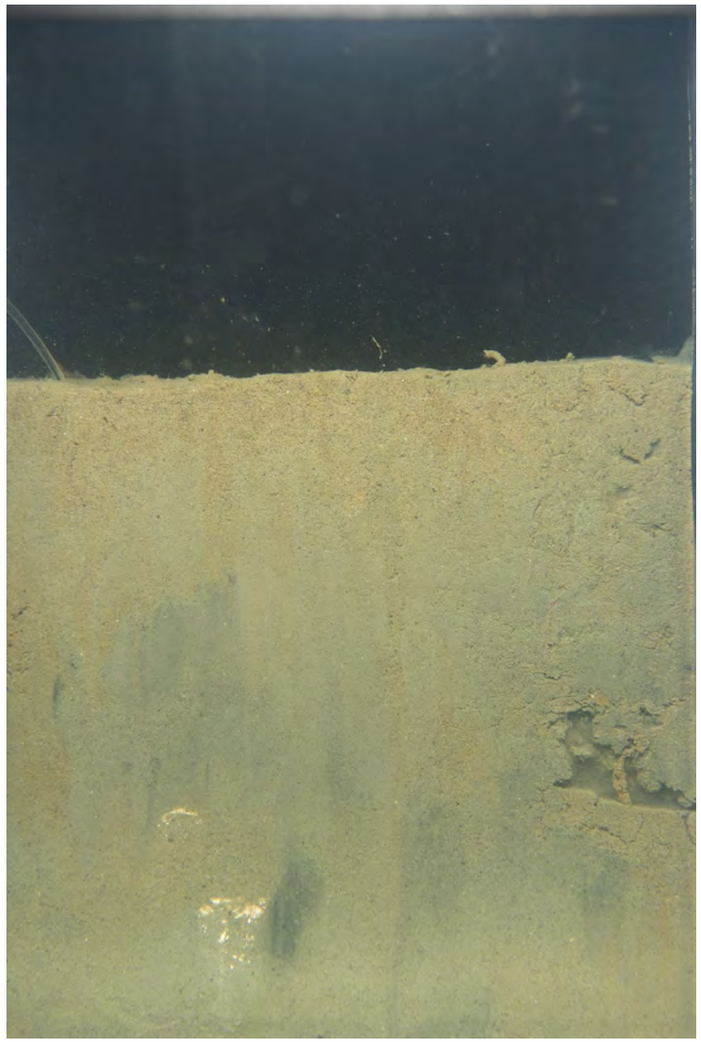
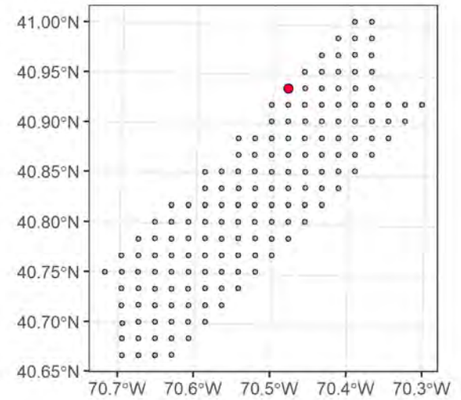


Figure E-78: WTG-020-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 14:11
Station (Replicate):	WTG-020 (1 of 2)
Depth (m):	-45.1
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, large crustacean? Burrows, out of focus

Plan-View Image



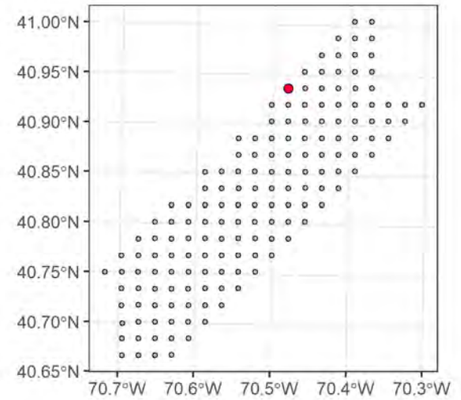
Figure E-79: WTG-020-A-PV

Sediment Profile Image



Figure E-80: WTG-020-C-SPI

Location



Attributes

Date Time (EST):	07/18/21 14:15
Station (Replicate):	WTG-020 (2 of 2)
Depth (m):	-45.2
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, large crustacean? Burrows, out of focus

Plan-View Image



Figure E-81: WTG-021-A-PV

Sediment Profile Image

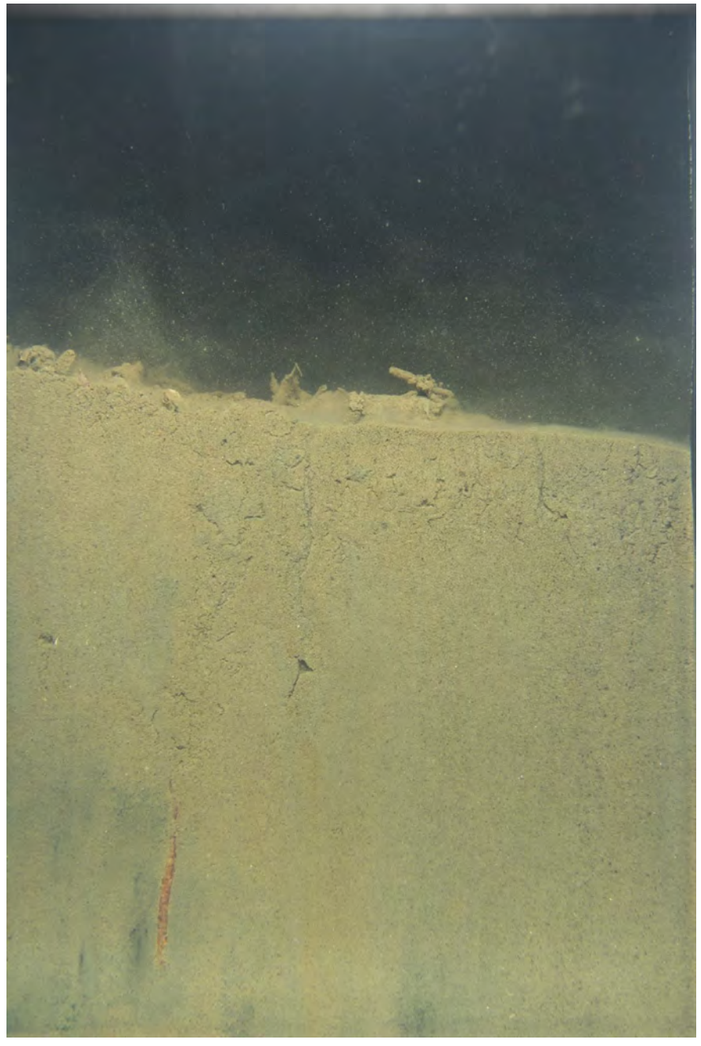
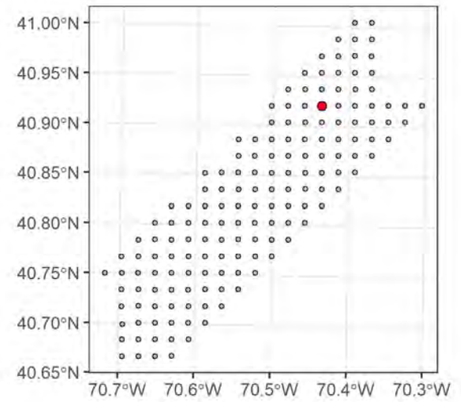


Figure E-82: WTG-021-A-SPI

Location



Attributes

Date Time (EST):	07/18/21 16:10
Station (Replicate):	WTG-021 (1 of 2)
Depth (m):	-45.2
Prism Penetration (cm):	13.3
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	clusters of amphipod tubes, out of focus

Plan-View Image



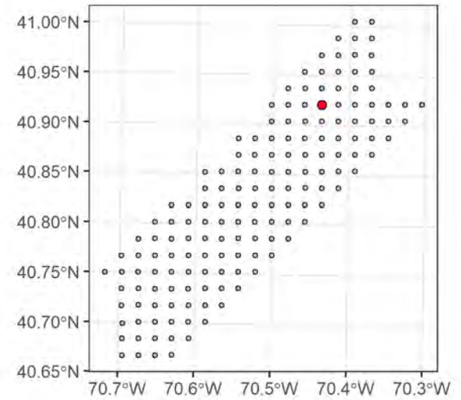
Figure E-83: WTG-021-C-PV

Sediment Profile Image



Figure E-84: WTG-021-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 16:14
Station (Replicate):	WTG-021 (2 of 2)
Depth (m):	-45.3
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	clusters of amphipod tubes, out of focus

Plan-View Image



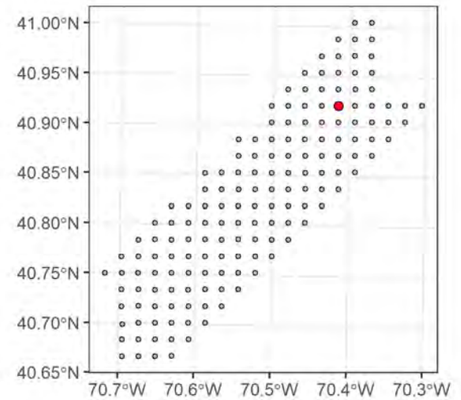
Figure E-85: WTG-022-A-PV

Sediment Profile Image



Figure E-86: WTG-022-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 11:19
Station (Replicate):	WTG-022 (1 of 2)
Depth (m):	-43.3
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image

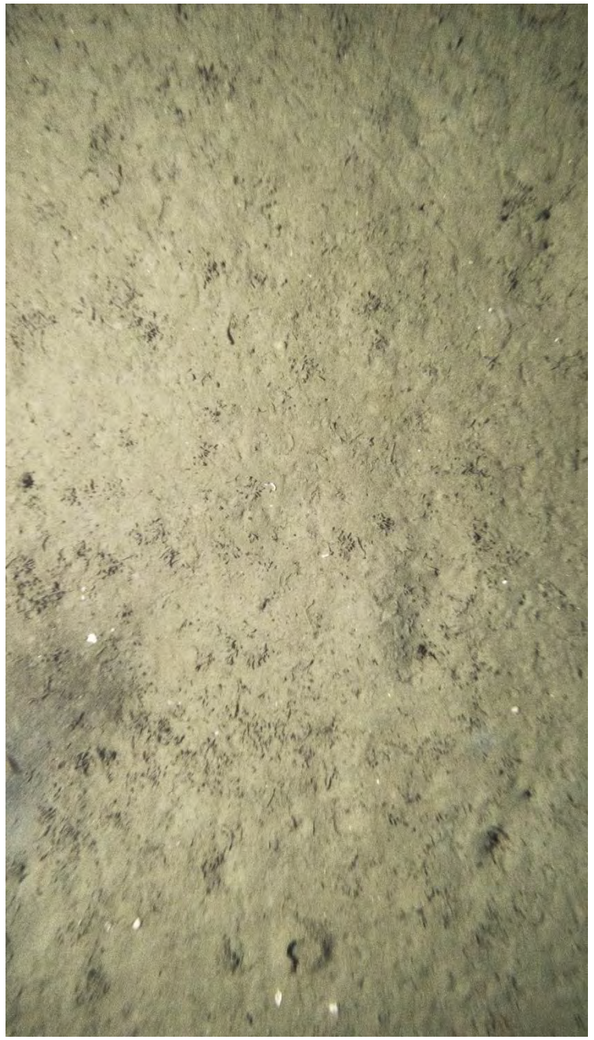


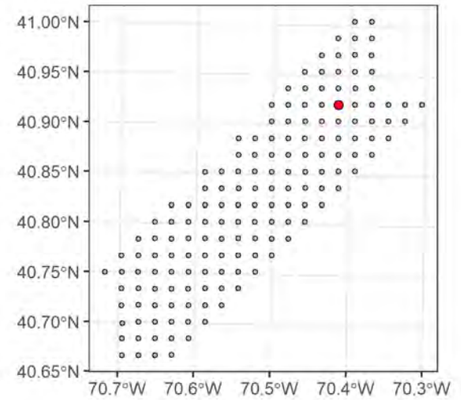
Figure E-87: WTG-022-C-PV

Sediment Profile Image



Figure E-88: WTG-022-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 11:28
Station (Replicate):	WTG-022 (2 of 2)
Depth (m):	-43.5
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, large and small burrows, faint crab tracks, naticid egg case

Plan-View Image



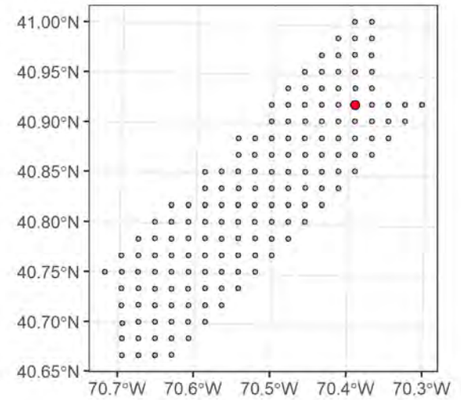
Figure E-89: WTG-023-B-PV

Sediment Profile Image



Figure E-90: WTG-023-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 10:02
Station (Replicate):	WTG-023 (1 of 2)
Depth (m):	-42
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



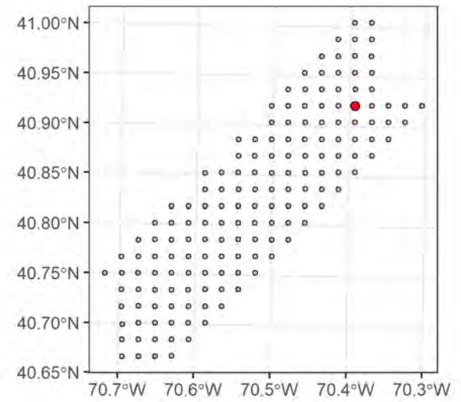
Figure E-91: WTG-023-C-PV

Sediment Profile Image



Figure E-92: WTG-023-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 10:06
Station (Replicate):	WTG-023 (2 of 2)
Depth (m):	-41.9
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	6.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image

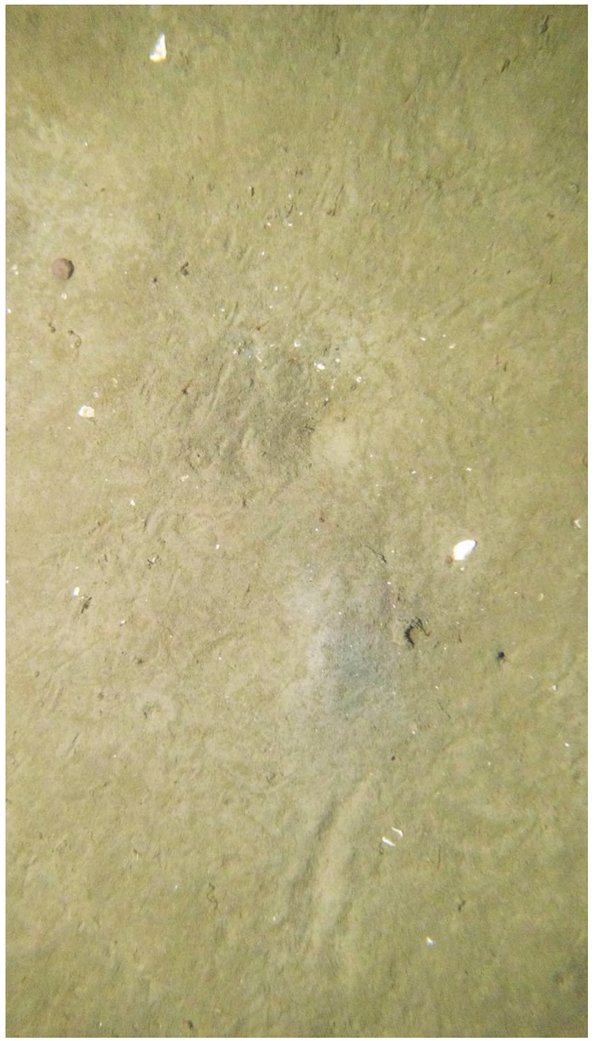


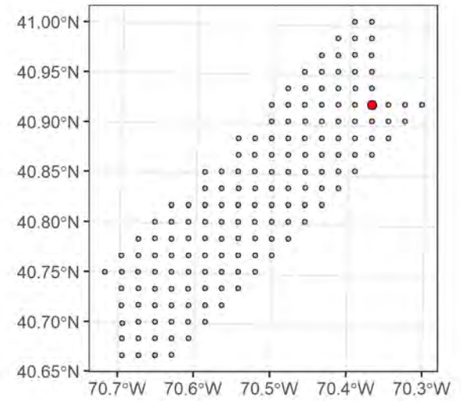
Figure E-93: WTG-024-B-PV

Sediment Profile Image



Figure E-94: WTG-024-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 08:36
Station (Replicate):	WTG-024 (1 of 2)
Depth (m):	-40.5
Prism Penetration (cm):	6.3
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Few burrows, crab tracks

Plan-View Image



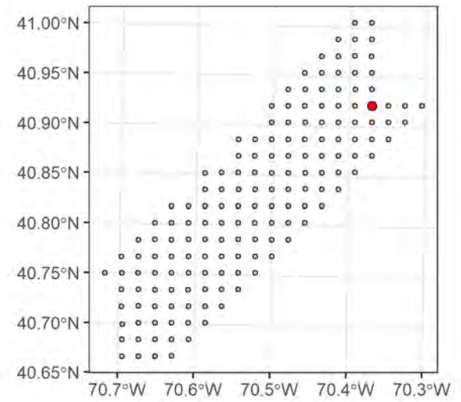
Figure E-95: WTG-024-C-PV

Sediment Profile Image



Figure E-96: WTG-024-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 08:45
Station (Replicate):	WTG-024 (2 of 2)
Depth (m):	-40.6
Prism Penetration (cm):	10.3
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, few burrows, faint crab tracks

Plan-View Image



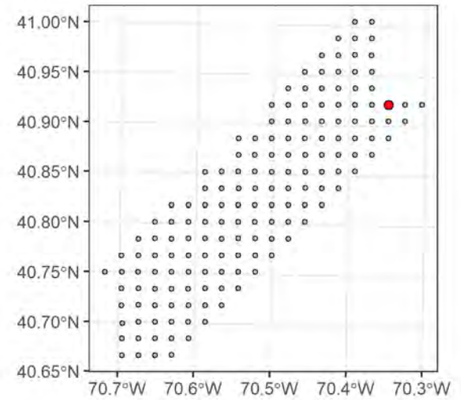
Figure E-97: WTG-025-A-PV

Sediment Profile Image



Figure E-98: WTG-025-A-SPI

Location



Attributes

Date Time (EST):	07/18/21 19:02
Station (Replicate):	WTG-025 (1 of 2)
Depth (m):	-40.3
Prism Penetration (cm):	11.3
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tubes, some burrows

Plan-View Image



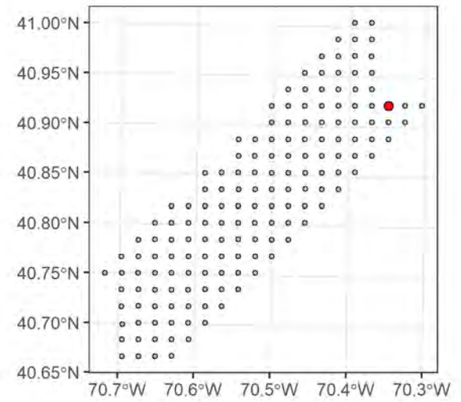
Figure E-99: WTG-025-B-PV

Sediment Profile Image



Figure E-100: WTG-025-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 19:07
Station (Replicate):	WTG-025 (2 of 2)
Depth (m):	-40.4
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some amphipod tubes

Plan-View Image

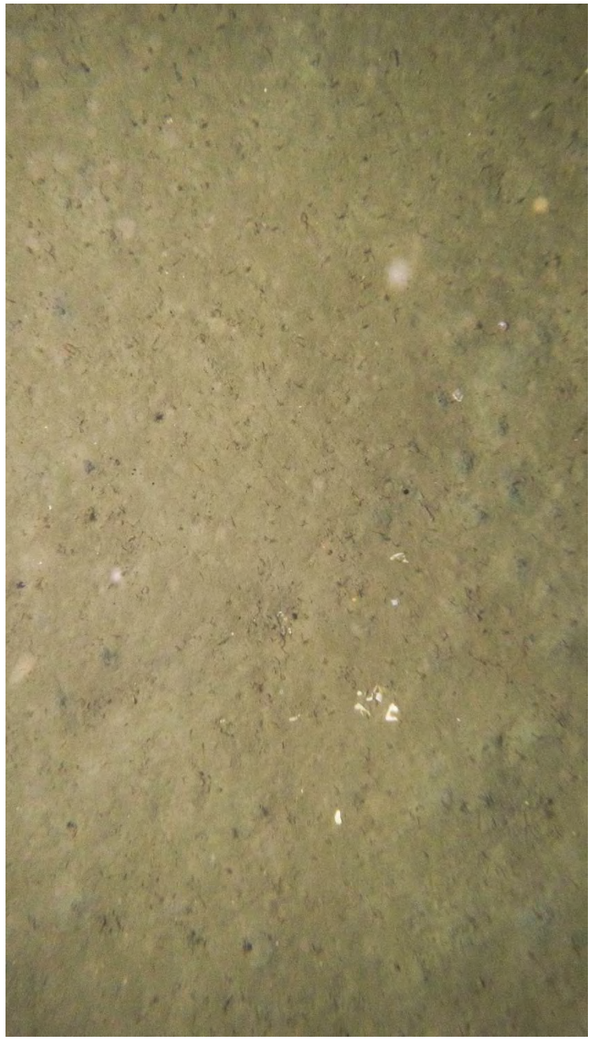


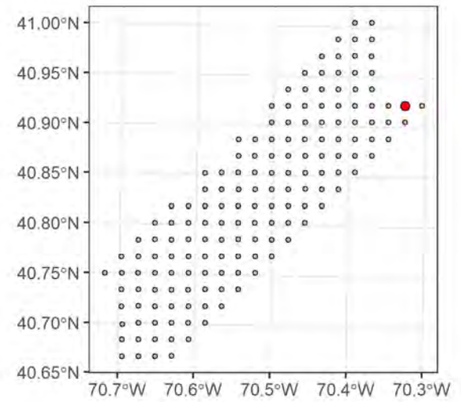
Figure E-101: WTG-026-B-PV

Sediment Profile Image



Figure E-102: WTG-026-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 07:08
Station (Replicate):	WTG-026 (1 of 2)
Depth (m):	-39.3
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Caprellid amphipods visible from SPI photo, few small burrows

Plan-View Image



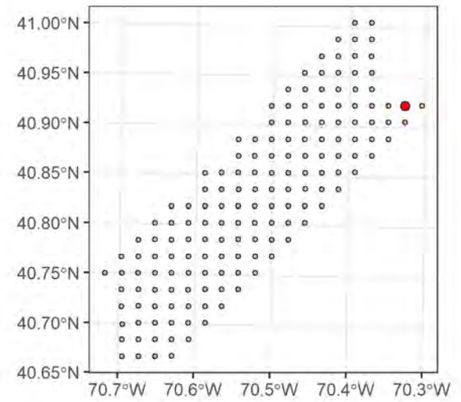
Figure E-103: WTG-026-C-PV

Sediment Profile Image



Figure E-104: WTG-026-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 07:12
Station (Replicate):	WTG-026 (2 of 2)
Depth (m):	-39.3
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, Caprellid amphipods visible from SPI photo, few small burrows

Plan-View Image



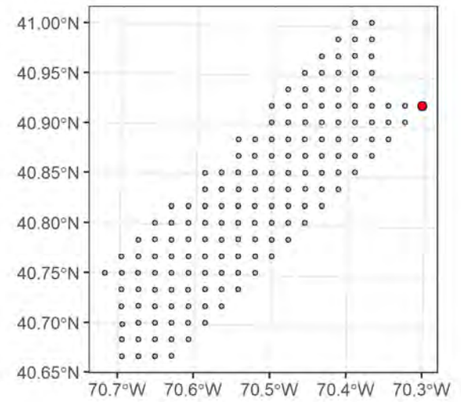
Figure E-105: WTG-027-A-PV

Sediment Profile Image



Figure E-106: WTG-027-A-SPI

Location



Attributes

Date Time (EST):	07/18/21 20:44
Station (Replicate):	WTG-027 (1 of 2)
Depth (m):	-38.8
Prism Penetration (cm):	8.8
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	numerous burrows and large tubes, one deep burrow (reduced sediment brought to surface)

Plan-View Image



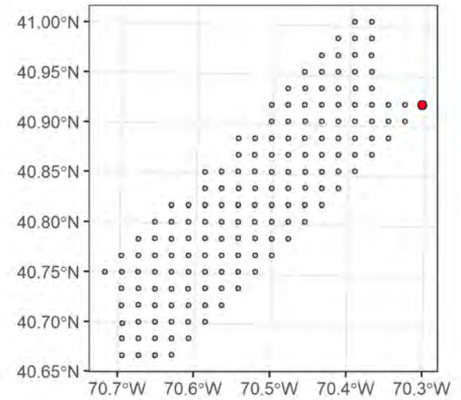
Figure E-107: WTG-027-B-PV

Sediment Profile Image



Figure E-108: WTG-027-C-SPI

Location



Attributes

Date Time (EST):	07/18/21 20:55
Station (Replicate):	WTG-027 (2 of 2)
Depth (m):	-38.4
Prism Penetration (cm):	11.3
aRPD Mean Depth (cm):	5.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	numerous burrows and large tubes

Plan-View Image



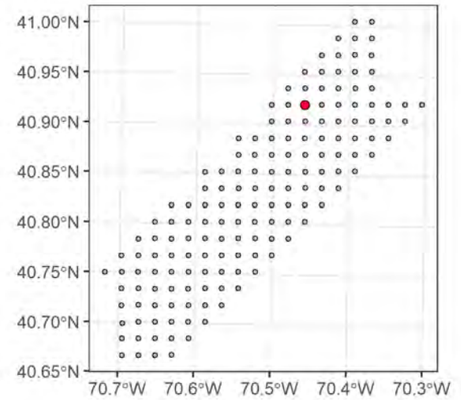
Figure E-109: WTG-028-A-PV

Sediment Profile Image



Figure E-110: WTG-028-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 13:06
Station (Replicate):	WTG-028 (1 of 2)
Depth (m):	-45.9
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



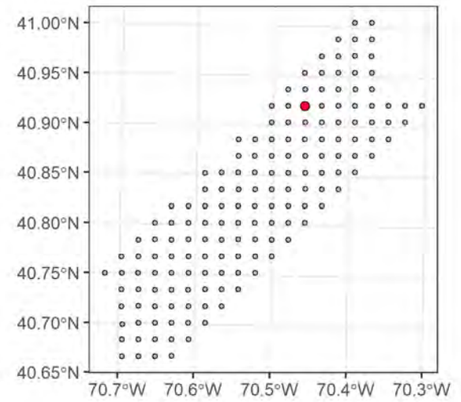
Figure E-111: WTG-028-B-PV

Sediment Profile Image



Figure E-112: WTG-028-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 13:15
Station (Replicate):	WTG-028 (2 of 2)
Depth (m):	-45.8
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp, 2 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

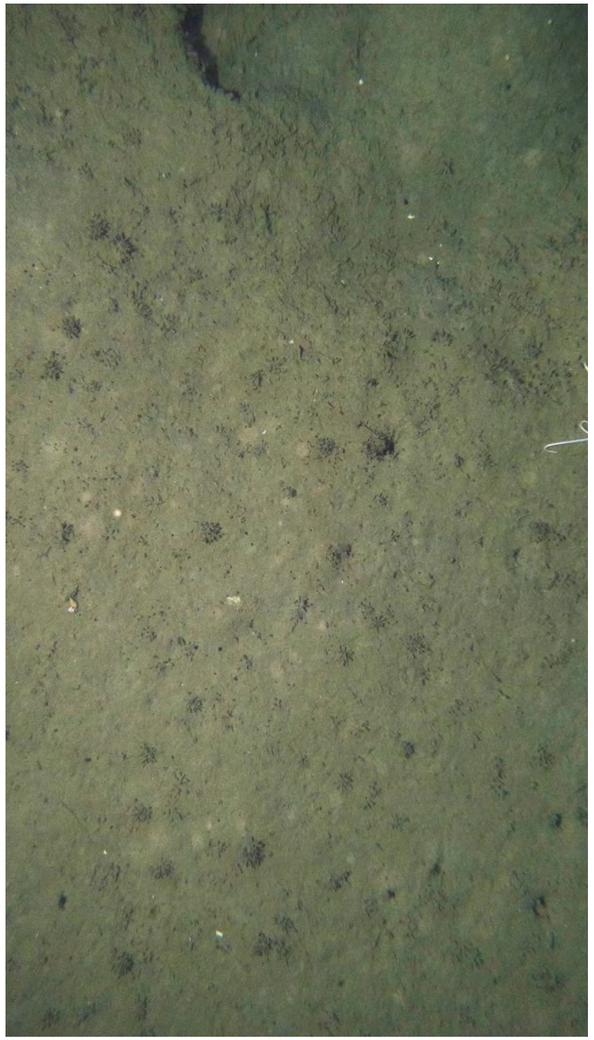


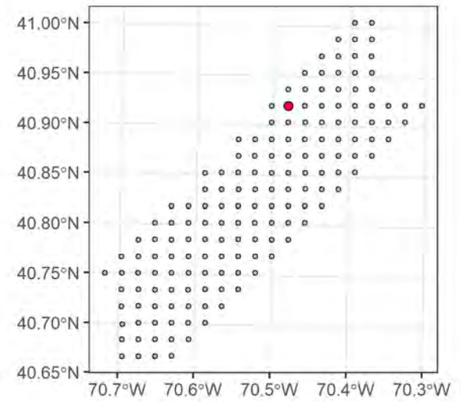
Figure E-113: WTG-029-B-PV

Sediment Profile Image



Figure E-114: WTG-029-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 14:19
Station (Replicate):	WTG-029 (1 of 2)
Depth (m):	-45.7
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Paguroidea 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clusters of amphipod tubes, numerous polychaete/bivalve burrows

Plan-View Image



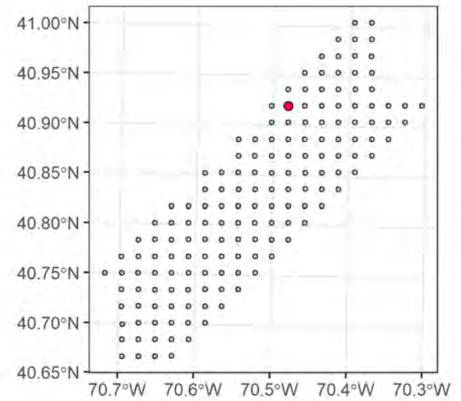
Figure E-115: WTG-029-C-PV

Sediment Profile Image



Figure E-116: WTG-029-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 14:28
Station (Replicate):	WTG-029 (2 of 2)
Depth (m):	-45.7
Prism Penetration (cm):	3.8
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, polychaete/bivalve burrows

Plan-View Image



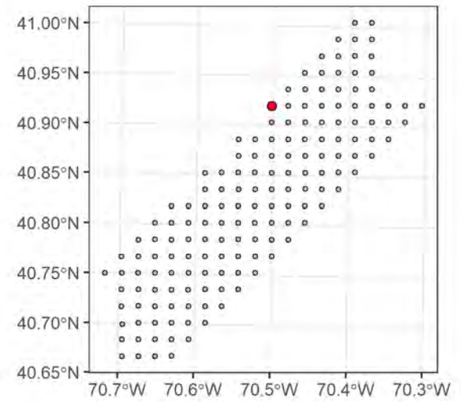
Figure E-117: WTG-030-B-PV

Sediment Profile Image



Figure E-118: WTG-030-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 14:50
Station (Replicate):	WTG-030 (1 of 2)
Depth (m):	-46.6
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



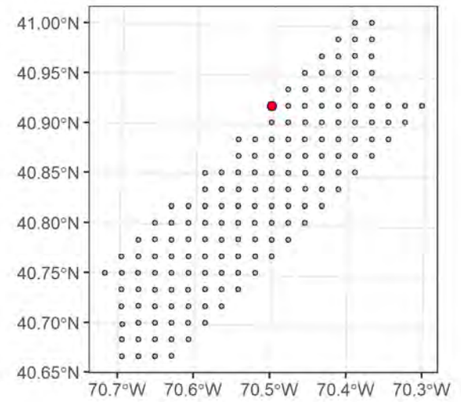
Figure E-119: WTG-030-A-PV

Sediment Profile Image



Figure E-120: WTG-030-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 14:54
Station (Replicate):	WTG-030 (2 of 2)
Depth (m):	-46.5
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp (Crangon septemspinosa?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



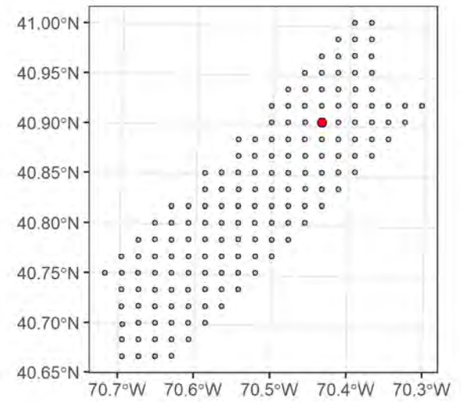
Figure E-121: WTG-031-B-PV

Sediment Profile Image



Figure E-122: WTG-031-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 22:43
Station (Replicate):	WTG-031 (1 of 2)
Depth (m):	-45.3
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	16 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



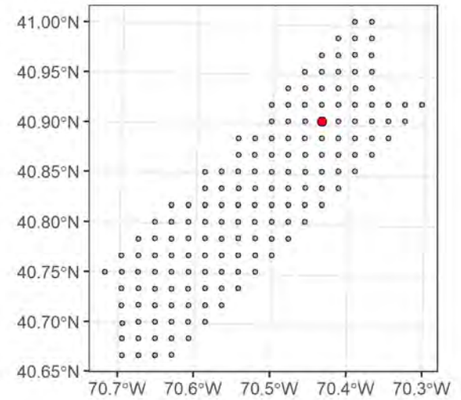
Figure E-123: WTG-031-A-PV

Sediment Profile Image



Figure E-124: WTG-031-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 22:48
Station (Replicate):	WTG-031 (2 of 2)
Depth (m):	-45.3
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	11 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



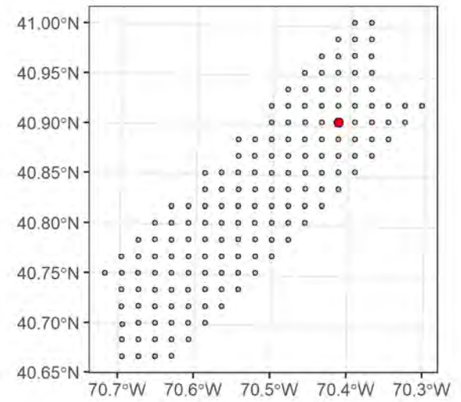
Figure E-125: WTG-032-A-PV

Sediment Profile Image



Figure E-126: WTG-032-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 08:16
Station (Replicate):	WTG-032 (1 of 2)
Depth (m):	-45.3
Prism Penetration (cm):	9.6
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, scattered burrows

Plan-View Image



Figure E-127: WTG-032-C-PV

Sediment Profile Image

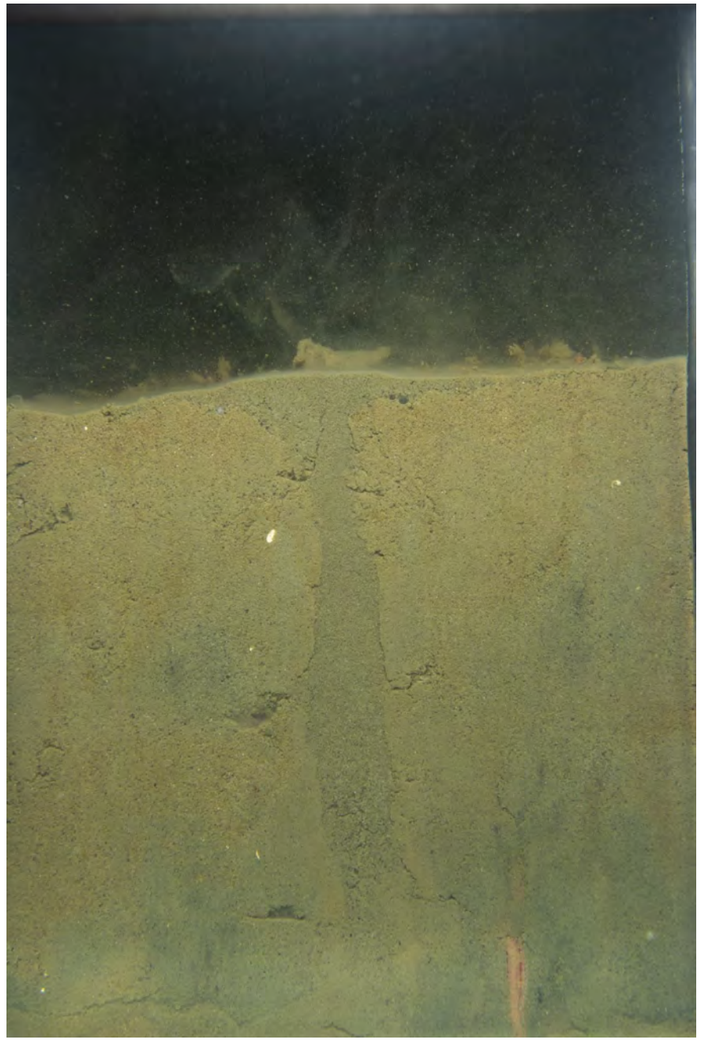
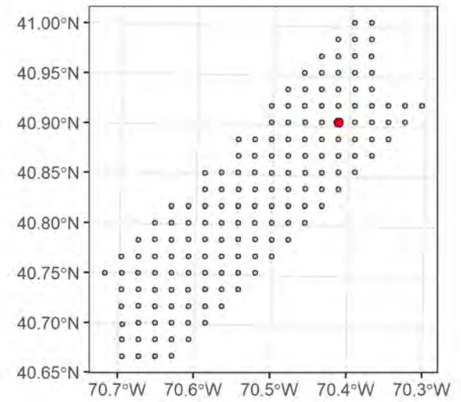


Figure E-128: WTG-032-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 08:21
Station (Replicate):	WTG-032 (2 of 2)
Depth (m):	-45.1
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, scattered burrows

Plan-View Image

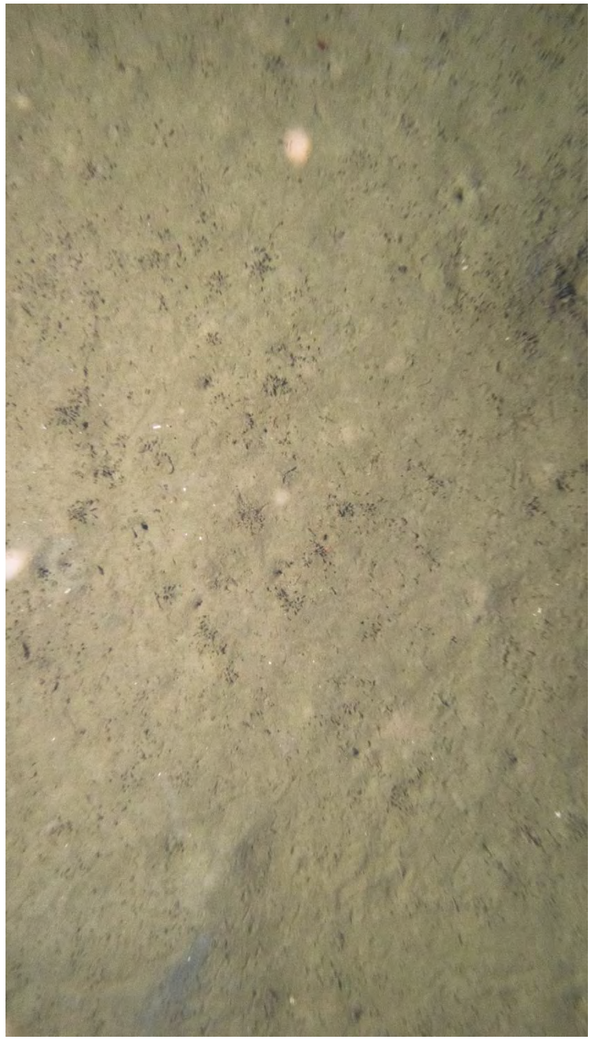


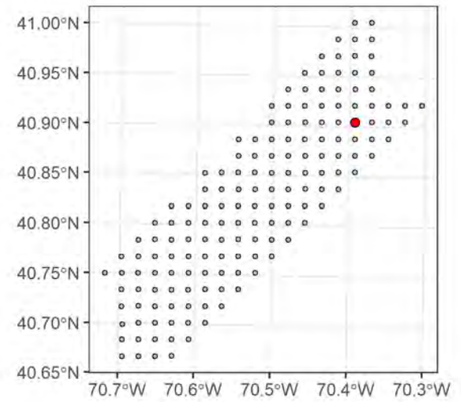
Figure E-129: WTG-033-D-PV

Sediment Profile Image



Figure E-130: WTG-033-A-SPI

Location



Attributes

Date Time (EST):	07/19/21 02:19
Station (Replicate):	WTG-033 (1 of 2)
Depth (m):	-43.6
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, scattered burrows

Plan-View Image



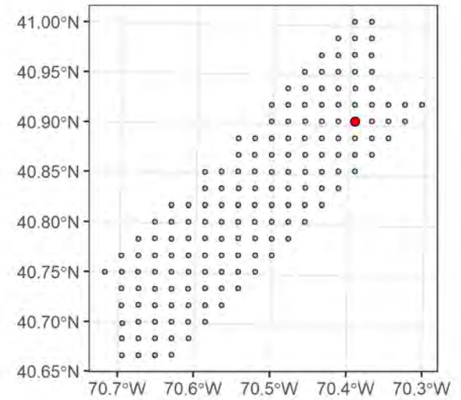
Figure E-131: WTG-033-E-PV

Sediment Profile Image



Figure E-132: WTG-033-F-SPI

Location



Attributes

Date Time (EST):	07/19/21 03:12
Station (Replicate):	WTG-033 (2 of 2)
Depth (m):	-44.1
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	6.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, scattered burrows

Plan-View Image

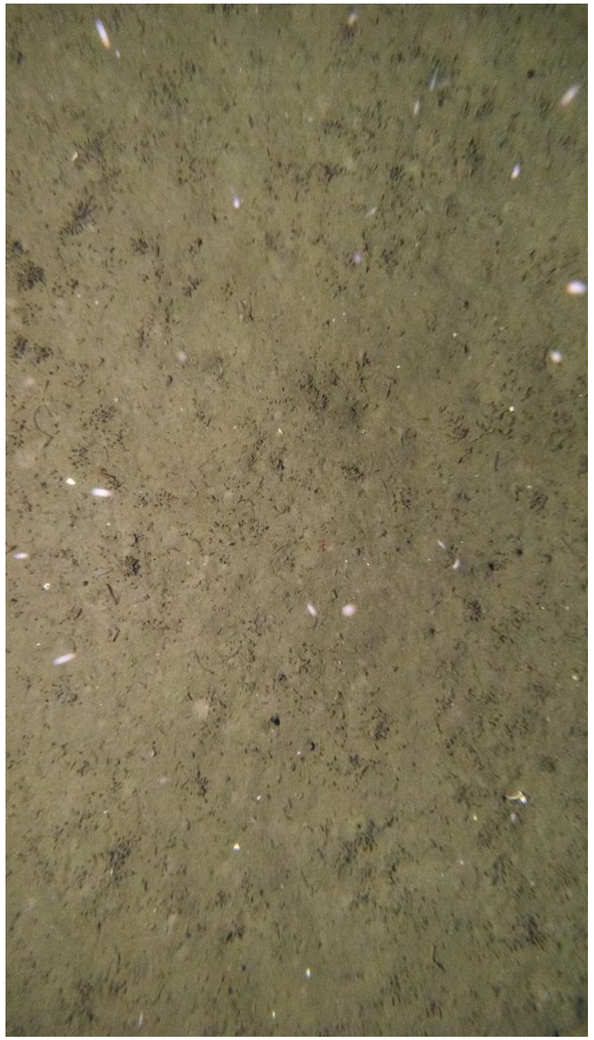


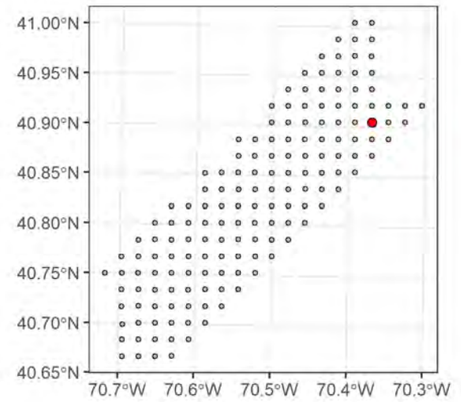
Figure E-133: WTG-034-A-PV

Sediment Profile Image



Figure E-134: WTG-034-A-SPI

Location



Attributes

Date Time (EST):	07/19/21 00:46
Station (Replicate):	WTG-034 (1 of 2)
Depth (m):	-42.5
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, scattered burrows

Plan-View Image



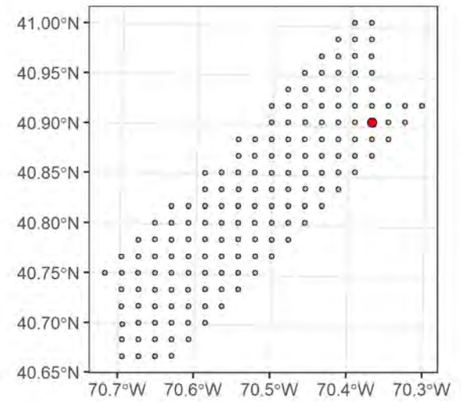
Figure E-135: WTG-034-C-PV

Sediment Profile Image



Figure E-136: WTG-034-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 00:58
Station (Replicate):	WTG-034 (2 of 2)
Depth (m):	-42.5
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some clusters of amphipod tubes, scattered burrows

Plan-View Image

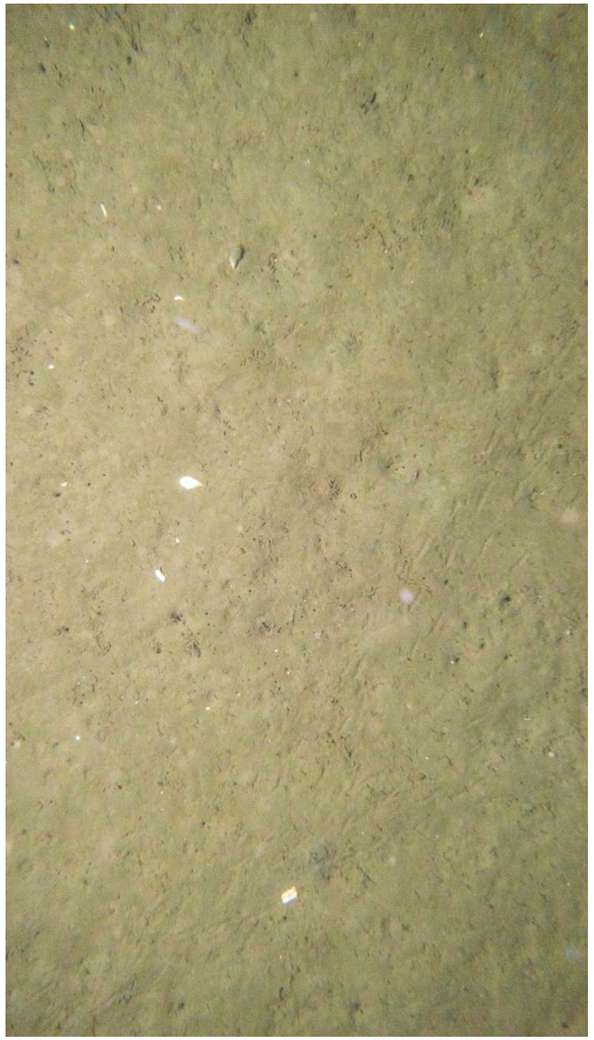


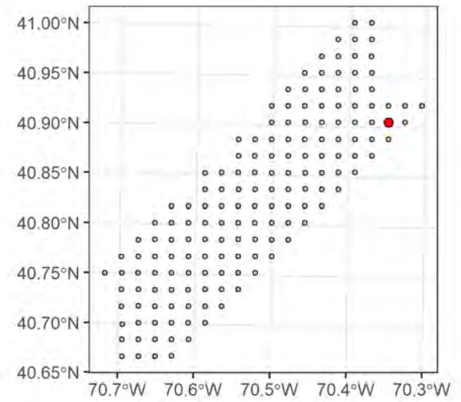
Figure E-137: WTG-035-A-PV

Sediment Profile Image



Figure E-138: WTG-035-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 05:11
Station (Replicate):	WTG-035 (1 of 2)
Depth (m):	-41.5
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows, crab tracks, Caprellids visible in SPI photo

Plan-View Image



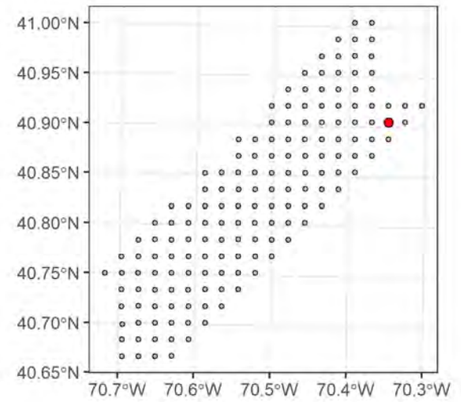
Figure E-139: WTG-035-B-PV

Sediment Profile Image



Figure E-140: WTG-035-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 05:16
Station (Replicate):	WTG-035 (2 of 2)
Depth (m):	-41.6
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	5.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



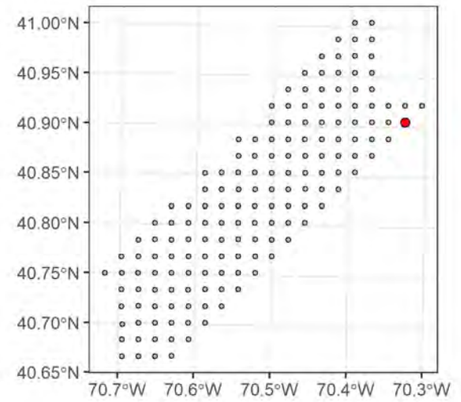
Figure E-141: WTG-036-A-PV

Sediment Profile Image



Figure E-142: WTG-036-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 21:28
Station (Replicate):	WTG-036 (1 of 2)
Depth (m):	-41.5
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	Large Bivalves 2 Paguroidea 1 fish (not in DUP)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clam siphons (potentially sensitive taxa?)

Plan-View Image



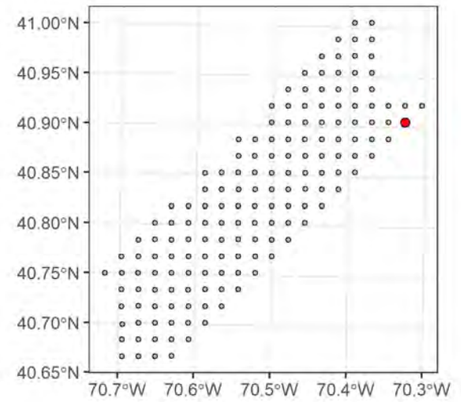
Figure E-143: WTG-036-B-PV

Sediment Profile Image



Figure E-144: WTG-036-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 21:33
Station (Replicate):	WTG-036 (2 of 2)
Depth (m):	-41.5
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	Large Bivalves 2 Paguroidea 1 pleuronectidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous clam siphons (potentially sensitive taxa?)

Plan-View Image



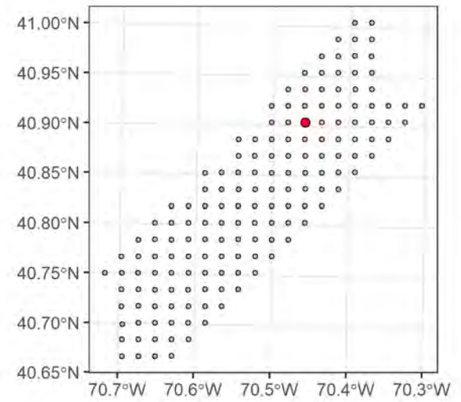
Figure E-145: WTG-037-C-PV

Sediment Profile Image



Figure E-146: WTG-037-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 12:29
Station (Replicate):	WTG-037 (1 of 2)
Depth (m):	-45.6
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	clusters of amphipods tubes

Plan-View Image



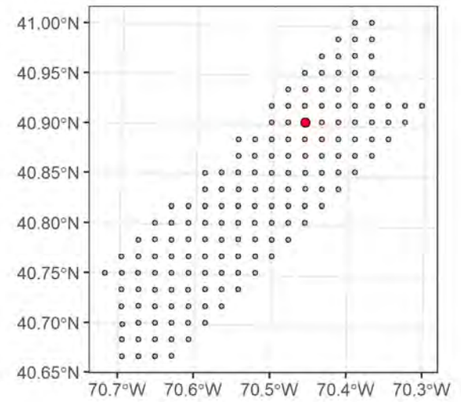
Figure E-147: WTG-037-B-PV

Sediment Profile Image



Figure E-148: WTG-037-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 12:33
Station (Replicate):	WTG-037 (2 of 2)
Depth (m):	-45.7
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	clusters of amphipod tubes

Plan-View Image



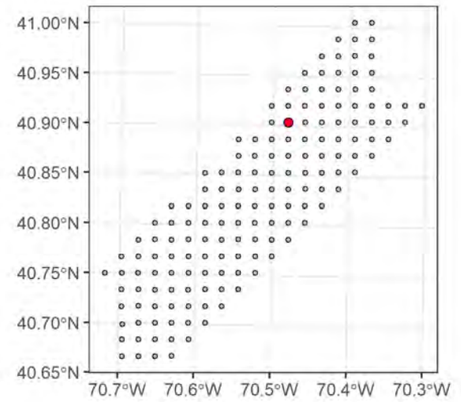
Figure E-149: WTG-038-B-PV

Sediment Profile Image



Figure E-150: WTG-038-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 21:06
Station (Replicate):	WTG-038 (1 of 2)
Depth (m):	-47.7
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod (Ericthtonius?) tube clusters, large and small burrows, faint crab tracks

Plan-View Image



Figure E-151: WTG-038-A-PV

Sediment Profile Image

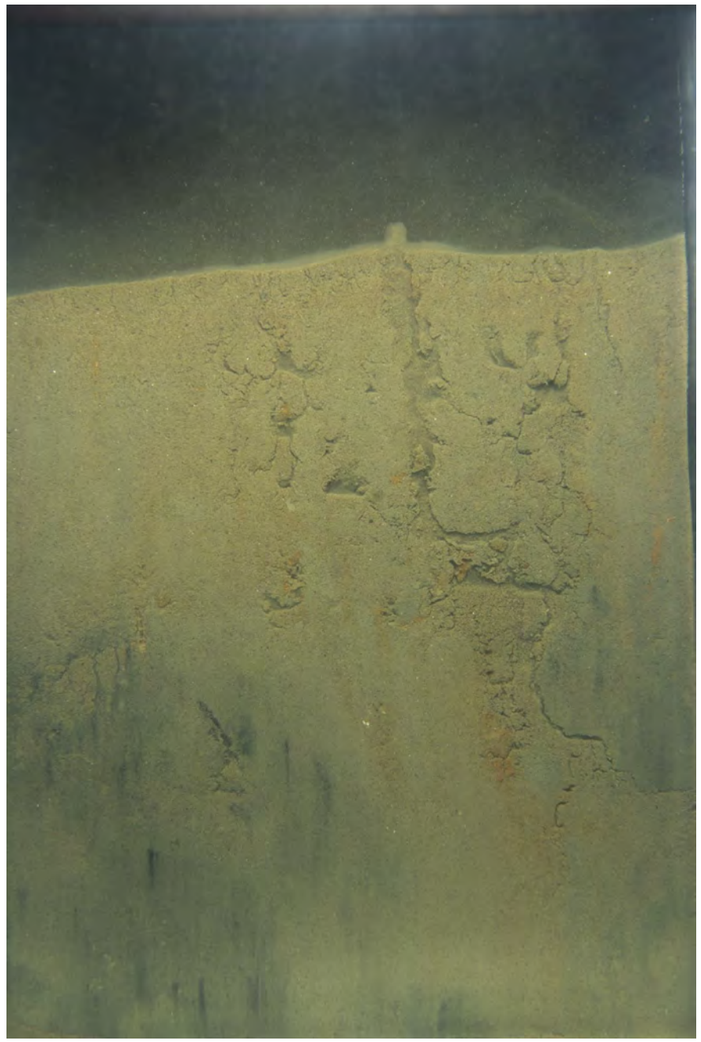
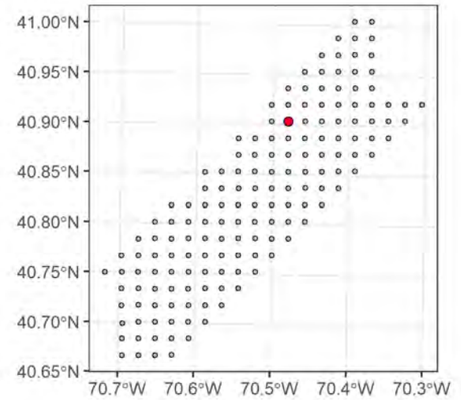


Figure E-152: WTG-038-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 21:11
Station (Replicate):	WTG-038 (2 of 2)
Depth (m):	-47.8
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint crab tracks

Plan-View Image



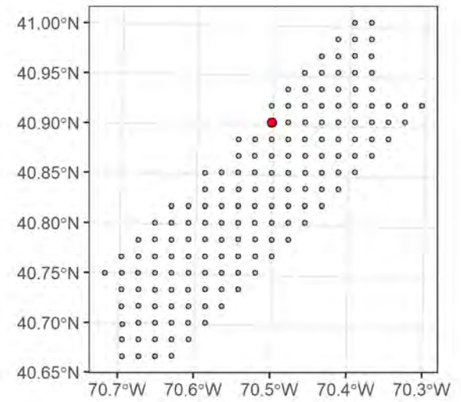
Figure E-153: WTG-039-A-PV

Sediment Profile Image



Figure E-154: WTG-039-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 16:01
Station (Replicate):	WTG-039 (1 of 2)
Depth (m):	-48.1
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	Numerous burrows, some amphipod tube clusters, no visible epifauna

Plan-View Image

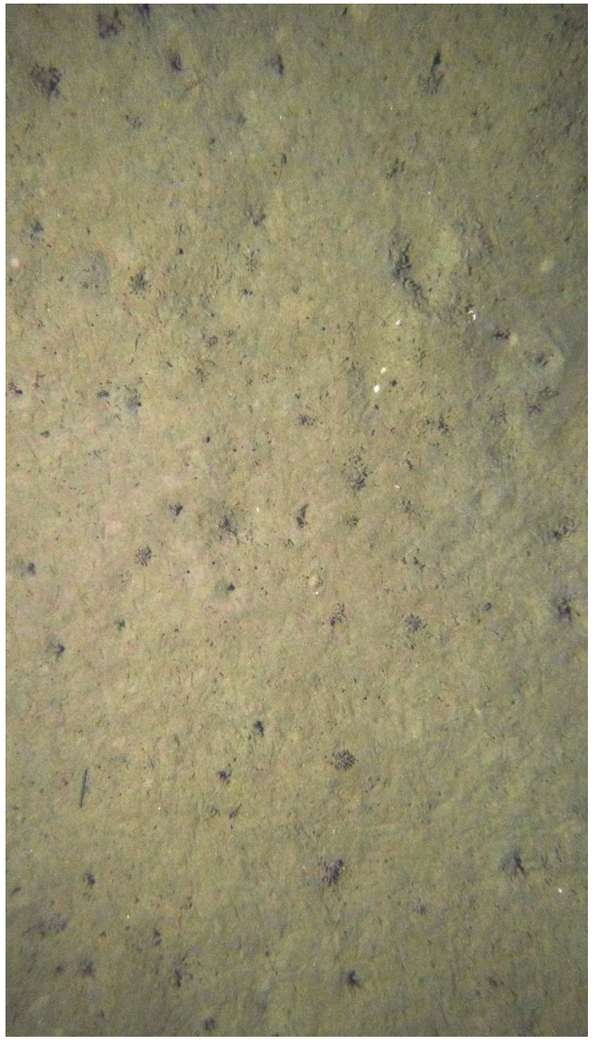


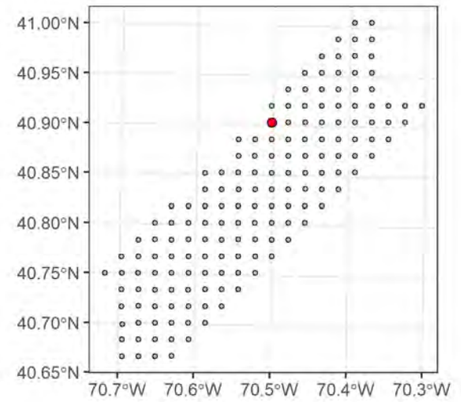
Figure E-155: WTG-039-B-PV

Sediment Profile Image



Figure E-156: WTG-039-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 16:10
Station (Replicate):	WTG-039 (2 of 2)
Depth (m):	-48.2
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	5.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	Numerous burrows, some amphipod tube clusters, no visible epifauna

Plan-View Image



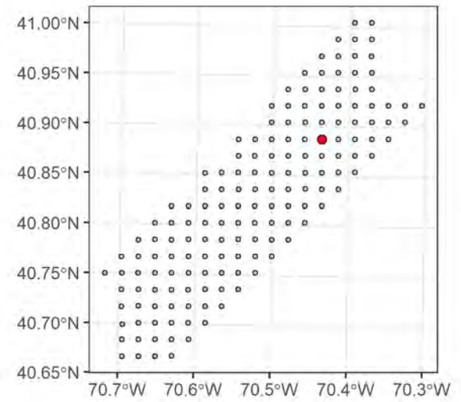
Figure E-157: WTG-040-B-PV

Sediment Profile Image



Figure E-158: WTG-040-B-SPI

Location



Attributes

Date Time (EST):	07/19/21 04:48
Station (Replicate):	WTG-040 (1 of 2)
Depth (m):	-47.8
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 indeterminate fish
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	Squid egg, few amphipod tube clusters, burrow traces, out of focus.

Plan-View Image



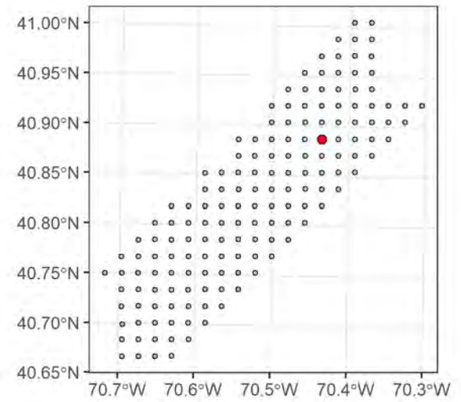
Figure E-159: WTG-040-A-PV

Sediment Profile Image



Figure E-160: WTG-040-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 04:54
Station (Replicate):	WTG-040 (2 of 2)
Depth (m):	-48
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea, 1 sea slug 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Squid eggs present, adult squid visible, some amphipod tube clusters

Plan-View Image



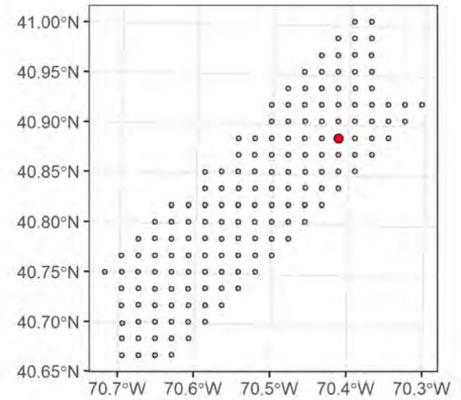
Figure E-161: WTG-041-C-PV

Sediment Profile Image



Figure E-162: WTG-041-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 00:34
Station (Replicate):	WTG-041 (1 of 2)
Depth (m):	-45.9
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp 2 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



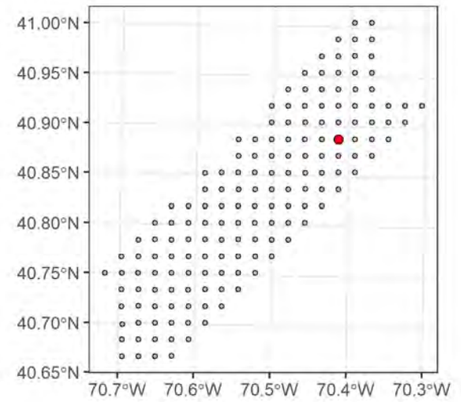
Figure E-163: WTG-041-B-PV

Sediment Profile Image



Figure E-164: WTG-041-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 00:38
Station (Replicate):	WTG-041 (2 of 2)
Depth (m):	-46
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 indeterminate fish
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image

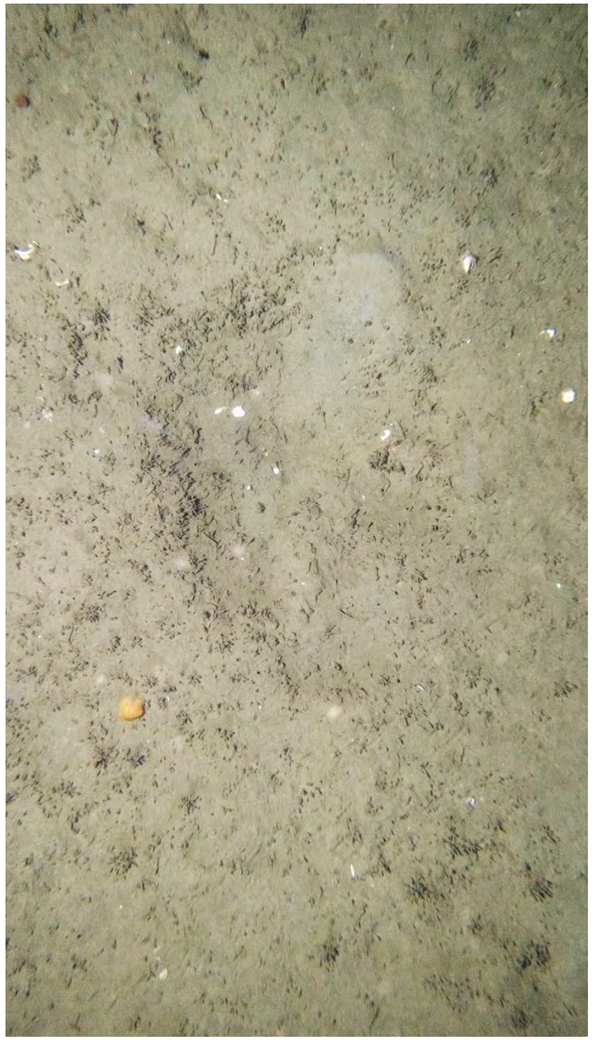


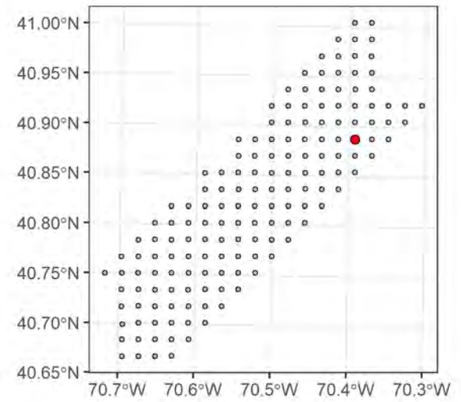
Figure E-165: WTG-042-B-PV

Sediment Profile Image



Figure E-166: WTG-042-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 19:37
Station (Replicate):	WTG-042 (1 of 2)
Depth (m):	-44.7
Prism Penetration (cm):	13
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea, 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, other traces and burrows

Plan-View Image



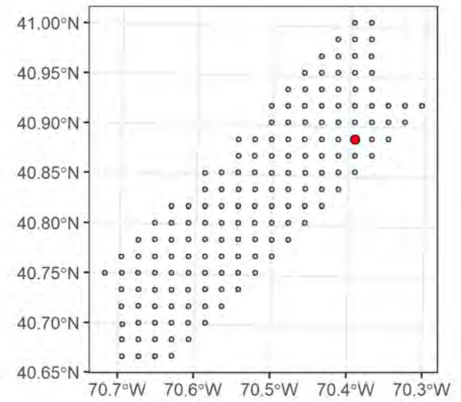
Figure E-167: WTG-042-A-PV

Sediment Profile Image



Figure E-168: WTG-042-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 19:42
Station (Replicate):	WTG-042 (2 of 2)
Depth (m):	-44.6
Prism Penetration (cm):	12.6
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 bivalve 1 Paguroidea, 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, one clam siphon visible

Plan-View Image



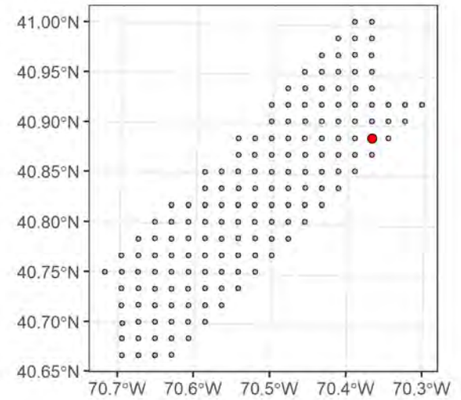
Figure E-169: WTG-043-A-PV

Sediment Profile Image



Figure E-170: WTG-043-A-SPI

Location



Attributes

Date Time (EST):	08/01/21 02:22
Station (Replicate):	WTG-043 (1 of 2)
Depth (m):	-44.6
Prism Penetration (cm):	12.2
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows present

Plan-View Image



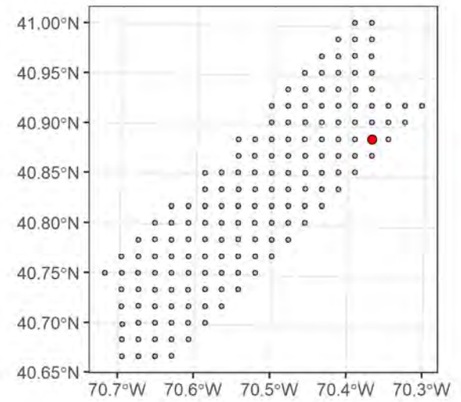
Figure E-171: WTG-043-B-PV

Sediment Profile Image



Figure E-172: WTG-043-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 02:27
Station (Replicate):	WTG-043 (2 of 2)
Depth (m):	-44.6
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	226 large bivalves 2 Cancer irroratus, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows present, 1 gastropod egg case

Plan-View Image



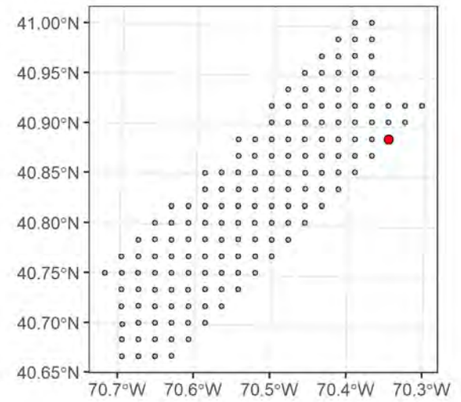
Figure E-173: WTG-044-A-PV

Sediment Profile Image



Figure E-174: WTG-044-B-SPI

Location



Attributes

Date Time (EST):	08/01/21 03:54
Station (Replicate):	WTG-044 (1 of 2)
Depth (m):	-43.3
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	large bivalves (at least 14) 3 Paguroidea, 3 shrimp 1 Lophius americanus, 1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



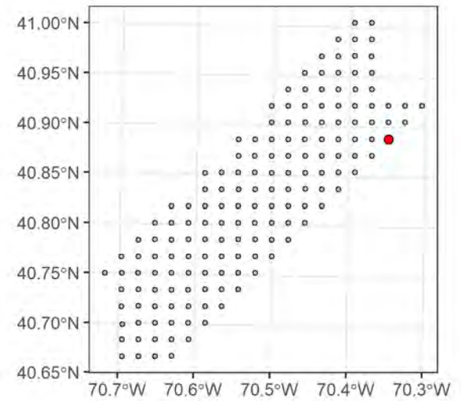
Figure E-175: WTG-044-C-PV

Sediment Profile Image



Figure E-176: WTG-044-C-SPI

Location



Attributes

Date Time (EST):	08/01/21 03:59
Station (Replicate):	WTG-044 (2 of 2)
Depth (m):	-43.2
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	1
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	numerous medium bivalves 3 Paguroidea, 6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks, 2 gastropod egg cases

Plan-View Image



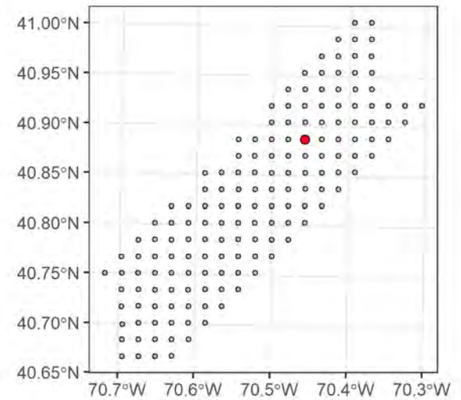
Figure E-177: WTG-045-B-PV

Sediment Profile Image



Figure E-178: WTG-045-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 10:47
Station (Replicate):	WTG-045 (1 of 2)
Depth (m):	-48.3
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	some amphipod tubes and traces, 3 egg cases (probably gastropod)

Plan-View Image



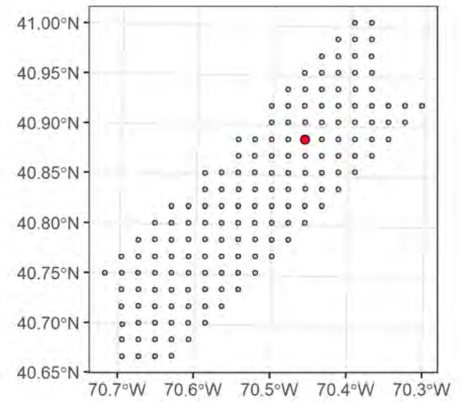
Figure E-179: WTG-045-A-PV

Sediment Profile Image



Figure E-180: WTG-045-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 10:52
Station (Replicate):	WTG-045 (2 of 2)
Depth (m):	-48.3
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	no visible epifauna, some amphipod tubes, numerous burrows and traces

Plan-View Image



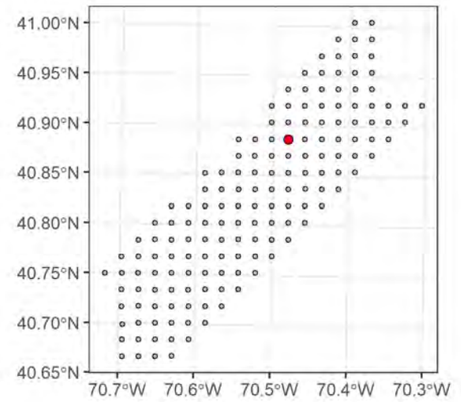
Figure E-181: WTG-046-A-PV

Sediment Profile Image



Figure E-182: WTG-046-A-SPI

Location



Attributes

Date Time (EST):	07/31/21 18:43
Station (Replicate):	WTG-046 (1 of 2)
Depth (m):	-49.6
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea, 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint crab tracks, three very large burrows/feeding voids

Plan-View Image



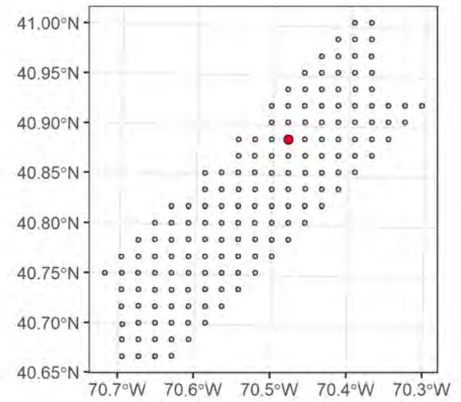
Figure E-183: WTG-046-C-PV

Sediment Profile Image



Figure E-184: WTG-046-F-SPI

Location



Attributes

Date Time (EST):	07/31/21 19:43
Station (Replicate):	WTG-046 (2 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint crab tracks

Plan-View Image



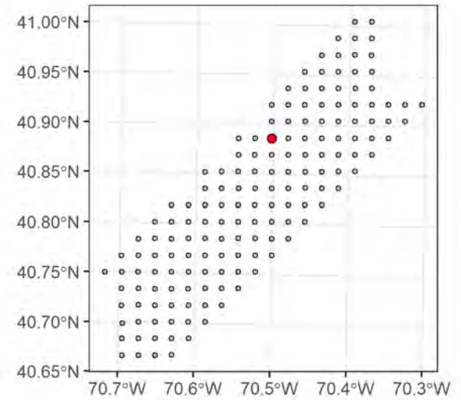
Figure E-185: WTG-047-A-PV

Sediment Profile Image



Figure E-186: WTG-047-A-SPI

Location



Attributes

Date Time (EST):	07/19/21 09:23
Station (Replicate):	WTG-047 (1 of 2)
Depth (m):	-49.7
Prism Penetration (cm):	17
aRPD Mean Depth (cm):	5.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 gastropod egg cases, scattered amphipod tube clusters, crab tracks, some burrows

Plan-View Image



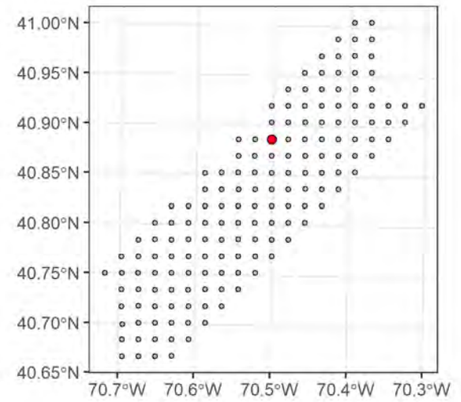
Figure E-187: WTG-047-C-PV

Sediment Profile Image



Figure E-188: WTG-047-B-SPI

Location



Attributes

Date Time (EST):	07/19/21 09:28
Station (Replicate):	WTG-047 (2 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 gastropod egg cases, scattered amphipod tube clusters, some burrows

Plan-View Image



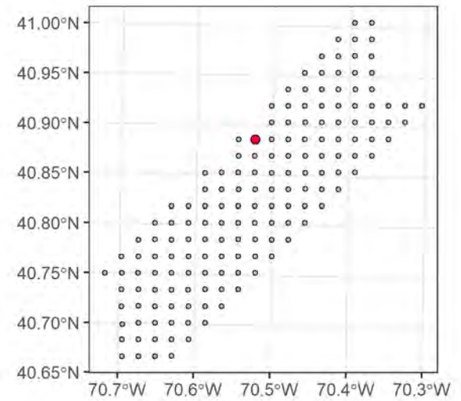
Figure E-189: WTG-048-B-PV

Sediment Profile Image



Figure E-190: WTG-048-B-SPI

Location



Attributes

Date Time (EST):	07/19/21 11:01
Station (Replicate):	WTG-048 (1 of 2)
Depth (m):	-49.4
Prism Penetration (cm):	16.8
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	Some amphipod tube clusters, traces and burrows.

Plan-View Image



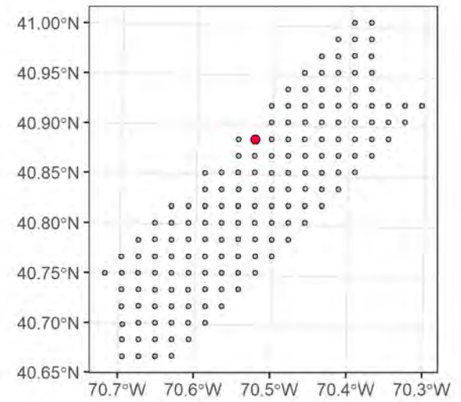
Figure E-191: WTG-048-A-PV

Sediment Profile Image



Figure E-192: WTG-048-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 11:06
Station (Replicate):	WTG-048 (2 of 2)
Depth (m):	-49.5
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	Some amphipod tube clusters, traces and burrows.

Plan-View Image



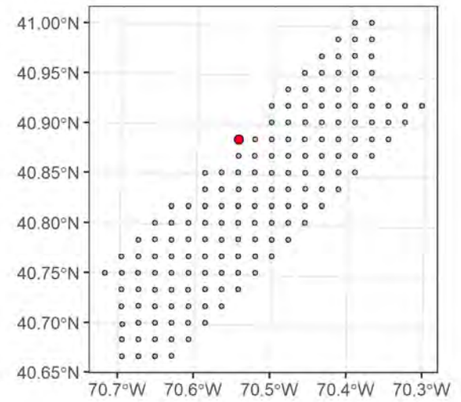
Figure E-193: WTG-049-A-PV

Sediment Profile Image



Figure E-194: WTG-049-A-SPI

Location



Attributes

Date Time (EST):	07/19/21 12:37
Station (Replicate):	WTG-049 (1 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	5.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 gastropod egg cases, Some amphipod tube clusters, traces and burrows.

Plan-View Image



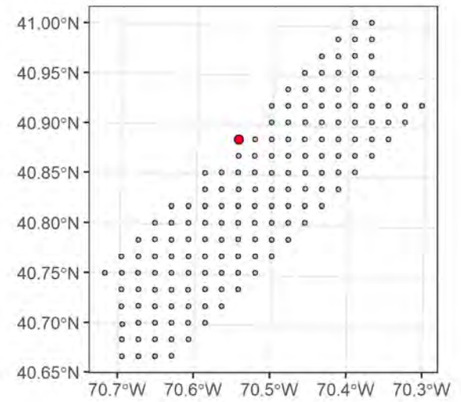
Figure E-195: WTG-049-C-PV

Sediment Profile Image



Figure E-196: WTG-049-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 12:47
Station (Replicate):	WTG-049 (2 of 2)
Depth (m):	-50.8
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	5.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 starfish (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	1 gastropod egg case, Some amphipod tube clusters, traces and burrows.

Plan-View Image



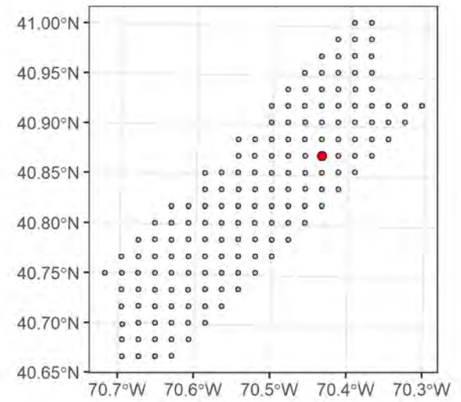
Figure E-197: WTG-050-B-PV

Sediment Profile Image



Figure E-198: WTG-050-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 12:30
Station (Replicate):	WTG-050 (1 of 2)
Depth (m):	-48.7
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks, one large feeding void?

Plan-View Image



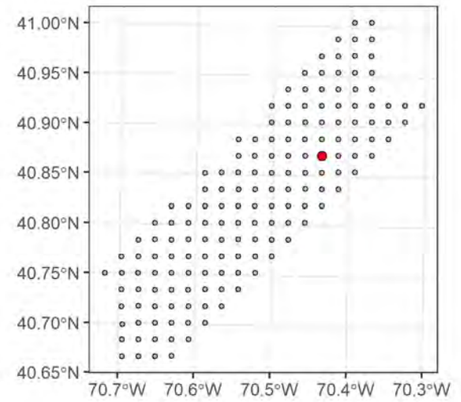
Figure E-199: WTG-050-A-PV

Sediment Profile Image



Figure E-200: WTG-050-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 12:35
Station (Replicate):	WTG-050 (2 of 2)
Depth (m):	-48.7
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	1 gastropod egg case, amphipod tube clusters, large and small burrows.

Plan-View Image



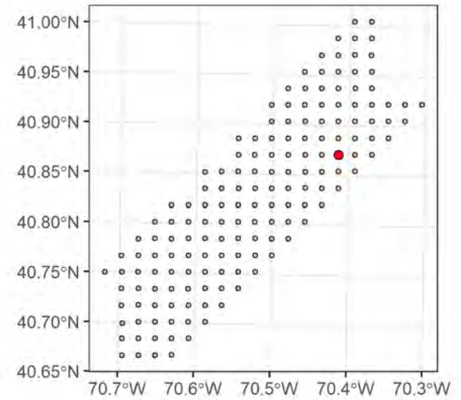
Figure E-201: WTG-051-B-PV

Sediment Profile Image



Figure E-202: WTG-051-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 17:48
Station (Replicate):	WTG-051 (1 of 2)
Depth (m):	-47.9
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	5.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, some amphipod tube clusters, traces and burrows.

Plan-View Image



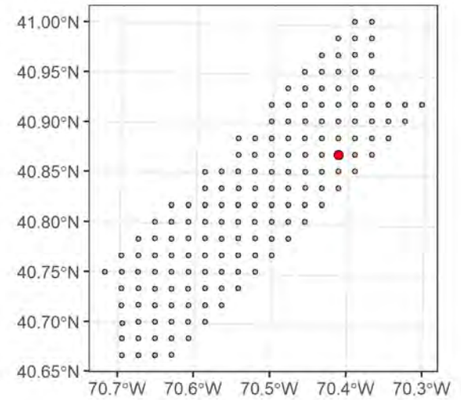
Figure E-203: WTG-051-A-PV

Sediment Profile Image



Figure E-204: WTG-051-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 17:53
Station (Replicate):	WTG-051 (2 of 2)
Depth (m):	-47.9
Prism Penetration (cm):	16.6
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	Large Bivalves 2 shrimp 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some large bivalves, Some amphipod tube clusters, traces and burrows.

Plan-View Image



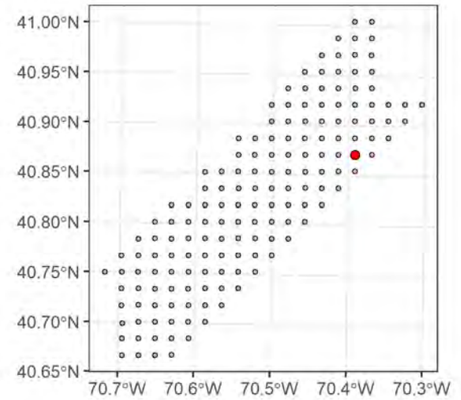
Figure E-205: WTG-052-A-PV

Sediment Profile Image



Figure E-206: WTG-052-A-SPI

Location



Attributes

Date Time (EST):	07/31/21 10:32
Station (Replicate):	WTG-052 (1 of 2)
Depth (m):	-46.6
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	small bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	1 gastropod egg case, few amphipod tubes, large and small burrows

Plan-View Image



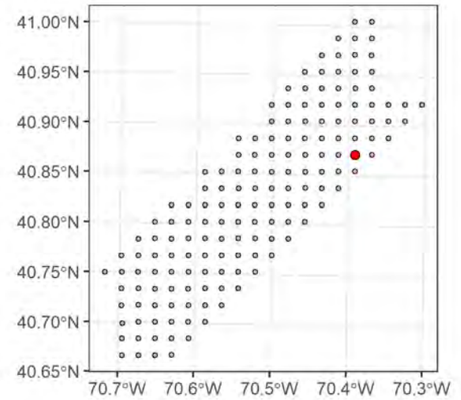
Figure E-207: WTG-052-C-PV

Sediment Profile Image



Figure E-208: WTG-052-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 10:41
Station (Replicate):	WTG-052 (2 of 2)
Depth (m):	-46.7
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	numerous small bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint crab tracks

Plan-View Image



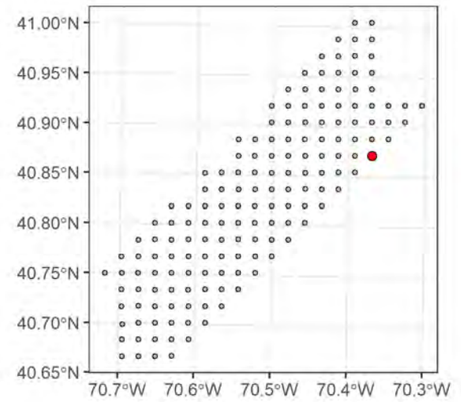
Figure E-209: WTG-053-B-PV

Sediment Profile Image



Figure E-210: WTG-053-B-SPI

Location



Attributes

Date Time (EST):	07/18/21 22:56
Station (Replicate):	WTG-053 (1 of 2)
Depth (m):	-44.6
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	scattered amphipod tubes

Plan-View Image



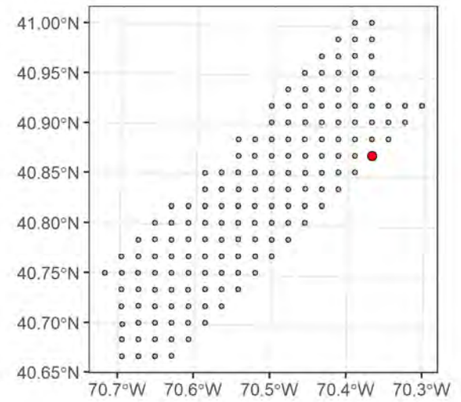
Figure E-211: WTG-053-A-PV

Sediment Profile Image



Figure E-212: WTG-053-C-SPI

Location



Attributes

Date Time (EST):	07/18/21 23:01
Station (Replicate):	WTG-053 (2 of 2)
Depth (m):	-44.7
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp, 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some scattered amphipod tubes

Plan-View Image

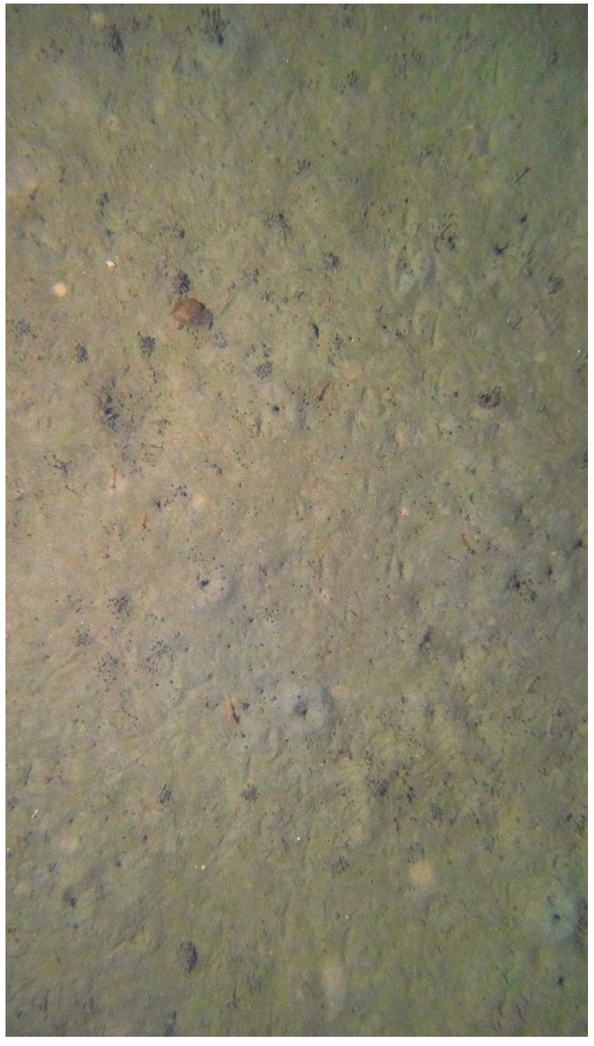


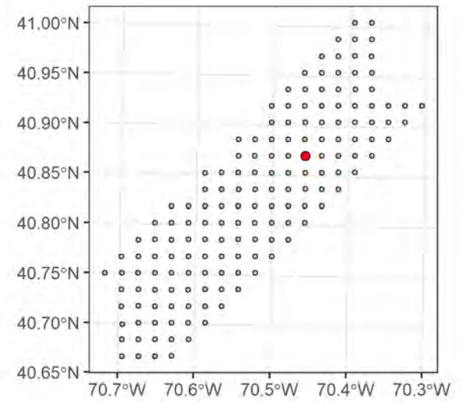
Figure E-213: WTG-054-B-PV

Sediment Profile Image



Figure E-214: WTG-054-B-SPI

Location



Attributes

Date Time (EST):	07/19/21 07:40
Station (Replicate):	WTG-054 (1 of 2)
Depth (m):	-48.7
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea, 3 Shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, Some amphipod tube clusters, traces and burrows.

Plan-View Image



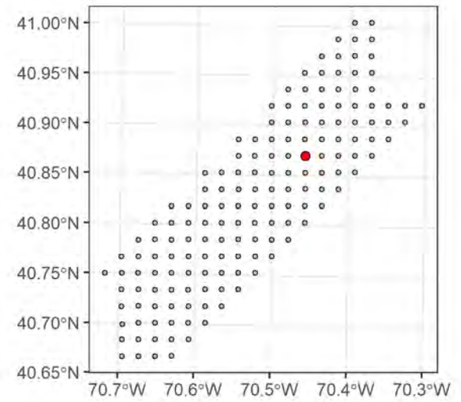
Figure E-215: WTG-054-A-PV

Sediment Profile Image



Figure E-216: WTG-054-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 07:45
Station (Replicate):	WTG-054 (2 of 2)
Depth (m):	-48.6
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Some amphipod tube clusters, traces and burrows.

Plan-View Image



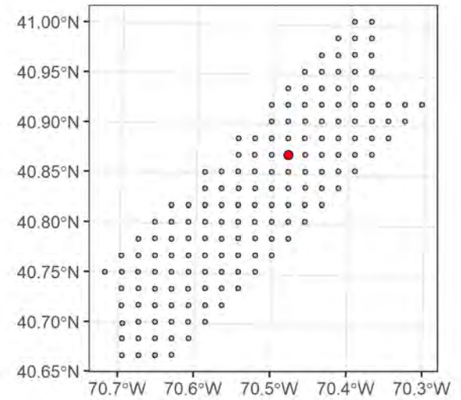
Figure E-217: WTG-055-B-PV

Sediment Profile Image



Figure E-218: WTG-055-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 14:16
Station (Replicate):	WTG-055 (1 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	5.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	1 gastropod egg case, small burrows, 2 very large burrows/feeding voids, focus issues

Plan-View Image



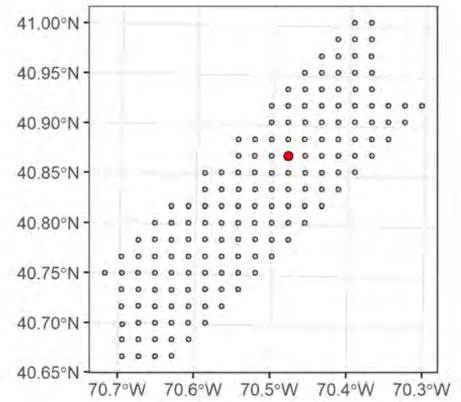
Figure E-219: WTG-055-C-PV

Sediment Profile Image



Figure E-220: WTG-055-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 14:22
Station (Replicate):	WTG-055 (2 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	1 gastropod egg case, large and small burrows, focus issues

Plan-View Image

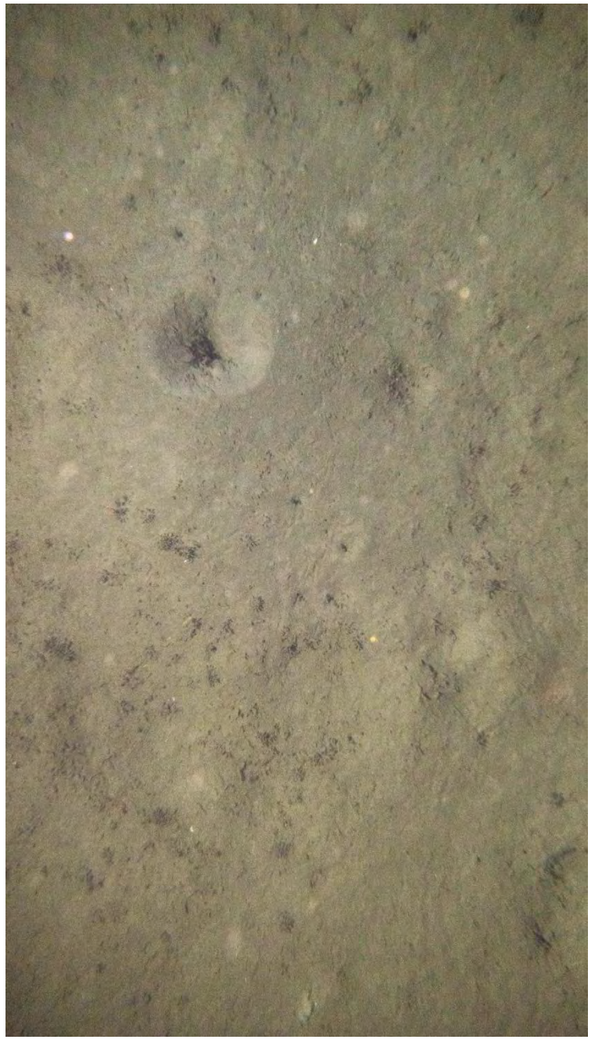


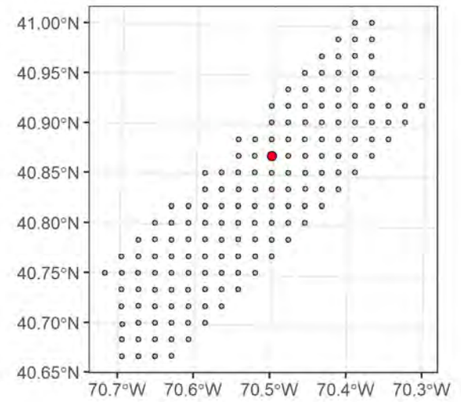
Figure E-221: WTG-056-A-PV

Sediment Profile Image



Figure E-222: WTG-056-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 17:45
Station (Replicate):	WTG-056 (1 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	1 gastropod egg case, some amphipod tube clusters, faint crab tracks, large burrows, one large feeding void?

Plan-View Image



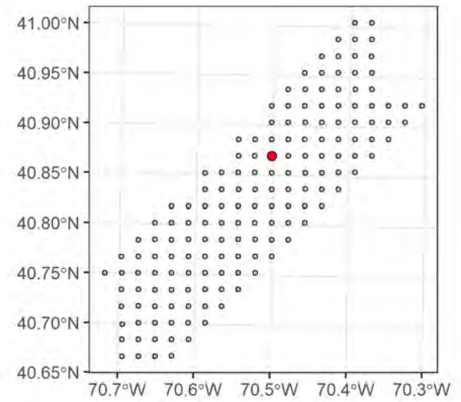
Figure E-223: WTG-056-C-PV

Sediment Profile Image



Figure E-224: WTG-056-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 17:54
Station (Replicate):	WTG-056 (2 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	17.6
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	2 gastropod egg cases, some amphipod tube clusters, faint crab tracks, large and small burrows

Plan-View Image



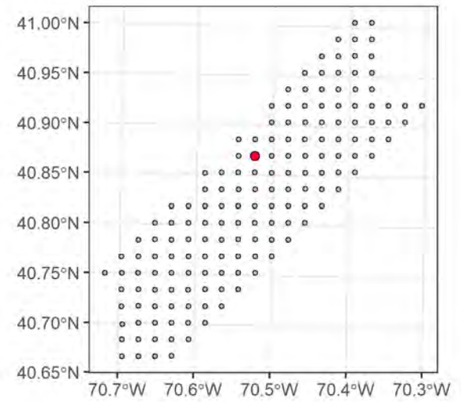
Figure E-225: WTG-057-B-PV

Sediment Profile Image



Figure E-226: WTG-057-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 16:21
Station (Replicate):	WTG-057 (1 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod (Ericthtonius?) tube clusters, large and small burrows, faint crab tracks, focus issues

Plan-View Image



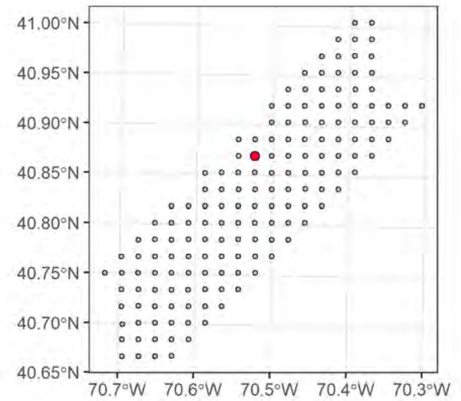
Figure E-227: WTG-057-C-PV

Sediment Profile Image



Figure E-228: WTG-057-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 16:25
Station (Replicate):	WTG-057 (2 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod (Ericthtonius?) tube clusters, large and small burrows, faint crab tracks, focus issues

Plan-View Image



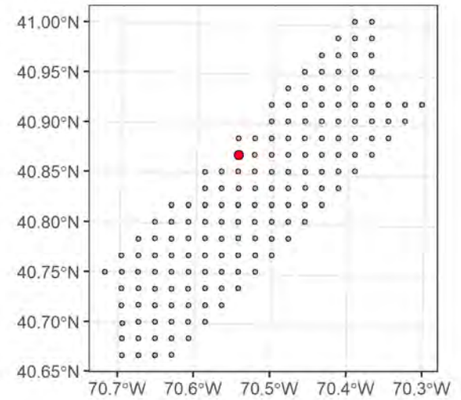
Figure E-229: WTG-058-B-PV

Sediment Profile Image



Figure E-230: WTG-058-B-SPI

Location



Attributes

Date Time (EST):	07/19/21 15:00
Station (Replicate):	WTG-058 (1 of 2)
Depth (m):	-53
Prism Penetration (cm):	17.2
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters

Plan-View Image



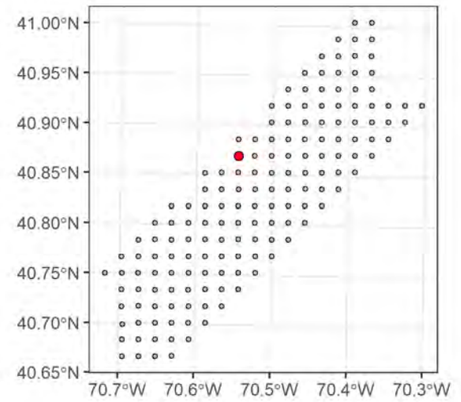
Figure E-231: WTG-058-A-PV

Sediment Profile Image



Figure E-232: WTG-058-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 15:04
Station (Replicate):	WTG-058 (2 of 2)
Depth (m):	-53
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	some amphipod tube clusters, one large burrow and several large feeding voids?

Plan-View Image

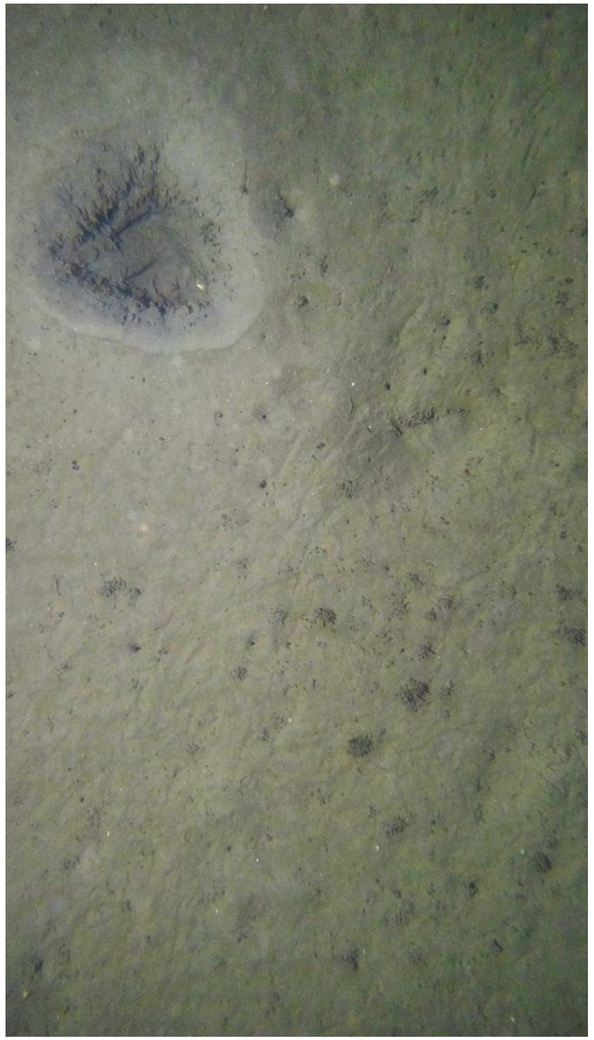


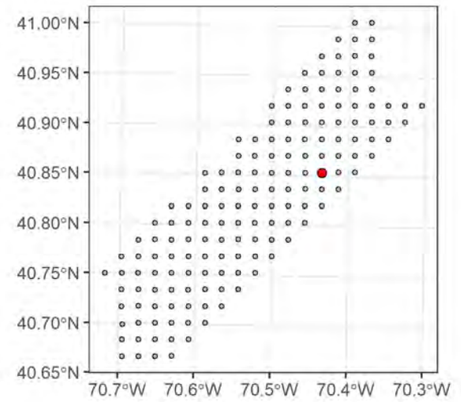
Figure E-233: WTG-059-E-PV

Sediment Profile Image



Figure E-234: WTG-059-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 13:54
Station (Replicate):	WTG-059 (1 of 2)
Depth (m):	-49.2
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 large bivalves 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some amphipod tube clusters, crab tracks, large and small burrows, one large feeding void?

Plan-View Image

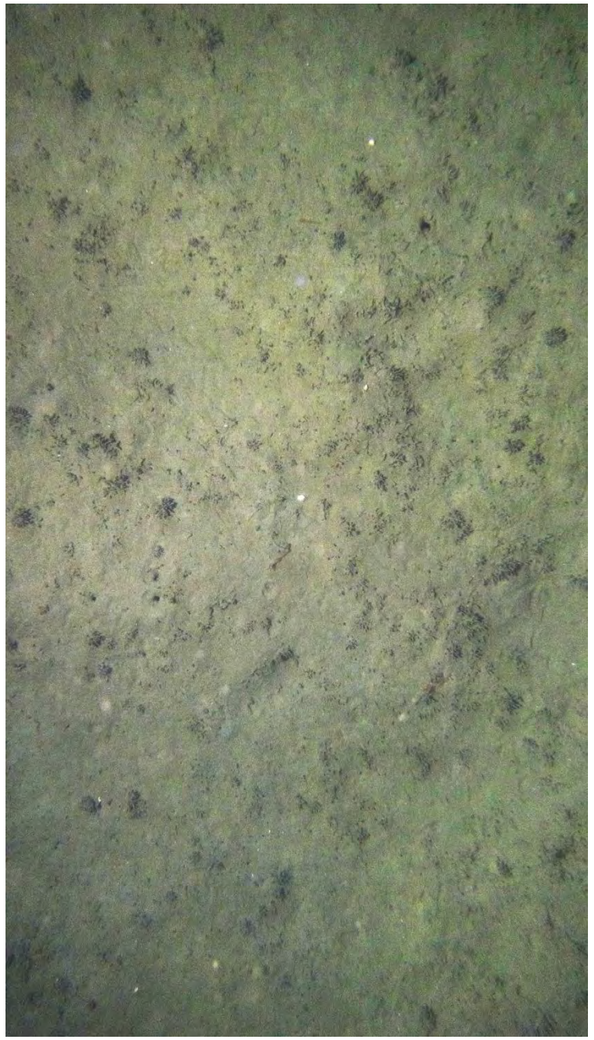


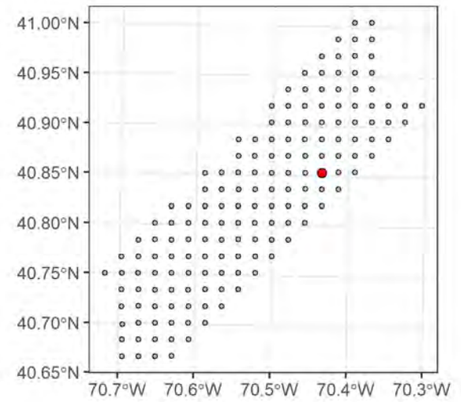
Figure E-235: WTG-059-D-PV

Sediment Profile Image



Figure E-236: WTG-059-D-SPI

Location



Attributes

Date Time (EST):	07/22/21 14:31
Station (Replicate):	WTG-059 (2 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 small bivalves 1 shrimp, 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small and large burrows

Plan-View Image



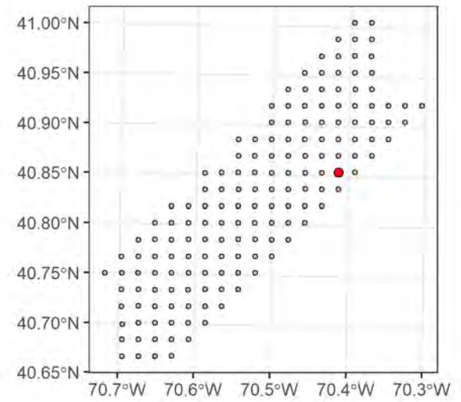
Figure E-237: WTG-060-E-PV

Sediment Profile Image



Figure E-238: WTG-060-E-SPI

Location



Attributes

Date Time (EST):	07/31/21 09:07
Station (Replicate):	WTG-060 (1 of 2)
Depth (m):	-48.6
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, some large and small burrows, faint crab tracks

Plan-View Image



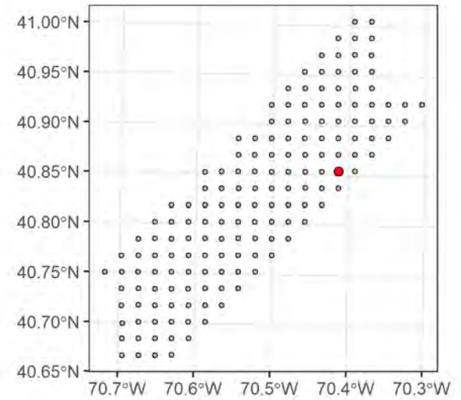
Figure E-239: WTG-060-D-PV

Sediment Profile Image



Figure E-240: WTG-060-F-SPI

Location



Attributes

Date Time (EST):	07/31/21 09:11
Station (Replicate):	WTG-060 (2 of 2)
Depth (m):	-48.5
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, some large and small burrows, faint crab tracks

Plan-View Image



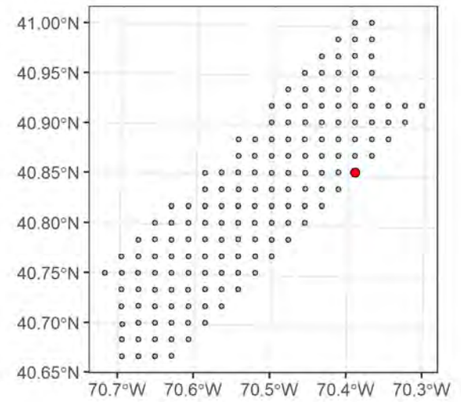
Figure E-241: WTG-061-A-PV

Sediment Profile Image



Figure E-242: WTG-061-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 16:17
Station (Replicate):	WTG-061 (1 of 2)
Depth (m):	-48.2
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	numerous large bivalves 2 small Paguroidea, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, some large and small burrows, dense bed of large bivalves

Plan-View Image



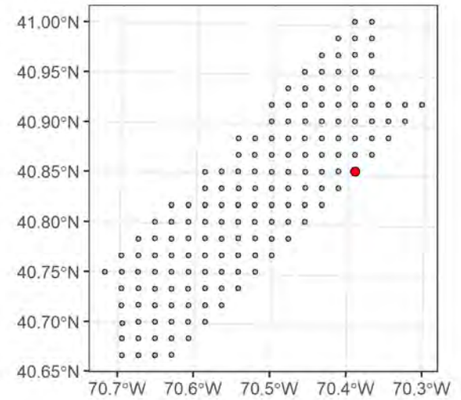
Figure E-243: WTG-061-C-PV

Sediment Profile Image



Figure E-244: WTG-061-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 16:21
Station (Replicate):	WTG-061 (2 of 2)
Depth (m):	-48.1
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	Large Bivalves
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, some large and small burrows, few large bivalves

Plan-View Image



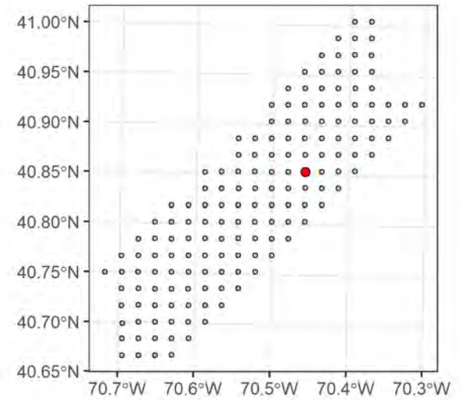
Figure E-245: WTG-062-A-PV

Sediment Profile Image



Figure E-246: WTG-062-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 20:58
Station (Replicate):	WTG-062 (1 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp 1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, numerous small burrows, 2 very large burrow

Plan-View Image

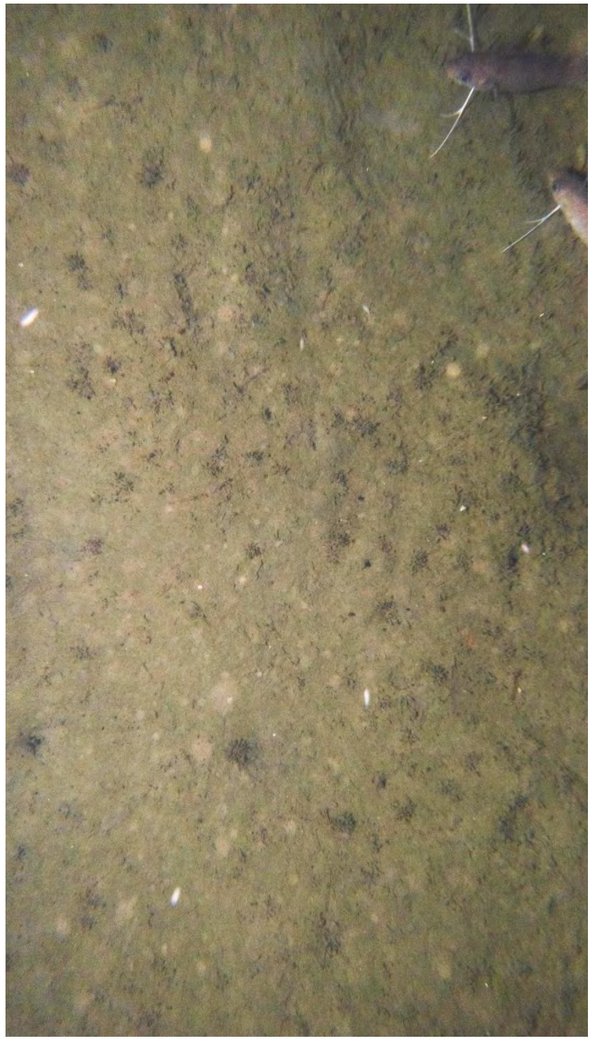


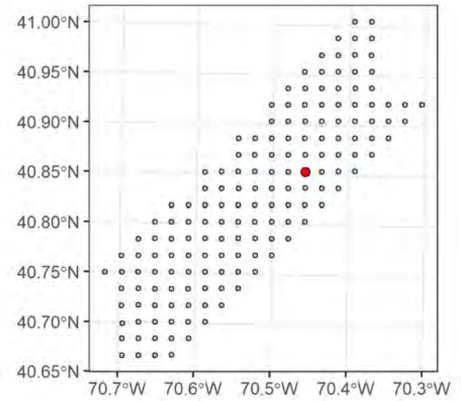
Figure E-247: WTG-062-B-PV

Sediment Profile Image



Figure E-248: WTG-062-B-SPI

Location



Attributes

Date Time (EST):	07/29/21 21:04
Station (Replicate):	WTG-062 (2 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, numerous small burrows

Plan-View Image



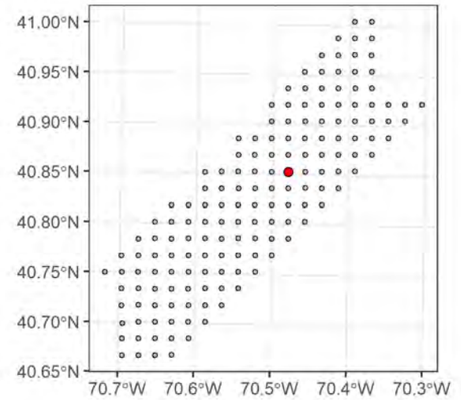
Figure E-249: WTG-063-B-PV

Sediment Profile Image



Figure E-250: WTG-063-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 19:29
Station (Replicate):	WTG-063 (1 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, numerous small burrows, few large burrows

Plan-View Image

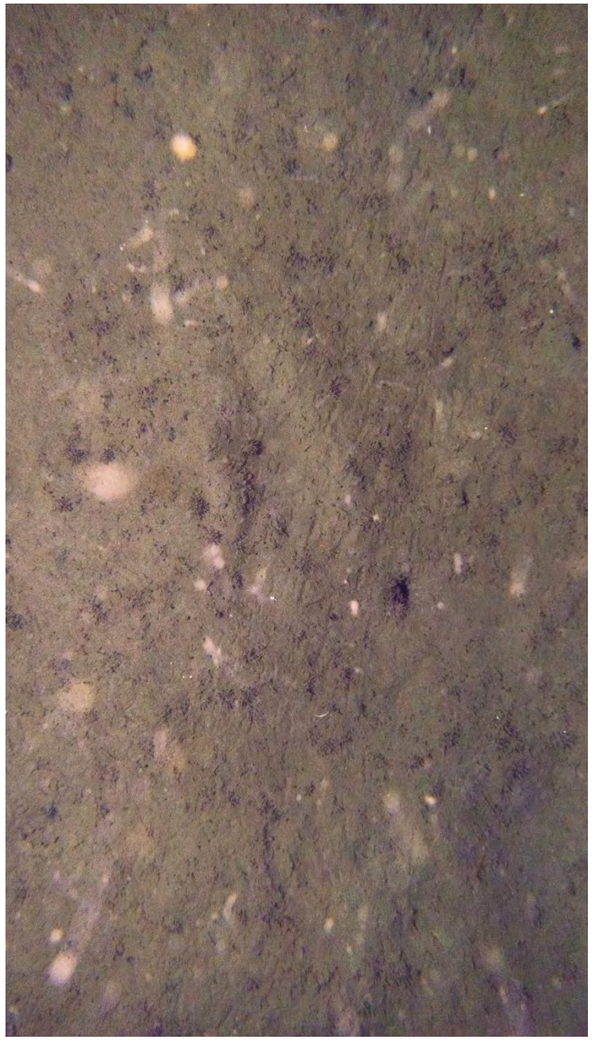


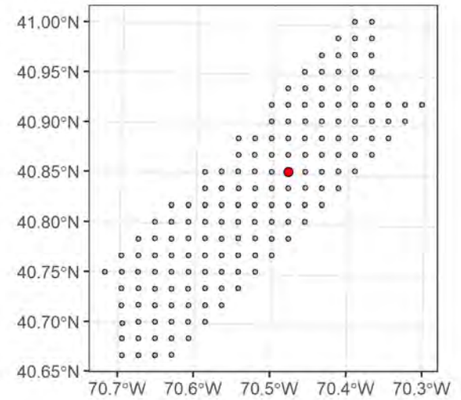
Figure E-251: WTG-063-C-PV

Sediment Profile Image



Figure E-252: WTG-063-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 19:39
Station (Replicate):	WTG-063 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	16.8
aRPD Mean Depth (cm):	7.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, numerous small burrows, few large burrows, crab tracks

Plan-View Image



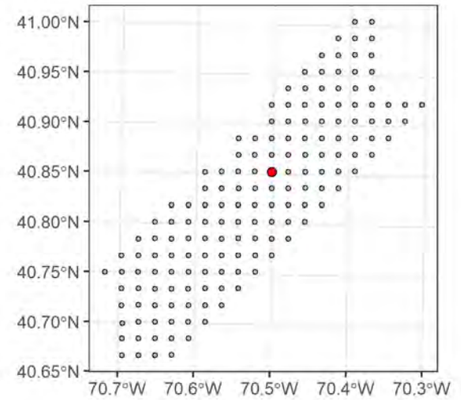
Figure E-253: WTG-064-A-PV

Sediment Profile Image



Figure E-254: WTG-064-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 17:32
Station (Replicate):	WTG-064 (1 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	17
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, numerous small burrows, one large burrow/feeding void, crab tracks

Plan-View Image

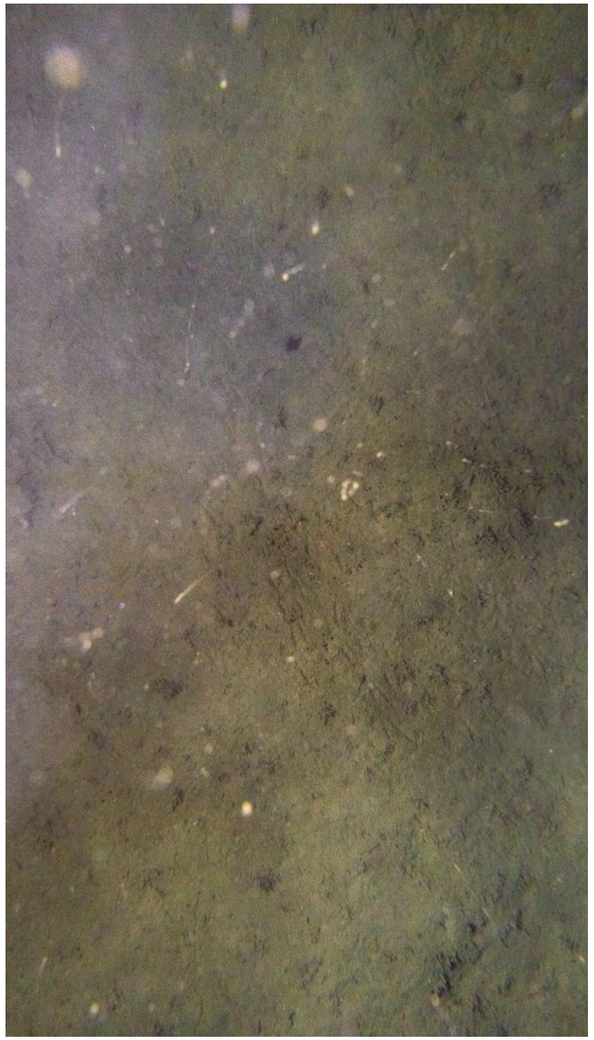


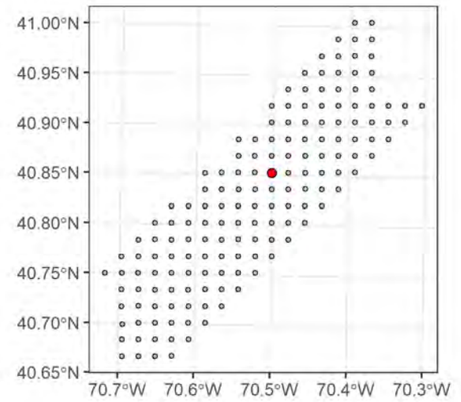
Figure E-255: WTG-064-B-PV

Sediment Profile Image



Figure E-256: WTG-064-B-SPI

Location



Attributes

Date Time (EST):	07/29/21 17:37
Station (Replicate):	WTG-064 (2 of 2)
Depth (m):	-51.3
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	5.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	few small bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, crab tracks, focus issues

Plan-View Image

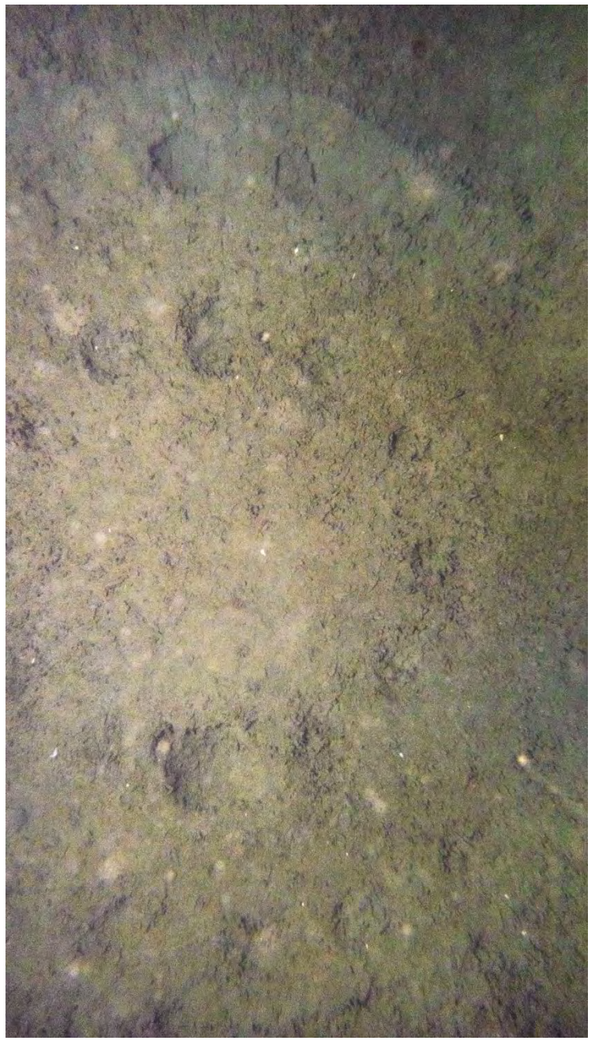


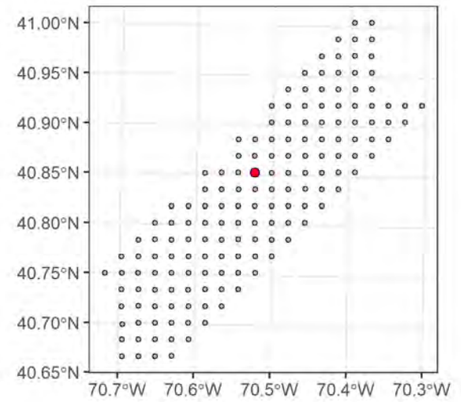
Figure E-257: WTG-065-A-PV

Sediment Profile Image



Figure E-258: WTG-065-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 19:37
Station (Replicate):	WTG-065 (1 of 2)
Depth (m):	-53
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	bottom roughened, no clear tubes or burrows, focus issues?

Plan-View Image



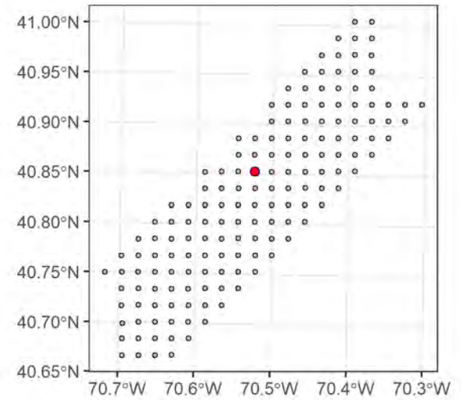
Figure E-259: WTG-065-B-PV

Sediment Profile Image



Figure E-260: WTG-065-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 19:46
Station (Replicate):	WTG-065 (2 of 2)
Depth (m):	-53
Prism Penetration (cm):	13.1
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, some large and small burrows

Plan-View Image



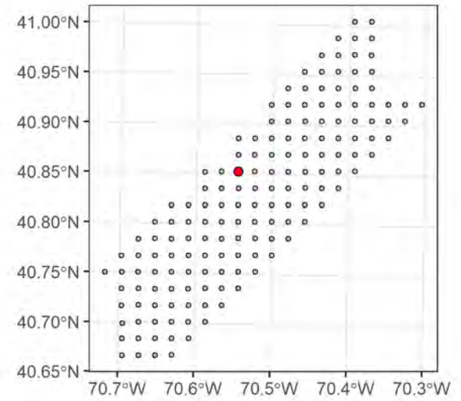
Figure E-261: WTG-066-B-PV

Sediment Profile Image



Figure E-262: WTG-066-B-SPI

Location



Attributes

Date Time (EST):	07/19/21 17:37
Station (Replicate):	WTG-066 (1 of 2)
Depth (m):	-52.6
Prism Penetration (cm):	12.1
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	4 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 gastropod egg cases, scattered amphipod tubes, several large burrows

Plan-View Image



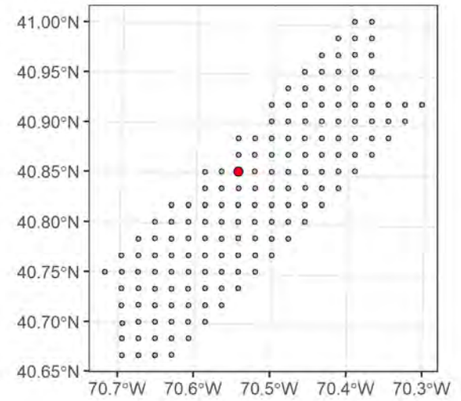
Figure E-263: WTG-066-C-PV

Sediment Profile Image



Figure E-264: WTG-066-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 17:42
Station (Replicate):	WTG-066 (2 of 2)
Depth (m):	-52.7
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	scattered amphipod tubes, several large burrows

Plan-View Image



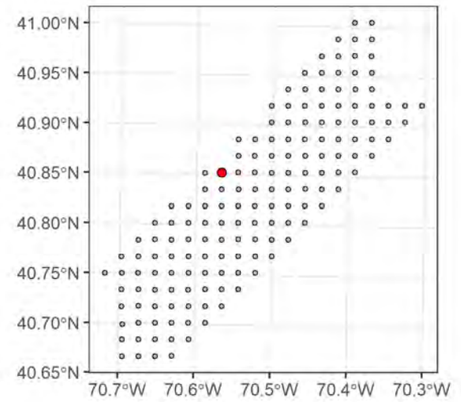
Figure E-265: WTG-067-E-PV

Sediment Profile Image



Figure E-266: WTG-067-A-SPI

Location



Attributes

Date Time (EST):	07/19/21 19:47
Station (Replicate):	WTG-067 (1 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	5.7
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 burrowing starfish (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, some small burrows

Plan-View Image



Figure E-267: WTG-067-E-PV

Sediment Profile Image

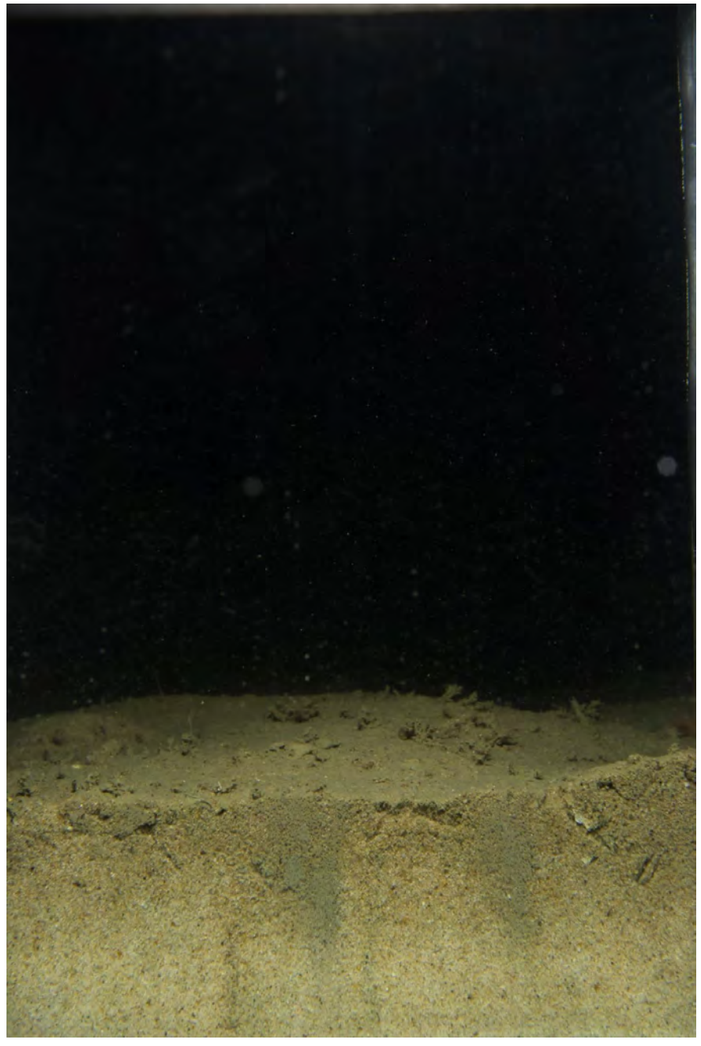
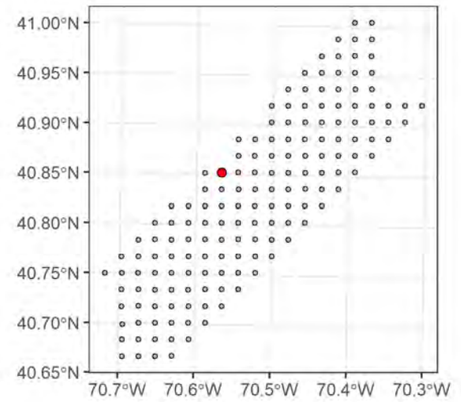


Figure E-268: WTG-067-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 19:58
Station (Replicate):	WTG-067 (2 of 2)
Depth (m):	-50.3
Prism Penetration (cm):	5.1
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 burrowing starfish (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, some small burrows

Plan-View Image



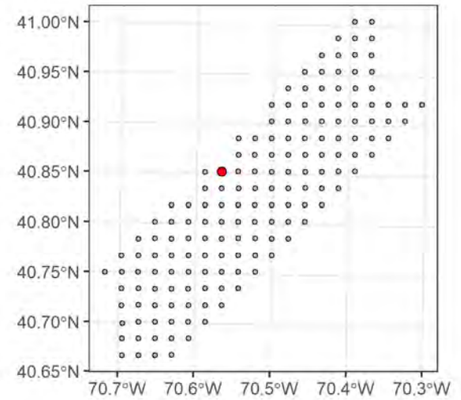
Figure E-269: WTG-067-D-PV

Sediment Profile Image



Figure E-270: WTG-067-D-SPI

Location



Attributes

Date Time (EST):	07/19/21 20:23
Station (Replicate):	WTG-067 (1 of 2)
Depth (m):	-50.3
Prism Penetration (cm):	5.8
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 burrowing starfish (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, some small burrows

Plan-View Image



Figure E-271: WTG-068-A-PV

Sediment Profile Image

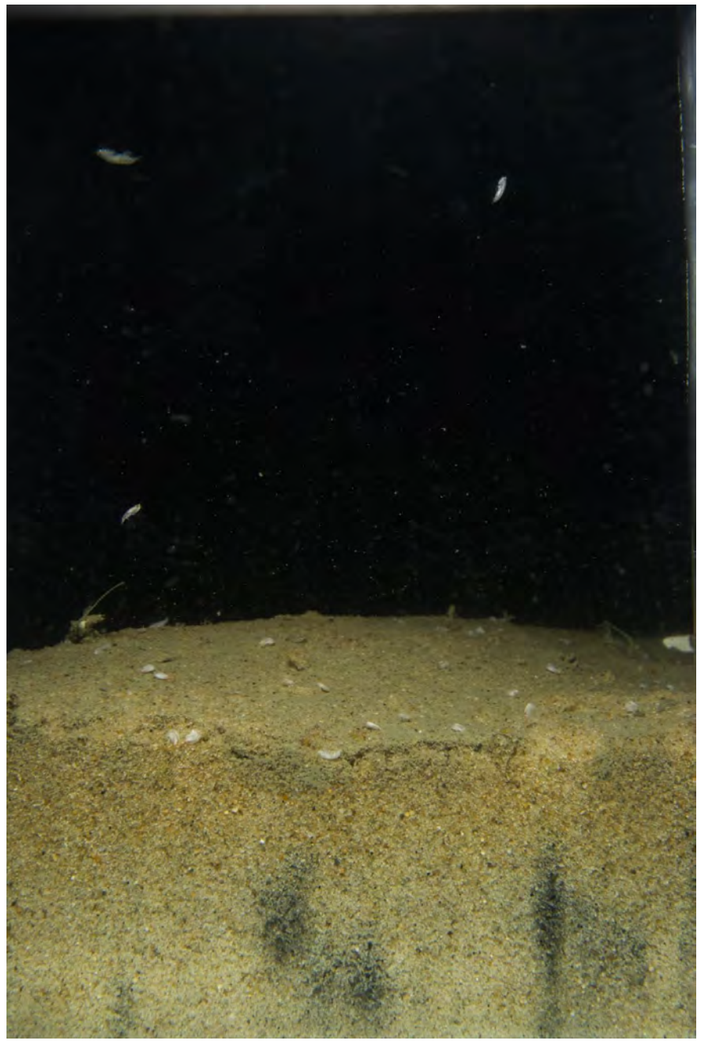
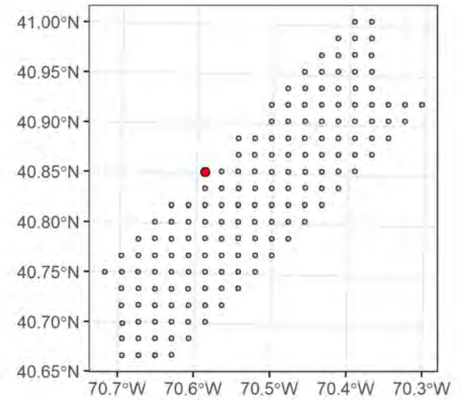


Figure E-272: WTG-068-C-SPI

Location



Attributes

Date Time (EST):	07/19/21 22:11
Station (Replicate):	WTG-068 (2 of 2)
Depth (m):	-49.6
Prism Penetration (cm):	5.9
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	2 to 1
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, some amphipod tube clusters

Plan-View Image



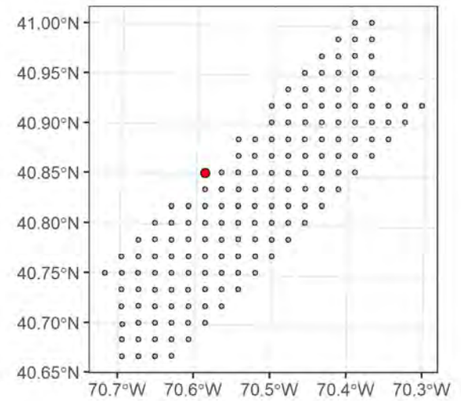
Figure E-273: WTG-068-F-PV

Sediment Profile Image



Figure E-274: WTG-068-F-SPI

Location



Attributes

Date Time (EST):	07/19/21 22:47
Station (Replicate):	WTG-068 (1 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	6.1
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	2 to 1
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	no visible epifauna, few amphipod tubes.

Plan-View Image



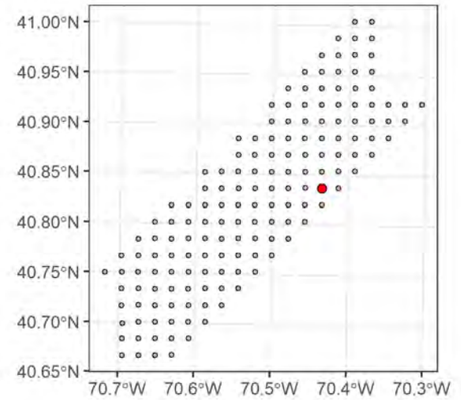
Figure E-275: WTG-069-A-PV

Sediment Profile Image



Figure E-276: WTG-069-A-SPI

Location



Attributes

Date Time (EST):	07/31/21 05:06
Station (Replicate):	WTG-069 (2 of 2)
Depth (m):	-49.9
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer, 14 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks

Plan-View Image



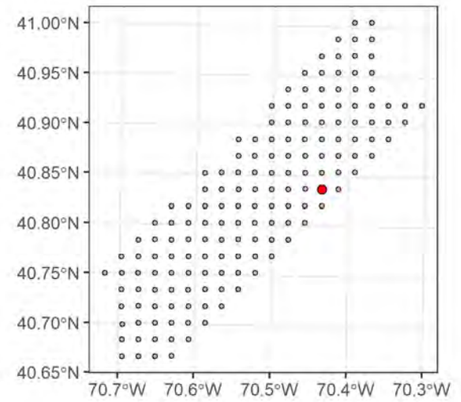
Figure E-277: WTG-069-C-PV

Sediment Profile Image



Figure E-278: WTG-069-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 05:11
Station (Replicate):	WTG-069 (1 of 2)
Depth (m):	-49.9
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	11 shrimp 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



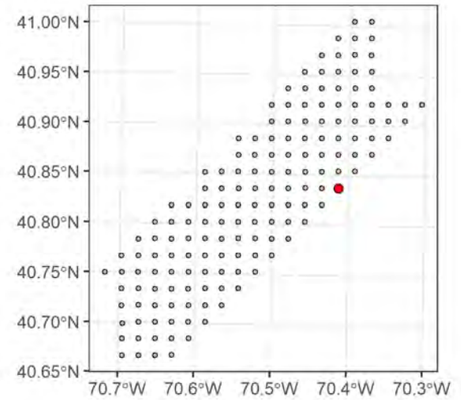
Figure E-279: WTG-070-B-PV

Sediment Profile Image



Figure E-280: WTG-070-B-SPI

Location



Attributes

Date Time (EST):	07/31/21 07:02
Station (Replicate):	WTG-070 (2 of 2)
Depth (m):	-48.5
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



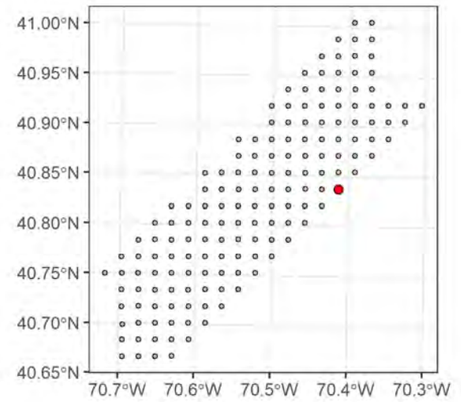
Figure E-281: WTG-070-A-PV

Sediment Profile Image



Figure E-282: WTG-070-C-SPI

Location



Attributes

Date Time (EST):	07/31/21 07:07
Station (Replicate):	WTG-070 (1 of 2)
Depth (m):	-48.8
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



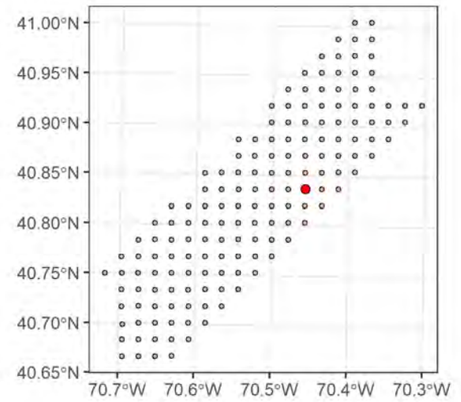
Figure E-283: WTG-071-A-PV

Sediment Profile Image



Figure E-284: WTG-071-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 12:01
Station (Replicate):	WTG-071 (2 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, some large and small burrows, focus issues, no epifauna visible

Plan-View Image



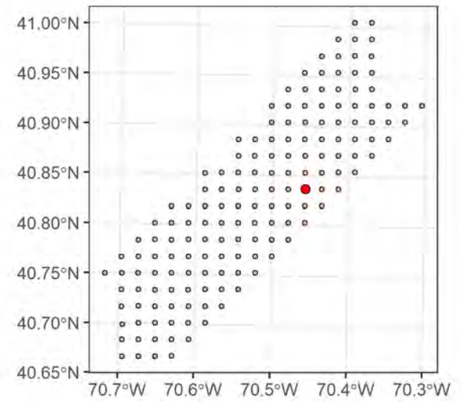
Figure E-285: WTG-071-C-PV

Sediment Profile Image



Figure E-286: WTG-071-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 12:06
Station (Replicate):	WTG-071 (1 of 2)
Depth (m):	-50
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, some large and small burrows, focus issues, no epifauna visible

Plan-View Image



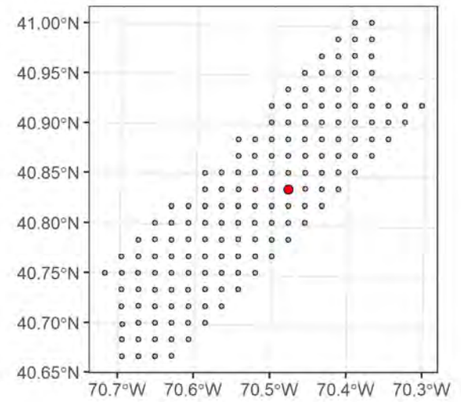
Figure E-287: WTG-072-A-PV

Sediment Profile Image



Figure E-288: WTG-072-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 10:24
Station (Replicate):	WTG-072 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, amphipod tube clusters, some large and small burrows, focus issues, no epifauna visible

Plan-View Image



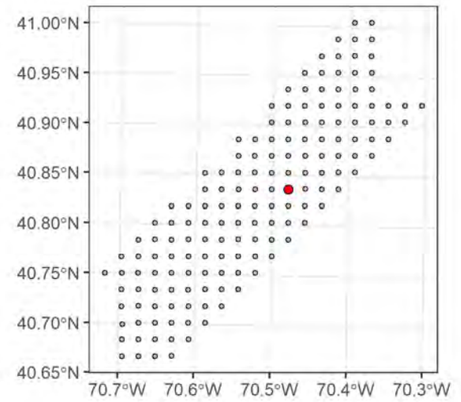
Figure E-289: WTG-072-B-PV

Sediment Profile Image



Figure E-290: WTG-072-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 10:29
Station (Replicate):	WTG-072 (1 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, amphipod tube clusters, some large and small burrows, one very large burrow/feeding void?, focus and light issues, no epifauna visible

Plan-View Image



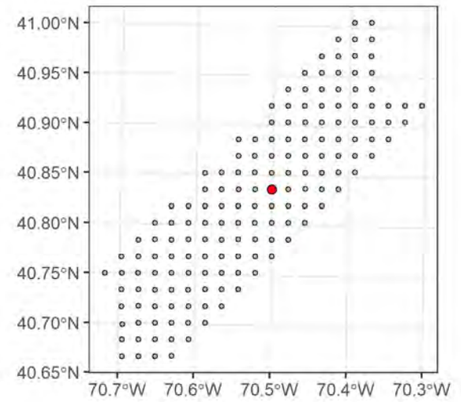
Figure E-291: WTG-073-A-PV

Sediment Profile Image



Figure E-292: WTG-073-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 15:51
Station (Replicate):	WTG-073 (2 of 2)
Depth (m):	-52.8
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	small bivalves 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



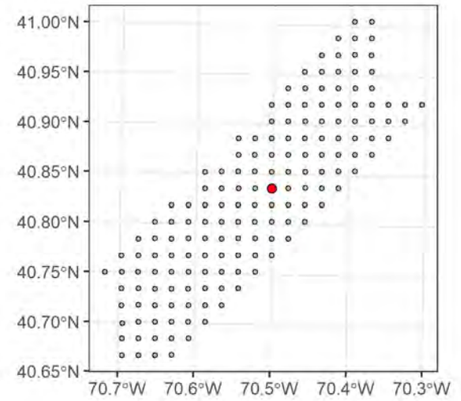
Figure E-293: WTG-073-B-PV

Sediment Profile Image



Figure E-294: WTG-073-B-SPI

Location



Attributes

Date Time (EST):	07/29/21 15:57
Station (Replicate):	WTG-073 (1 of 2)
Depth (m):	-52.8
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer irroratus, 1 tiny sea star, 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



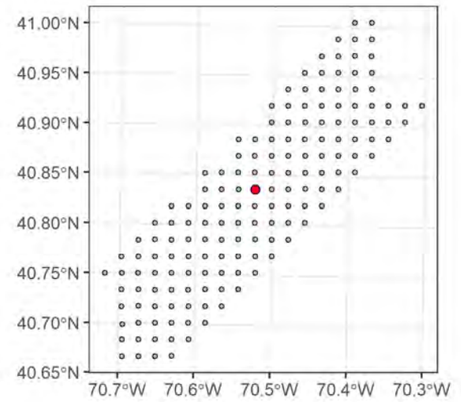
Figure E-295: WTG-074-A-PV

Sediment Profile Image



Figure E-296: WTG-074-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 04:11
Station (Replicate):	WTG-074 (2 of 2)
Depth (m):	-53.6
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	Numerous (750 estimated) Bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks

Plan-View Image

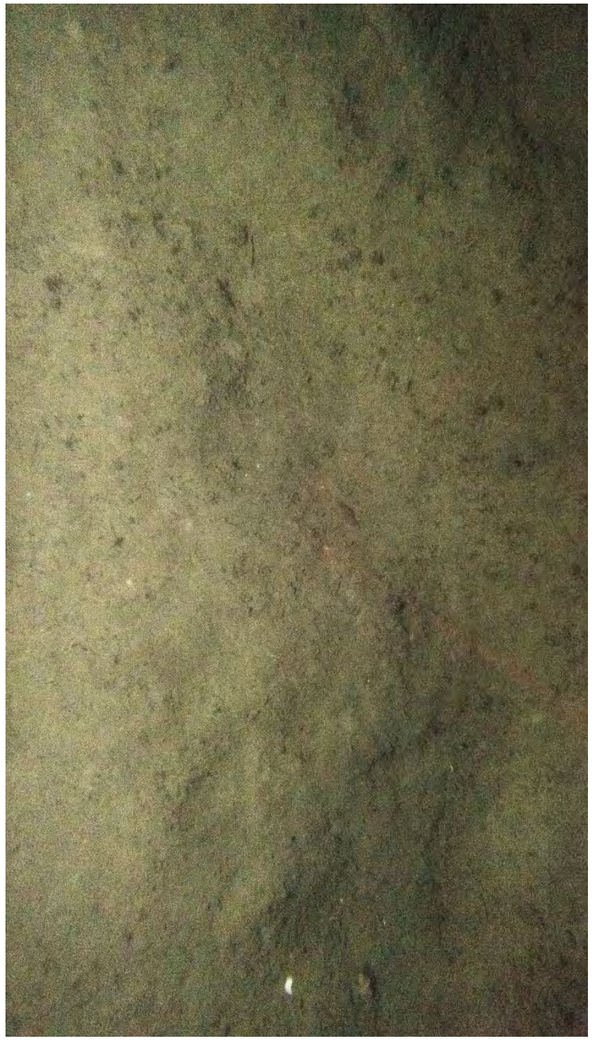


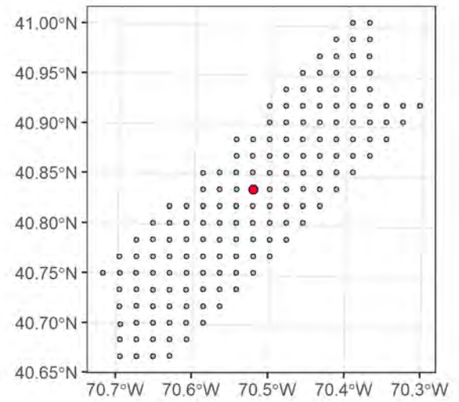
Figure E-297: WTG-074-B-PV

Sediment Profile Image



Figure E-298: WTG-074-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 04:22
Station (Replicate):	WTG-074 (1 of 2)
Depth (m):	-53.6
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, some large and small burrows, focus and light issues, no epifauna visible

Plan-View Image



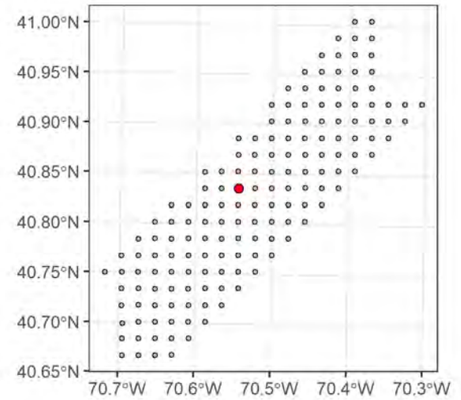
Figure E-299: WTG-075-A-PV

Sediment Profile Image



Figure E-300: WTG-075-A-SPI

Location



Attributes

Date Time (EST):	07/23/21 21:05
Station (Replicate):	WTG-075 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	numerous small bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, 1 feeding void?

Plan-View Image



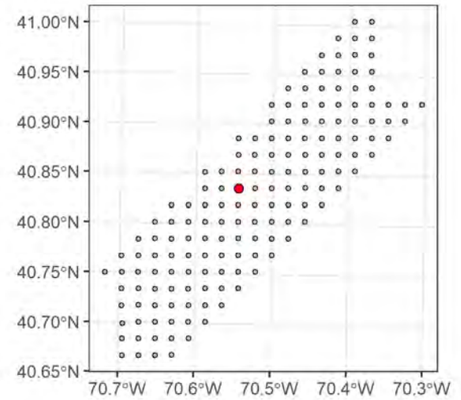
Figure E-301: WTG-075-B-PV

Sediment Profile Image



Figure E-302: WTG-075-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 21:10
Station (Replicate):	WTG-075 (1 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small and large burrows

Plan-View Image



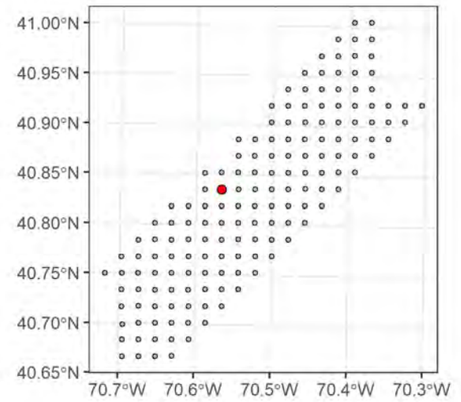
Figure E-303: WTG-076-B-PV

Sediment Profile Image



Figure E-304: WTG-076-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 02:31
Station (Replicate):	WTG-076 (2 of 2)
Depth (m):	-50.5
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 burrowing starfish (Astropecten?)
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	amphipod tube clusters, large burrows

Plan-View Image



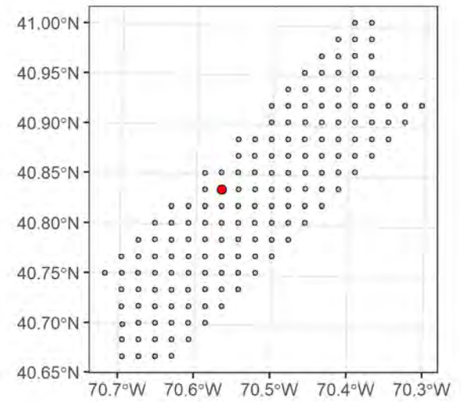
Figure E-305: WTG-076-A-PV

Sediment Profile Image



Figure E-306: WTG-076-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 02:36
Station (Replicate):	WTG-076 (1 of 2)
Depth (m):	-50.6
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	Soft Sediment Fauna
Comments:	amphipod tube clusters, large burrows

Plan-View Image



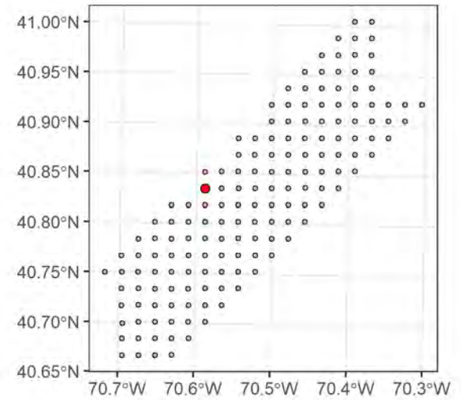
Figure E-307: WTG-077-A-PV

Sediment Profile Image



Figure E-308: WTG-077-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 00:54
Station (Replicate):	WTG-077 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	8
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	1 to 0
Infaunal Successional Stage:	I
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	3 shrimp, 1 large crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large crab at very edge of photo, faint crab tracks present

Plan-View Image



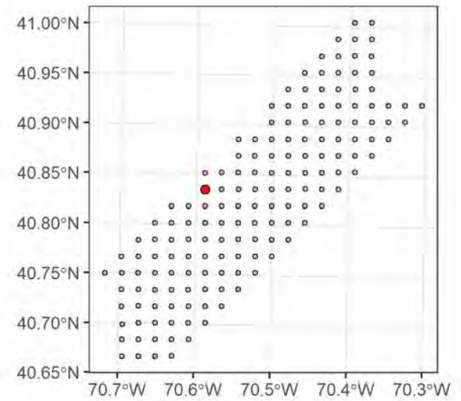
Figure E-309: WTG-077-B-PV

Sediment Profile Image



Figure E-310: WTG-077-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 00:59
Station (Replicate):	WTG-077 (1 of 2)
Depth (m):	-50.7
Prism Penetration (cm):	7.3
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	2 to 1
Infaunal Successional Stage:	I
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	None
Comments:	2 shrimp, amphipod tubes, crab tracks

Plan-View Image



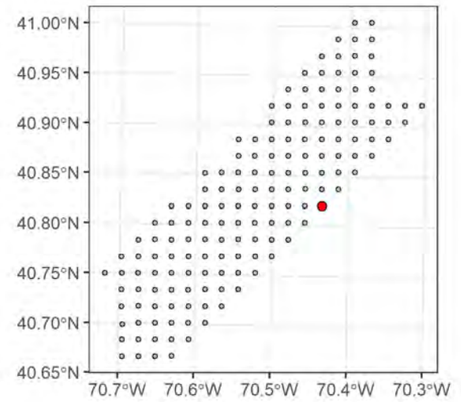
Figure E-311: WTG-078-B-PV

Sediment Profile Image



Figure E-312: WTG-078-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 07:44
Station (Replicate):	WTG-078 (2 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, large burrows

Plan-View Image



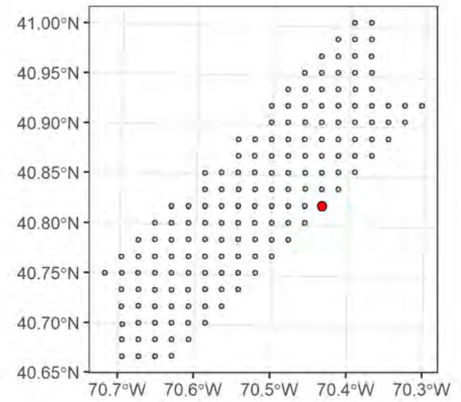
Figure E-313: WTG-078-A-PV

Sediment Profile Image



Figure E-314: WTG-078-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 07:47
Station (Replicate):	WTG-078 (1 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, large burrows, some with signs of reduced sediment.

Plan-View Image



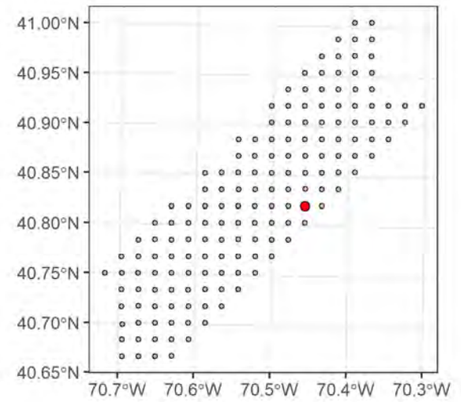
Figure E-315: WTG-079-A-PV

Sediment Profile Image



Figure E-316: WTG-079-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 06:42
Station (Replicate):	WTG-079 (2 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Some amphipod tube clusters, few small burrows. No visible epifauna.

Plan-View Image

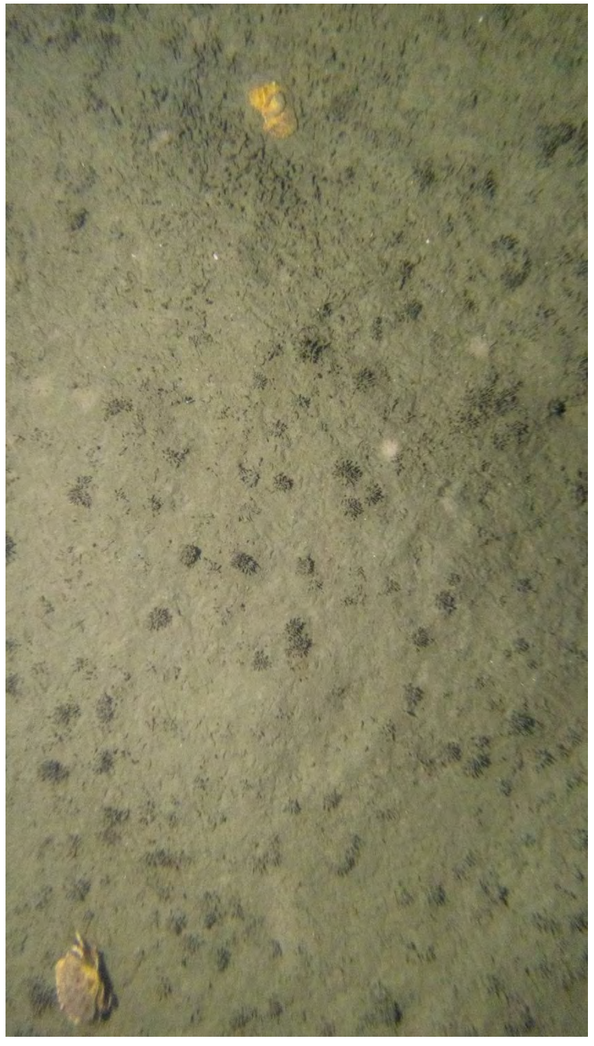


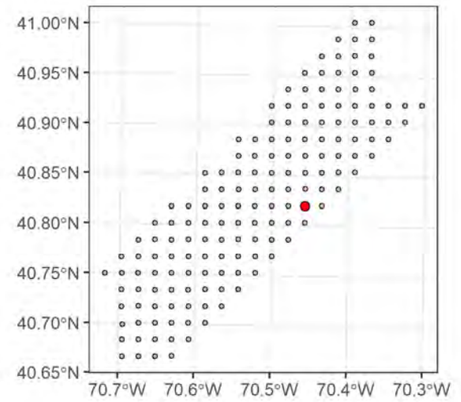
Figure E-317: WTG-079-C-PV

Sediment Profile Image



Figure E-318: WTG-079-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 06:52
Station (Replicate):	WTG-079 (1 of 2)
Depth (m):	-51
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 large crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Some amphipod tube clusters, few small burrows.

Plan-View Image



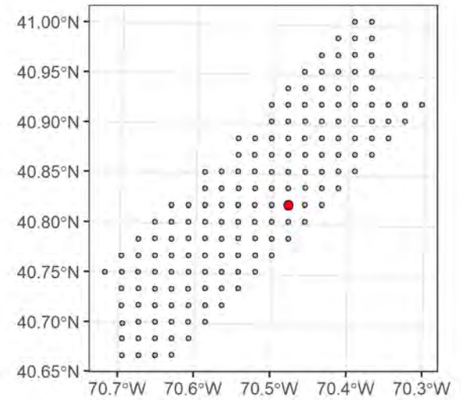
Figure E-319: WTG-080-A-PV

Sediment Profile Image



Figure E-320: WTG-080-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 08:15
Station (Replicate):	WTG-080 (2 of 2)
Depth (m):	-52.2
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Some amphipod tube clusters, few small burrows, faint crab tracks.

Plan-View Image



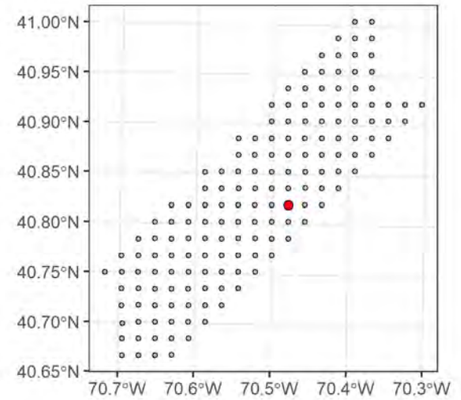
Figure E-321: WTG-080-B-PV

Sediment Profile Image



Figure E-322: WTG-080-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 08:23
Station (Replicate):	WTG-080 (1 of 2)
Depth (m):	-52.2
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Some amphipod tube clusters, few small burrows.

Plan-View Image

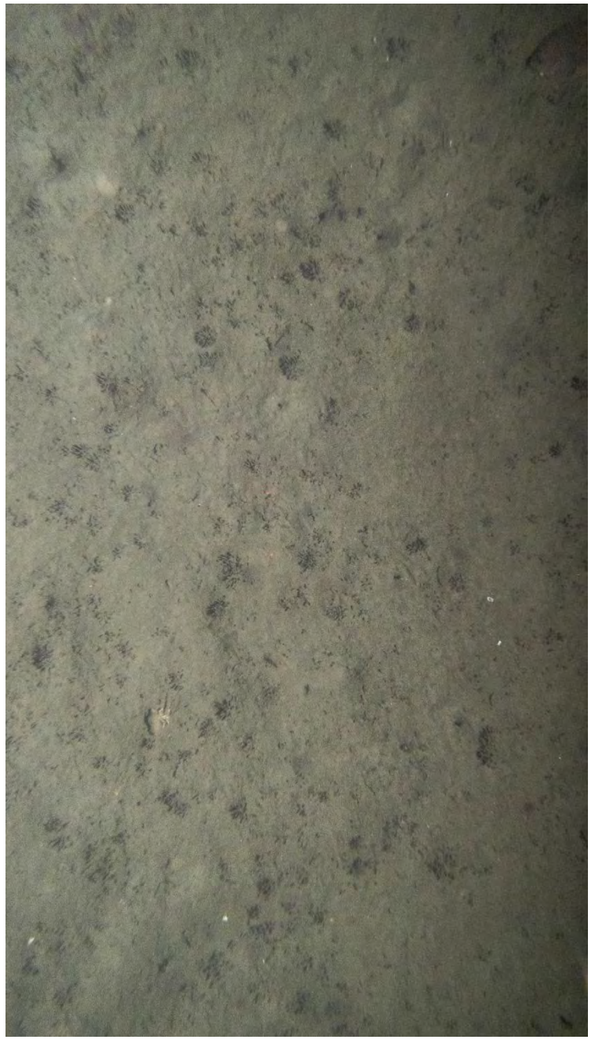


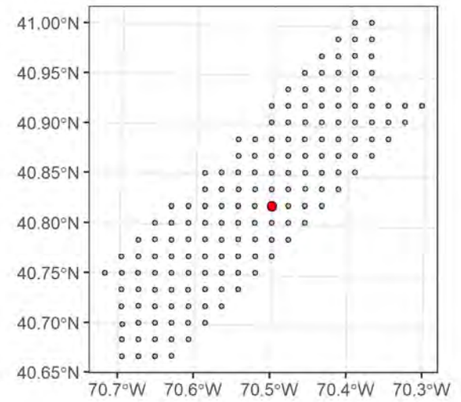
Figure E-323: WTG-081-A-PV

Sediment Profile Image



Figure E-324: WTG-081-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 05:48
Station (Replicate):	WTG-081 (2 of 2)
Depth (m):	-51.3
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Paguroidea 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large burrows

Plan-View Image



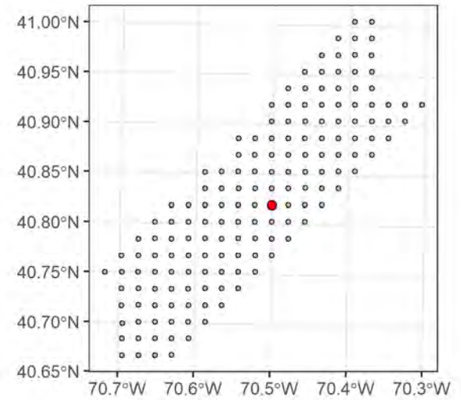
Figure E-325: WTG-081-B-PV

Sediment Profile Image



Figure E-326: WTG-081-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 05:58
Station (Replicate):	WTG-081 (1 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	lighting/focus insufficient for fish ID, amphipod tube clusters, large burrows

Plan-View Image



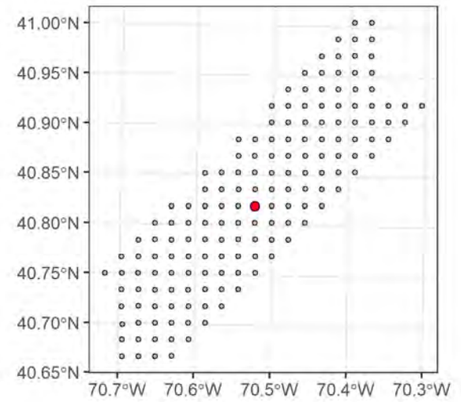
Figure E-327: WTG-082-A-PV

Sediment Profile Image



Figure E-328: WTG-082-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 12:50
Station (Replicate):	WTG-082 (2 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small and large burrows

Plan-View Image

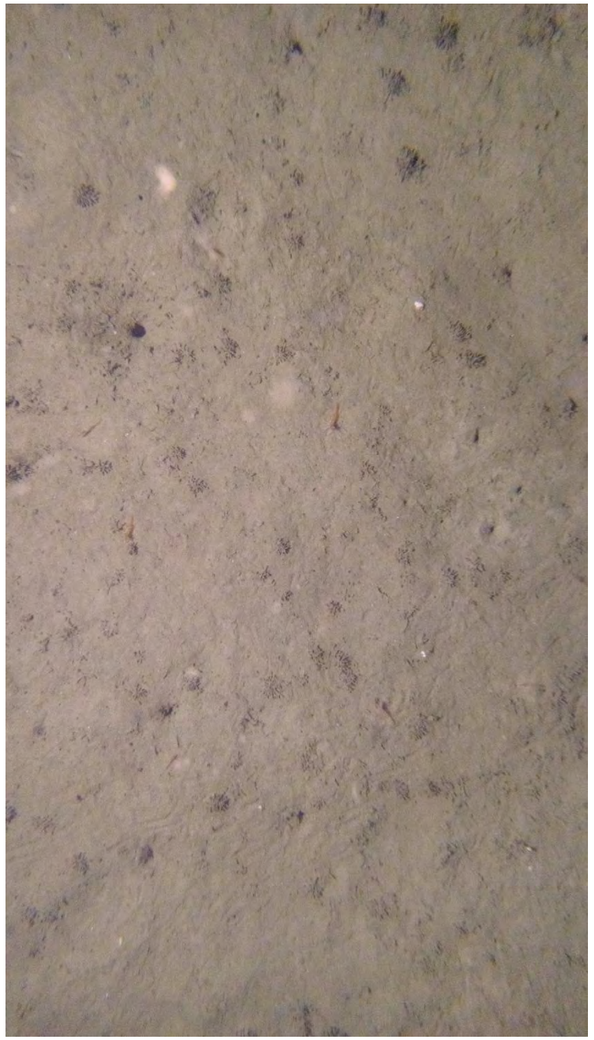


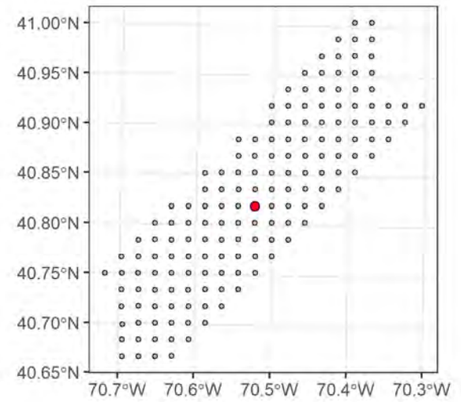
Figure E-329: WTG-082-B-PV

Sediment Profile Image



Figure E-330: WTG-082-D-SPI

Location



Attributes

Date Time (EST):	07/29/21 13:08
Station (Replicate):	WTG-082 (1 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small and large burrows

Plan-View Image



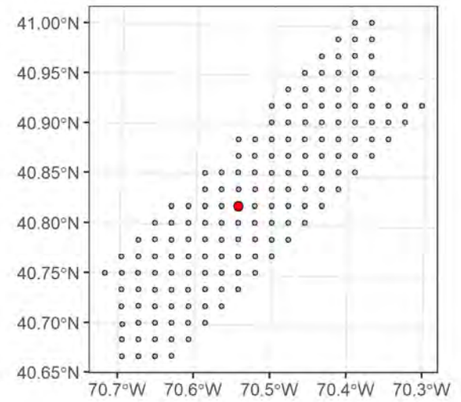
Figure E-331: WTG-083-A-PV

Sediment Profile Image



Figure E-332: WTG-083-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 15:25
Station (Replicate):	WTG-083 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows

Plan-View Image



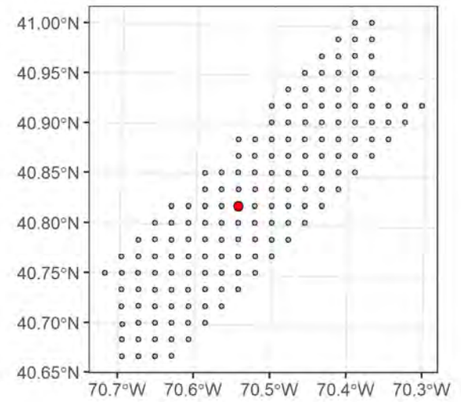
Figure E-333: WTG-083-C-PV

Sediment Profile Image



Figure E-334: WTG-083-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 15:34
Station (Replicate):	WTG-083 (1 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	6.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, one large burrow

Plan-View Image



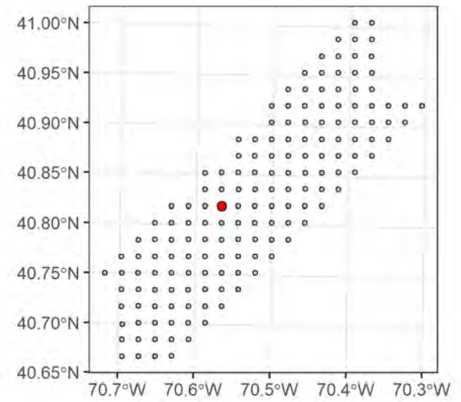
Figure E-335: WTG-084-A-PV

Sediment Profile Image



Figure E-336: WTG-084-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 17:05
Station (Replicate):	WTG-084 (2 of 2)
Depth (m):	-52.1
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, few amphipod tubes and burrows

Plan-View Image



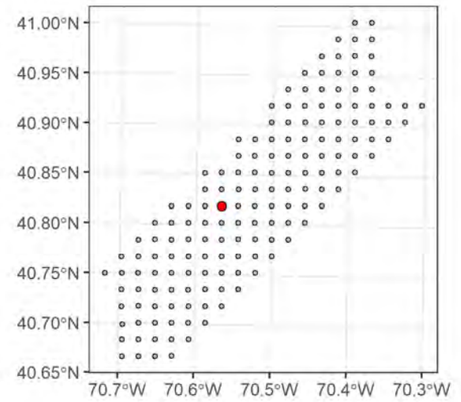
Figure E-337: WTG-084-B-PV

Sediment Profile Image



Figure E-338: WTG-084-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 17:15
Station (Replicate):	WTG-084 (1 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	12.5
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, few amphipod tubes and burrows

Plan-View Image

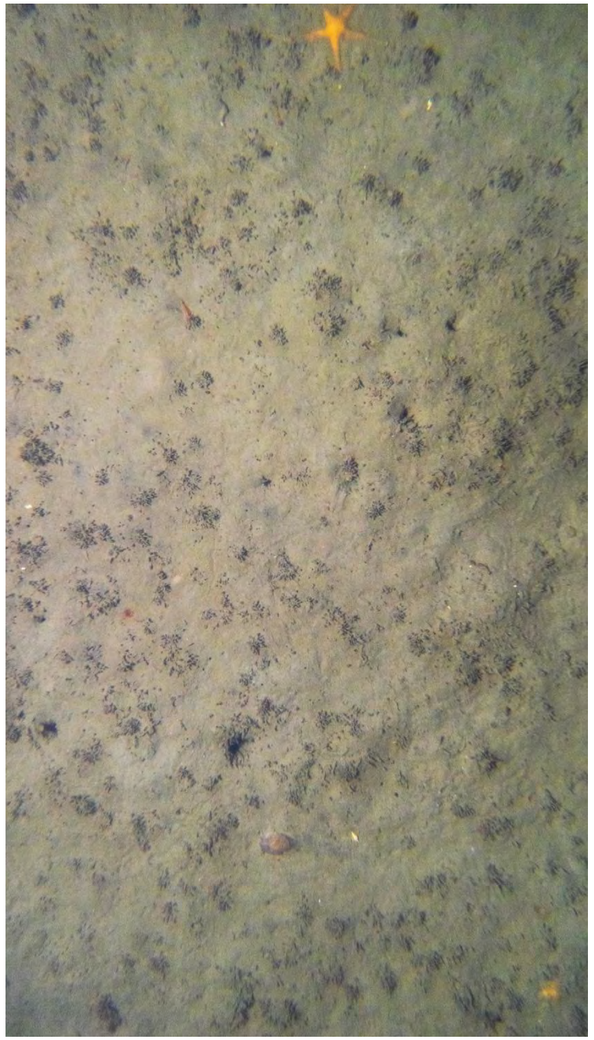


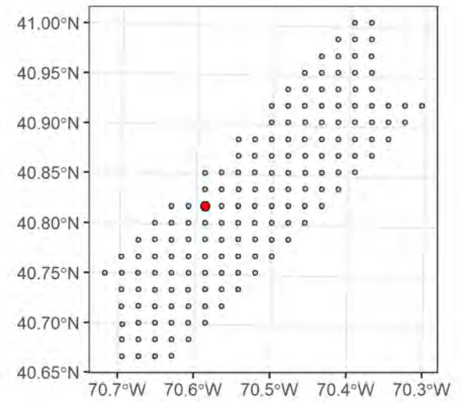
Figure E-339: WTG-085-A-PV

Sediment Profile Image



Figure E-340: WTG-085-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 19:17
Station (Replicate):	WTG-085 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia, small bivalves 1 sea slug, 1 shrimp, 2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small and large burrows

Plan-View Image



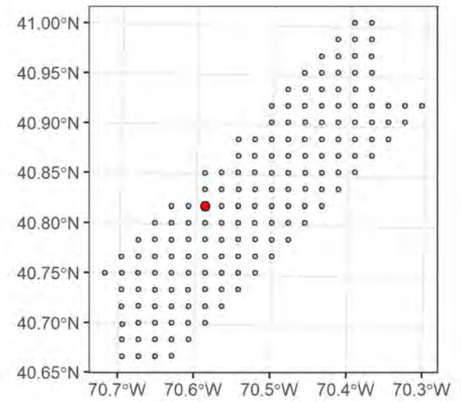
Figure E-341: WTG-085-C-PV

Sediment Profile Image



Figure E-342: WTG-085-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 19:22
Station (Replicate):	WTG-085 (1 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis, 1 burrowing sea star (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large burrows. Picture not well focused, details of smaller structures missing.

Plan-View Image

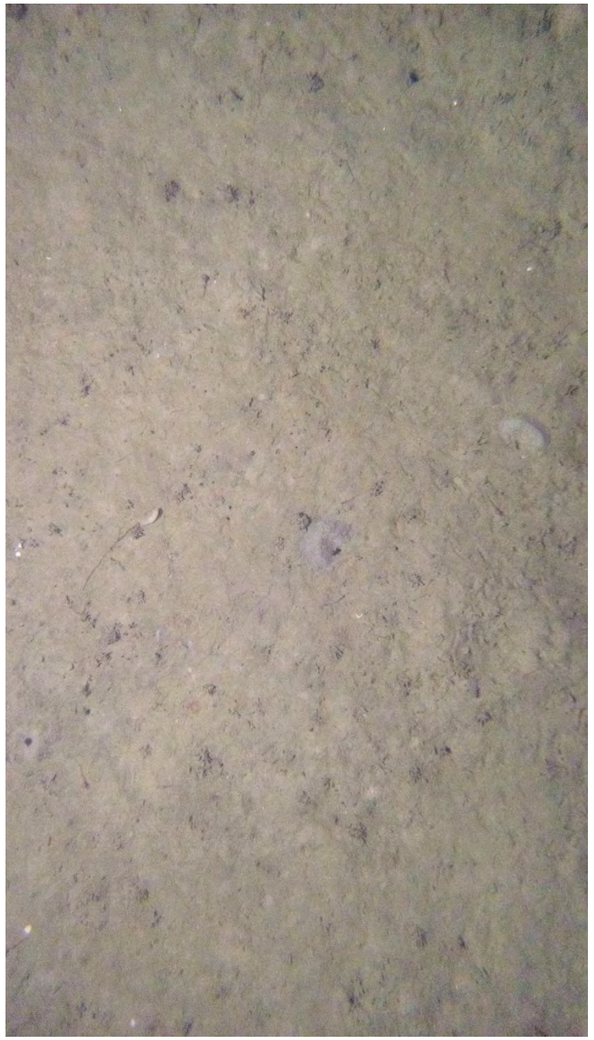


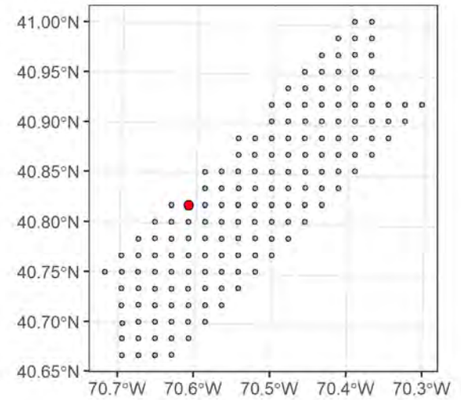
Figure E-343: WTG-086-A-PV

Sediment Profile Image



Figure E-344: WTG-086-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 03:58
Station (Replicate):	WTG-086 (2 of 2)
Depth (m):	-52
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, some large and small burrows

Plan-View Image



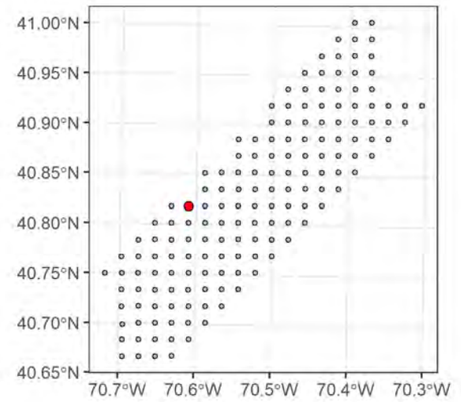
Figure E-345: WTG-086-B-PV

Sediment Profile Image



Figure E-346: WTG-086-B-SPI

Location



Attributes

Date Time (EST):	07/24/21 04:05
Station (Replicate):	WTG-086 (1 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, some large and small burrows, Naticid egg case

Plan-View Image



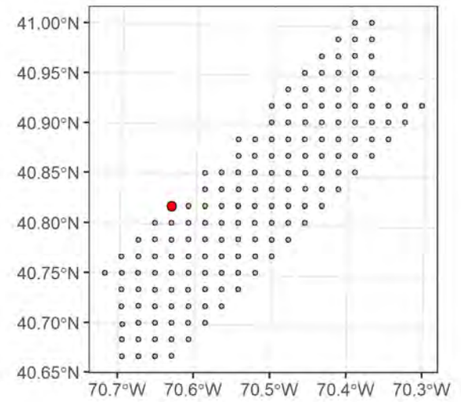
Figure E-347: WTG-087-B-PV

Sediment Profile Image



Figure E-348: WTG-087-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 21:09
Station (Replicate):	WTG-087 (2 of 2)
Depth (m):	-53.6
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	small bivalves 2 sea slugs
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



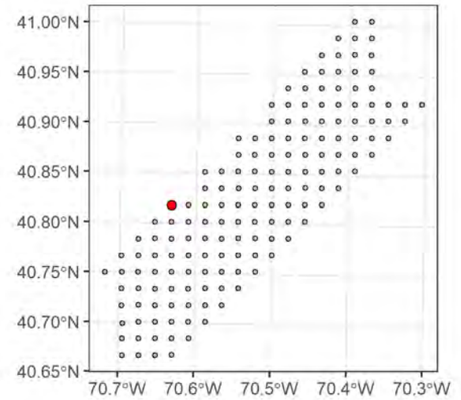
Figure E-349: WTG-087-A-PV

Sediment Profile Image



Figure E-350: WTG-087-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 21:14
Station (Replicate):	WTG-087 (1 of 2)
Depth (m):	-53.6
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia, small bivalves 1 large crab, partially buried
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 gastropod egg cases, amphipod tube clusters, large and small burrows

Plan-View Image

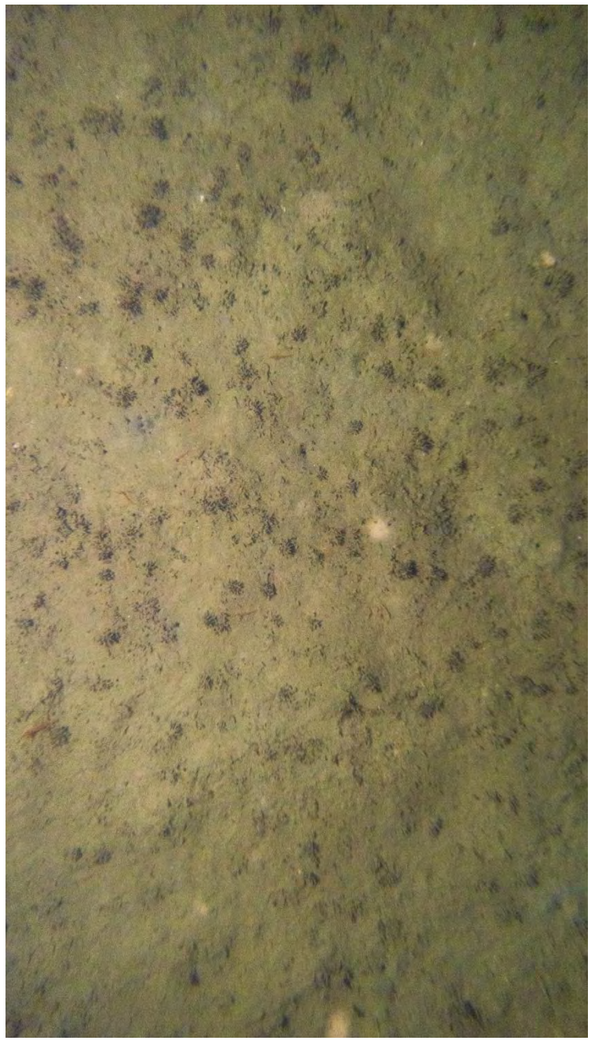


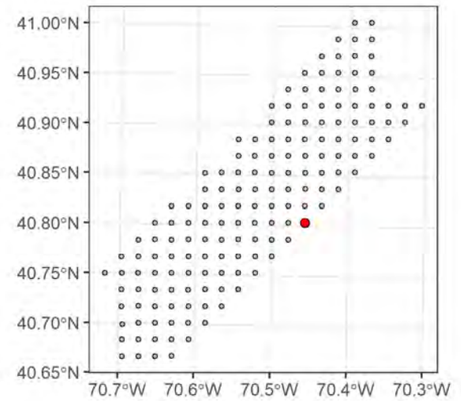
Figure E-351: WTG-088-A-PV

Sediment Profile Image



Figure E-352: WTG-088-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 08:48
Station (Replicate):	WTG-088 (2 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows

Plan-View Image

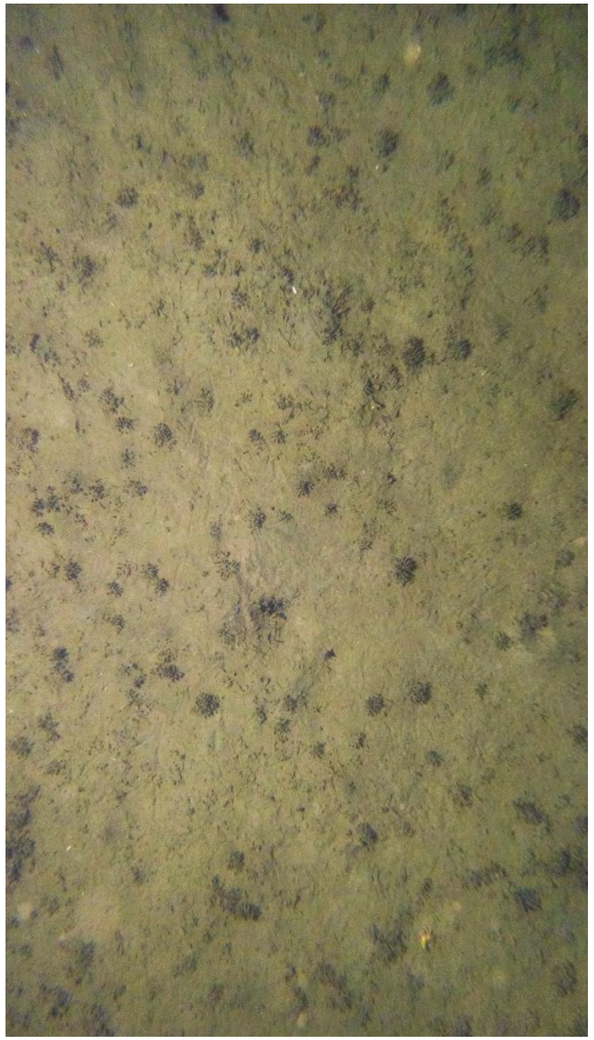


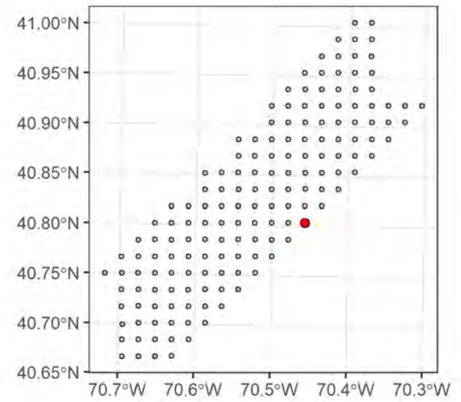
Figure E-353: WTG-088-C-PV

Sediment Profile Image



Figure E-354: WTG-088-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 08:53
Station (Replicate):	WTG-088 (1 of 2)
Depth (m):	-50.3
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

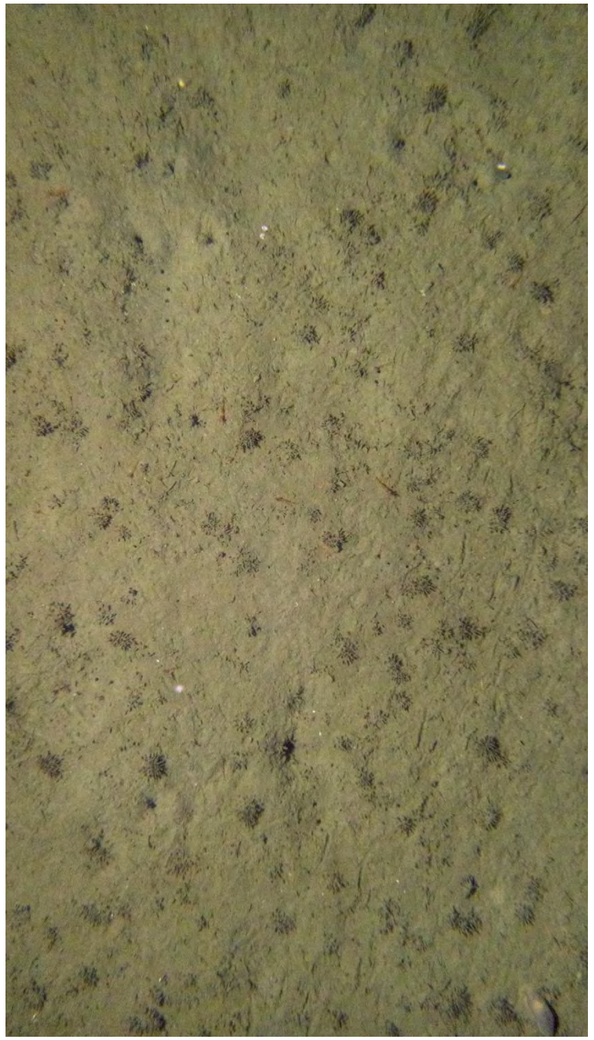


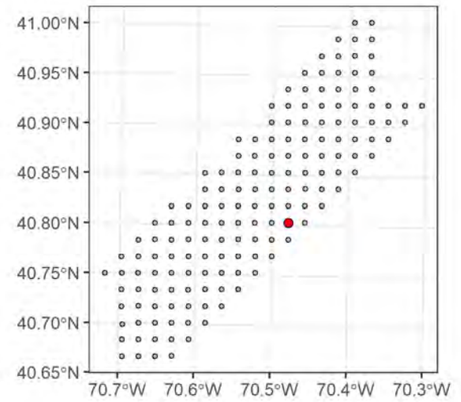
Figure E-355: WTG-089-A-PV

Sediment Profile Image



Figure E-356: WTG-089-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 04:48
Station (Replicate):	WTG-089 (2 of 2)
Depth (m):	-50
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



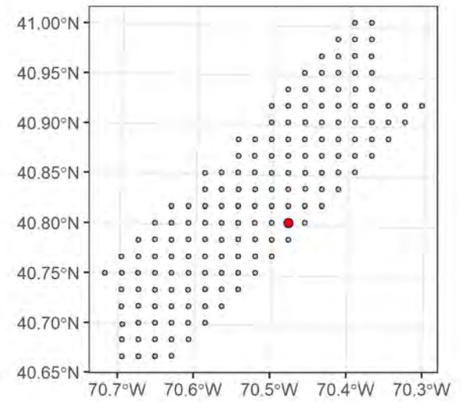
Figure E-357: WTG-089-B-PV

Sediment Profile Image



Figure E-358: WTG-089-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 04:58
Station (Replicate):	WTG-089 (1 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Loligo peali
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



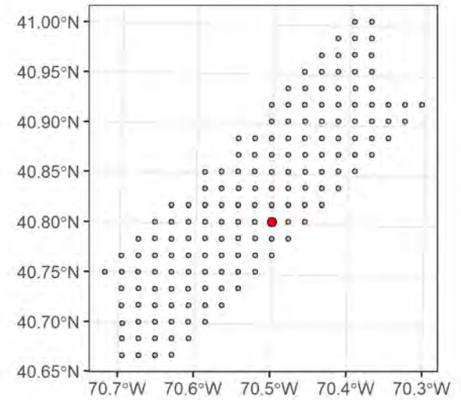
Figure E-359: WTG-090-A-PV

Sediment Profile Image



Figure E-360: WTG-090-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 11:01
Station (Replicate):	WTG-090 (2 of 2)
Depth (m):	-49.9
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug, 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large burrows

Plan-View Image

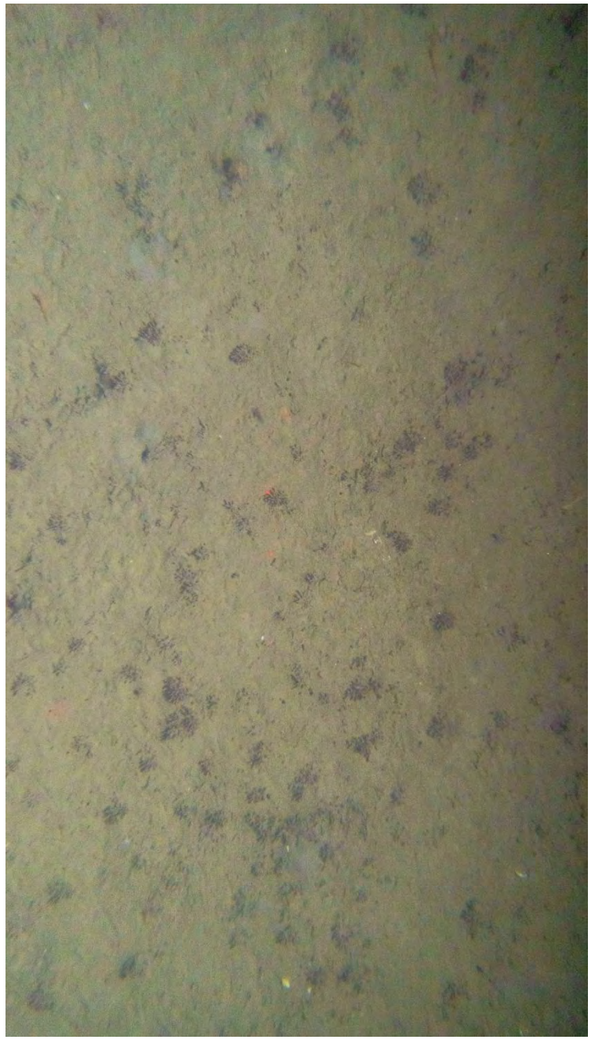


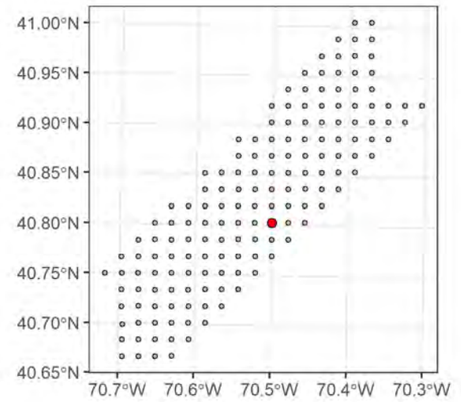
Figure E-361: WTG-090-C-PV

Sediment Profile Image



Figure E-362: WTG-090-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 11:05
Station (Replicate):	WTG-090 (1 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large burrows

Plan-View Image



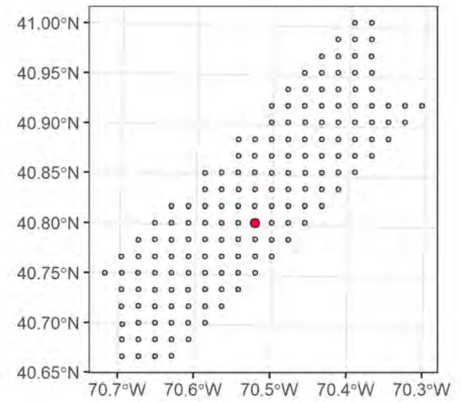
Figure E-363: WTG-091-A-PV

Sediment Profile Image



Figure E-364: WTG-091-B-SPI

Location



Attributes

Date Time (EST):	07/29/21 01:45
Station (Replicate):	WTG-091 (2 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	13.3
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	1 gastropod egg case, some amphipod tube clusters, faint crab tracks, large burrows

Plan-View Image



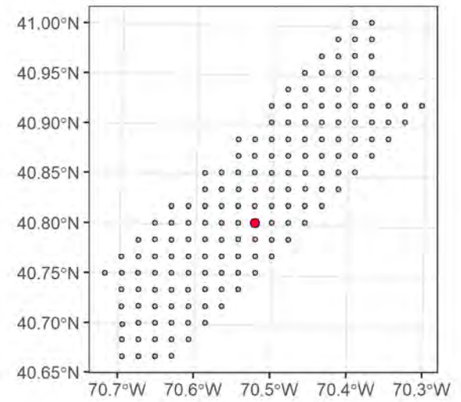
Figure E-365: WTG-091-C-PV

Sediment Profile Image



Figure E-366: WTG-091-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 01:51
Station (Replicate):	WTG-091 (1 of 2)
Depth (m):	-51.4
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, faint crab tracks, large and small burrows

Plan-View Image



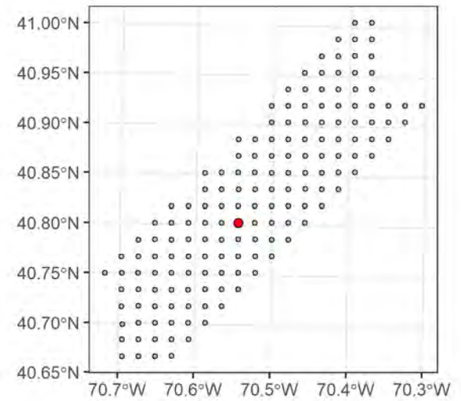
Figure E-367: WTG-092-A-PV

Sediment Profile Image



Figure E-368: WTG-092-B-SPI

Location



Attributes

Date Time (EST):	07/23/21 22:52
Station (Replicate):	WTG-092 (2 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	13.4
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, faint crab tracks, large and small burrows

Plan-View Image



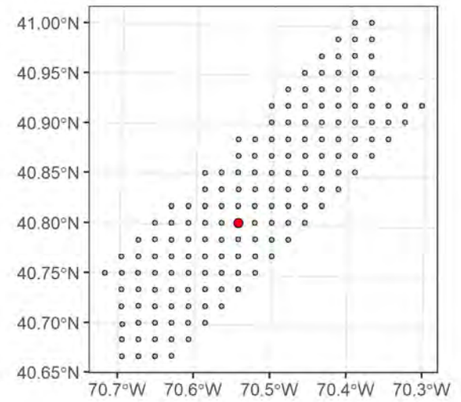
Figure E-369: WTG-092-C-PV

Sediment Profile Image



Figure E-370: WTG-092-C-SPI

Location



Attributes

Date Time (EST):	07/23/21 22:58
Station (Replicate):	WTG-092 (1 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	11.1
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, faint crab tracks, large and small burrows

Plan-View Image



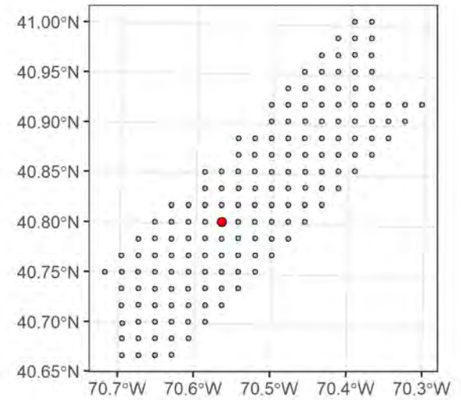
Figure E-371: WTG-093-A-PV

Sediment Profile Image



Figure E-372: WTG-093-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 23:50
Station (Replicate):	WTG-093 (2 of 2)
Depth (m):	-53
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, crab tracks, large and small burrows

Plan-View Image



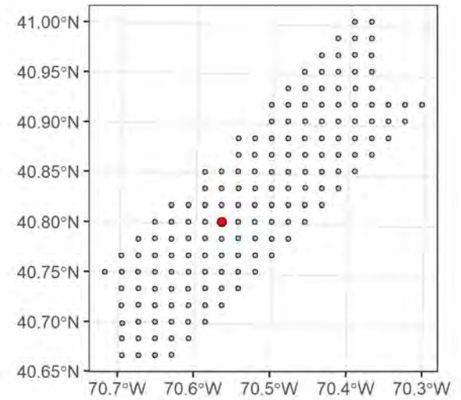
Figure E-373: WTG-093-C-PV

Sediment Profile Image



Figure E-374: WTG-093-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 00:01
Station (Replicate):	WTG-093 (1 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, crab tracks, large and small burrows

Plan-View Image

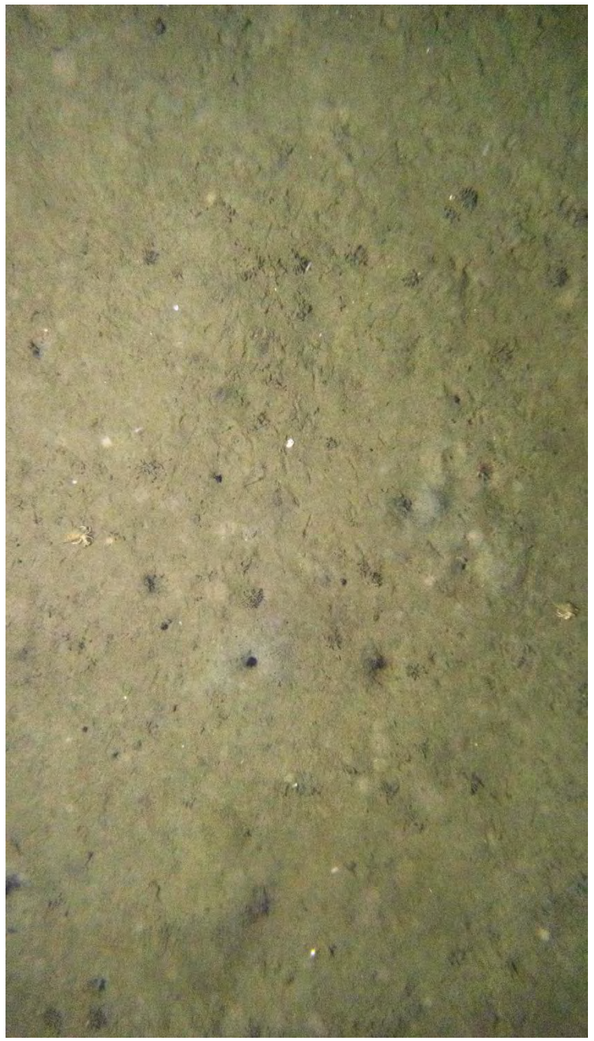


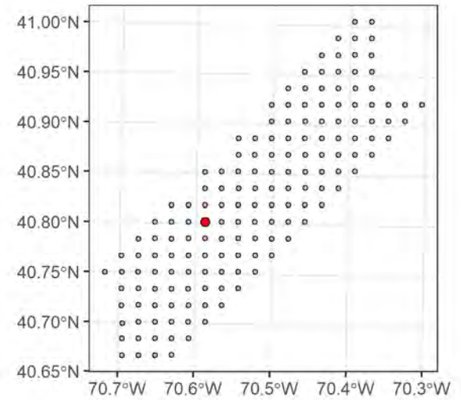
Figure E-375: WTG-094-A-PV

Sediment Profile Image



Figure E-376: WTG-094-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 02:24
Station (Replicate):	WTG-094 (2 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, crab tracks, large and small burrows

Plan-View Image



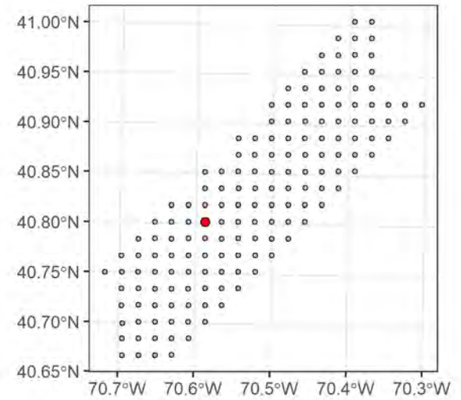
Figure E-377: WTG-094-B-PV

Sediment Profile Image



Figure E-378: WTG-094-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 02:35
Station (Replicate):	WTG-094 (1 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, crab tracks, large and small burrows

Plan-View Image

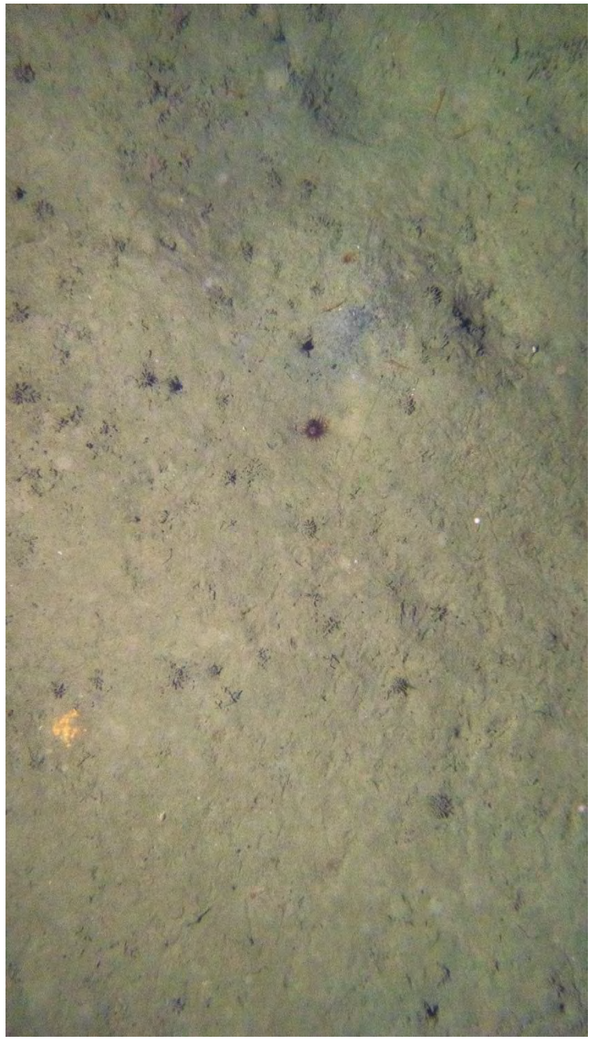


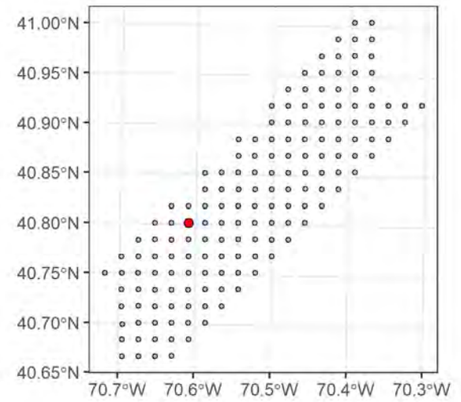
Figure E-379: WTG-095-A-PV

Sediment Profile Image



Figure E-380: WTG-095-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 03:20
Station (Replicate):	WTG-095 (2 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 1 Paguroidea, 1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, amphipod tube clusters

Plan-View Image



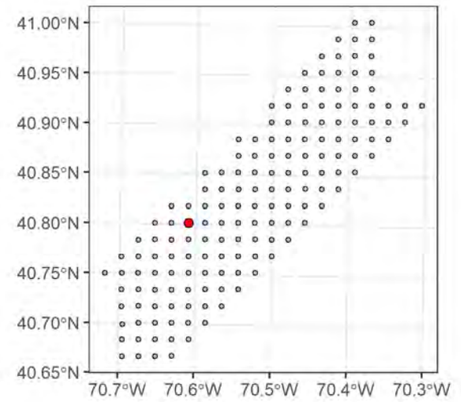
Figure E-381: WTG-095-B-PV

Sediment Profile Image



Figure E-382: WTG-095-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 03:32
Station (Replicate):	WTG-095 (1 of 2)
Depth (m):	-53.2
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab and gastropod tracks, amphipod tube clusters, some burrows.

Plan-View Image



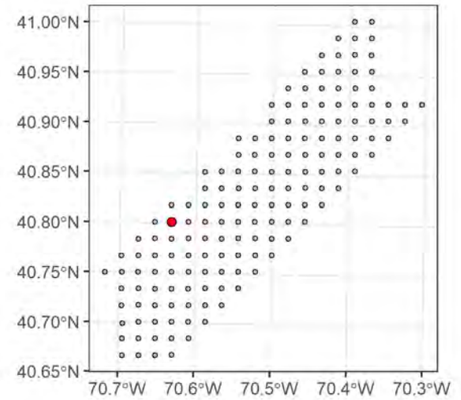
Figure E-383: WTG-096-A-PV

Sediment Profile Image



Figure E-384: WTG-096-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 08:29
Station (Replicate):	WTG-096 (2 of 2)
Depth (m):	-53.8
Prism Penetration (cm):	11.9
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tubes, some burrows

Plan-View Image



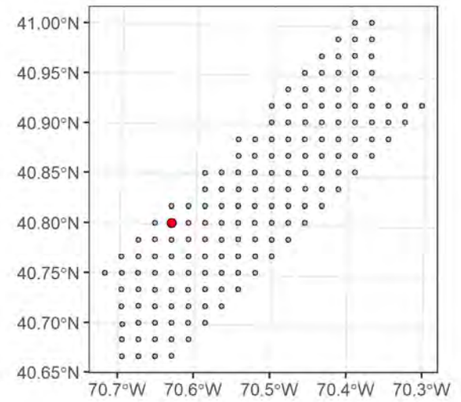
Figure E-385: WTG-096-B-PV

Sediment Profile Image



Figure E-386: WTG-096-C-SPI

Location



Attributes

Date Time (EST):	07/28/21 08:38
Station (Replicate):	WTG-096 (1 of 2)
Depth (m):	-53.9
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Cancer borealis, 3 shrimp 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tubes, some burrows

Plan-View Image



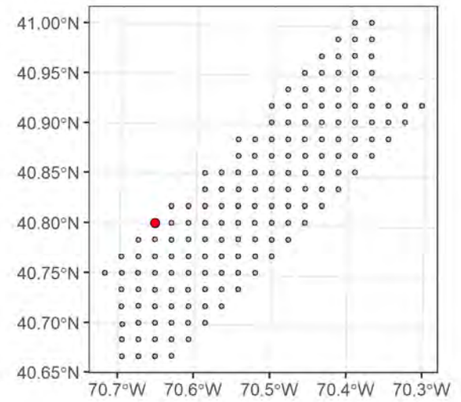
Figure E-387: WTG-097-B-PV

Sediment Profile Image



Figure E-388: WTG-097-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 22:40
Station (Replicate):	WTG-097 (2 of 2)
Depth (m):	-53.5
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Large and small burrows, few amphipod tubes

Plan-View Image

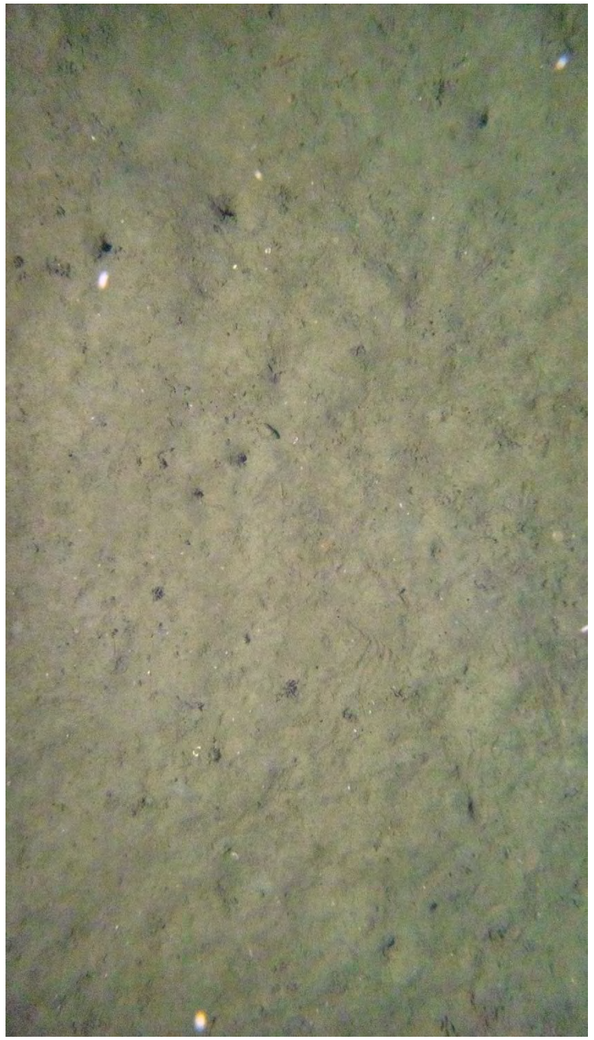


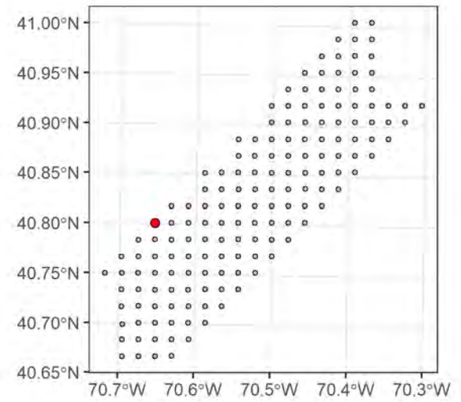
Figure E-389: WTG-097-A-PV

Sediment Profile Image



Figure E-390: WTG-097-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 22:45
Station (Replicate):	WTG-097 (1 of 2)
Depth (m):	-53.5
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Large and small burrows, few amphipod tubes

Plan-View Image

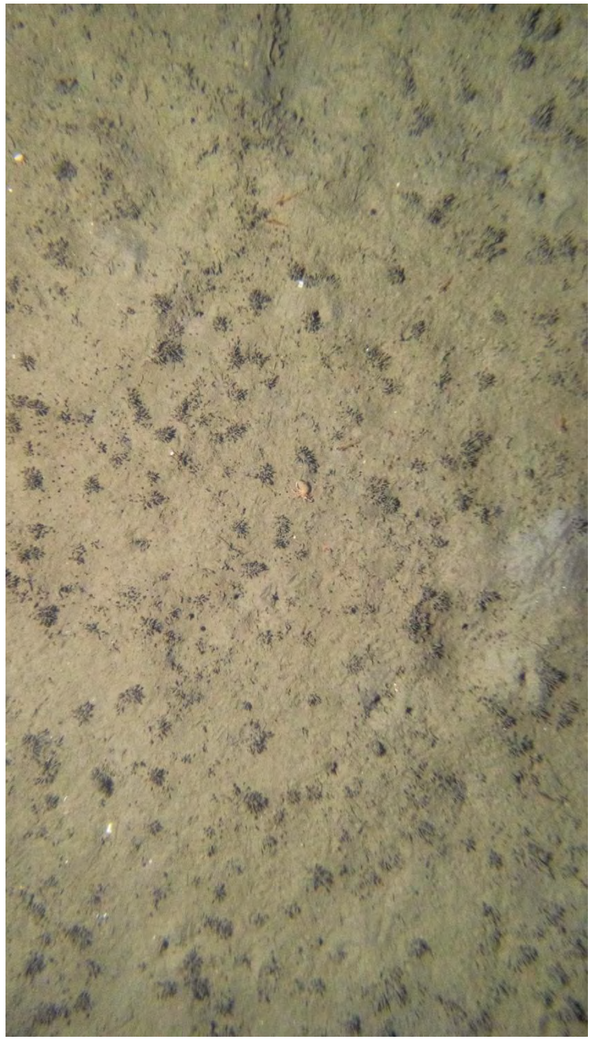


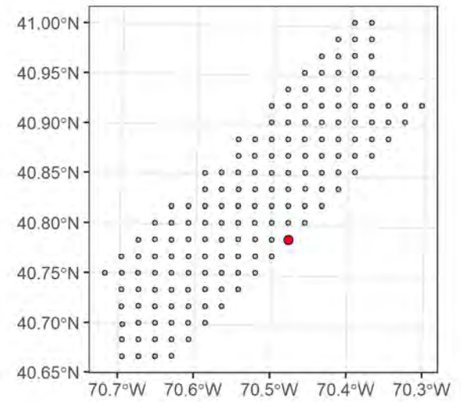
Figure E-391: WTG-098-B-PV

Sediment Profile Image



Figure E-392: WTG-098-B-SPI

Location



Attributes

Date Time (EST):	07/20/21 09:29
Station (Replicate):	WTG-098 (2 of 2)
Depth (m):	-49.7
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Paguroidea, 4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, large burrows

Plan-View Image

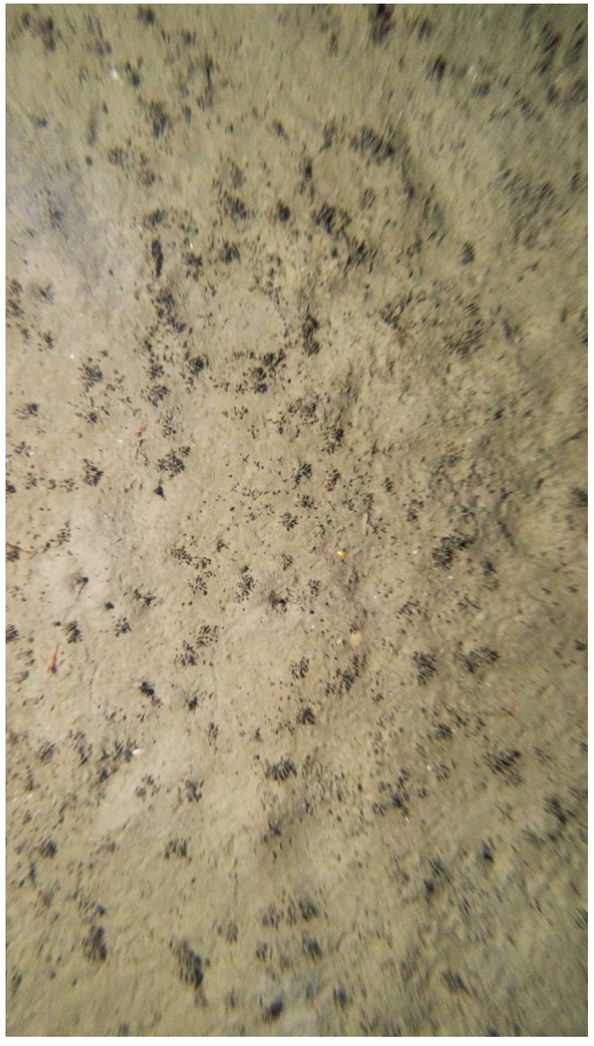


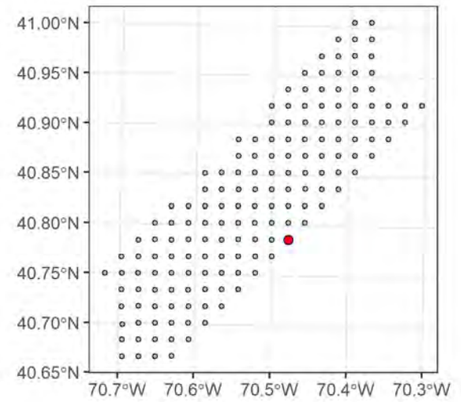
Figure E-393: WTG-098-A-PV

Sediment Profile Image



Figure E-394: WTG-098-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 09:34
Station (Replicate):	WTG-098 (1 of 2)
Depth (m):	-49.6
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, large burrows

Plan-View Image

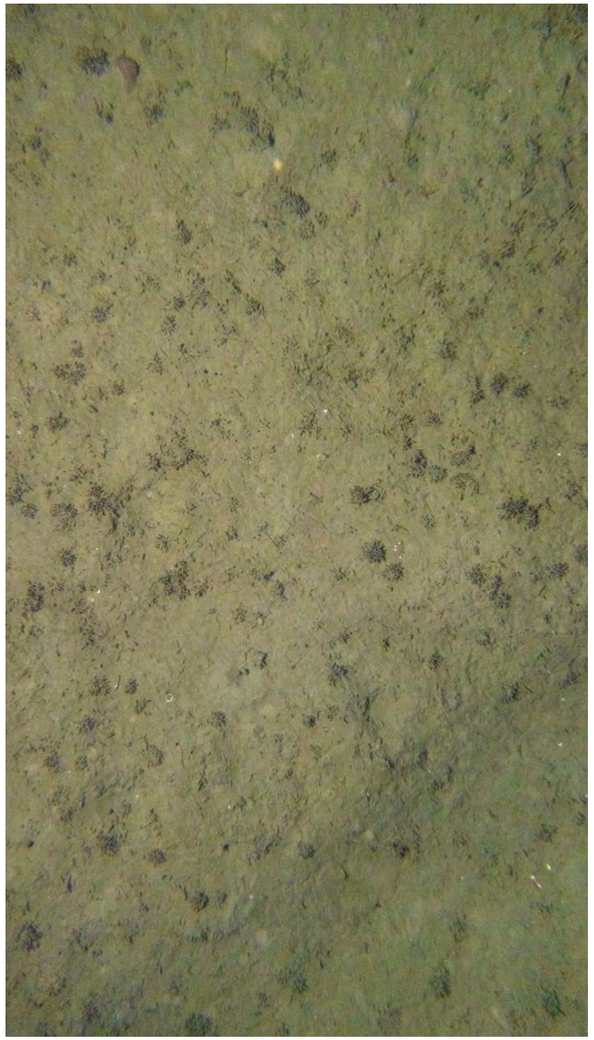


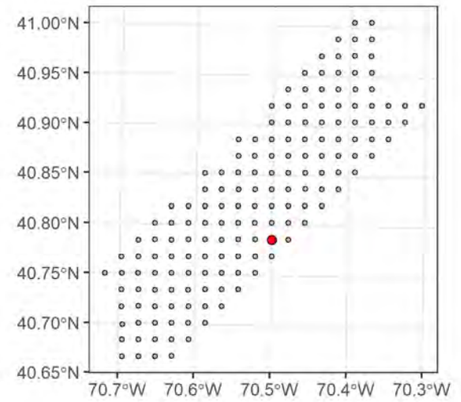
Figure E-395: WTG-099-A-PV

Sediment Profile Image



Figure E-396: WTG-099-A-SPI

Location



Attributes

Date Time (EST):	07/29/21 03:07
Station (Replicate):	WTG-099 (2 of 2)
Depth (m):	-50.6
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, faint crab track, large and small burrows

Plan-View Image

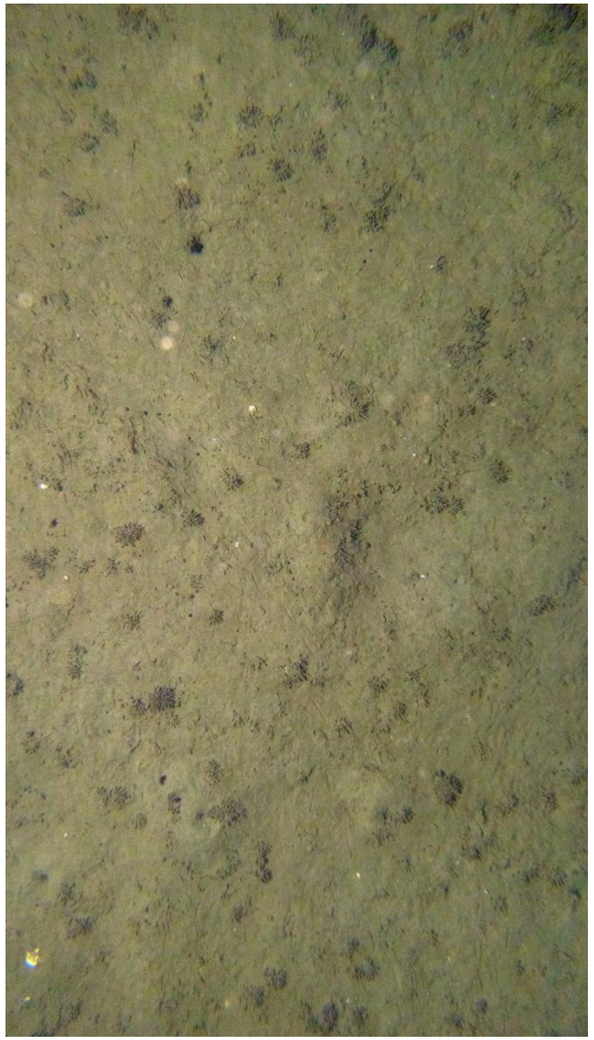


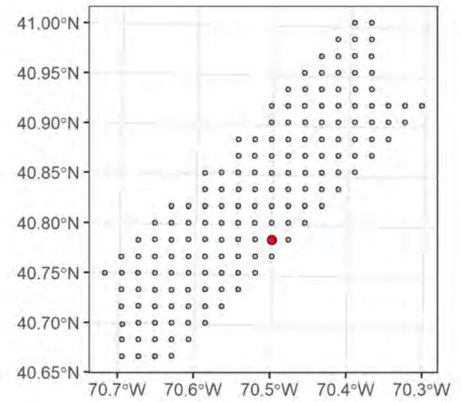
Figure E-397: WTG-099-B-PV

Sediment Profile Image



Figure E-398: WTG-099-C-SPI

Location



Attributes

Date Time (EST):	07/29/21 03:20
Station (Replicate):	WTG-099 (1 of 2)
Depth (m):	-50.5
Prism Penetration (cm):	13.4
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, faint crab track, large and small burrows

Plan-View Image

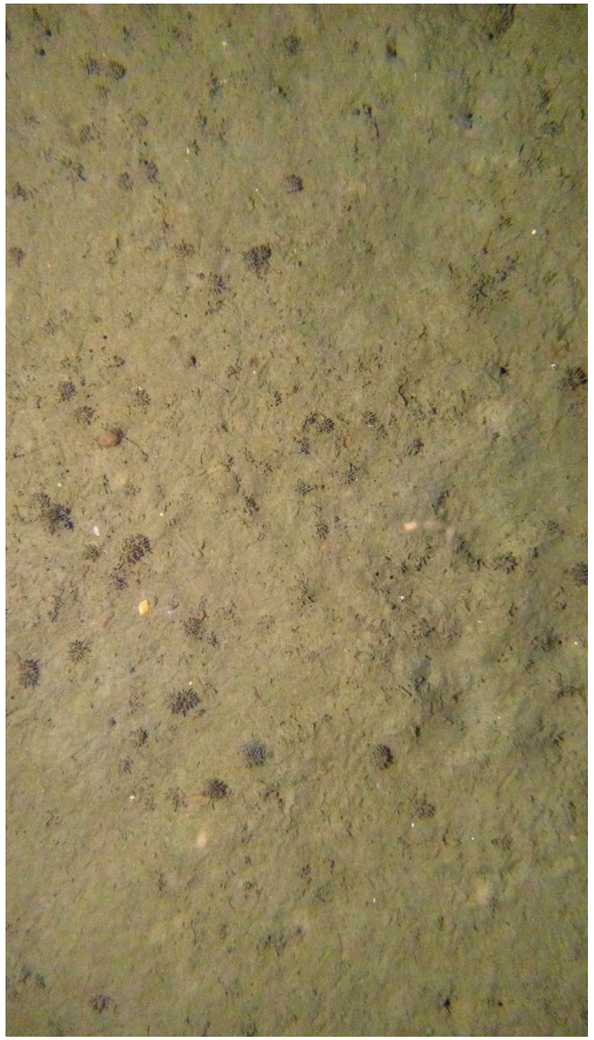


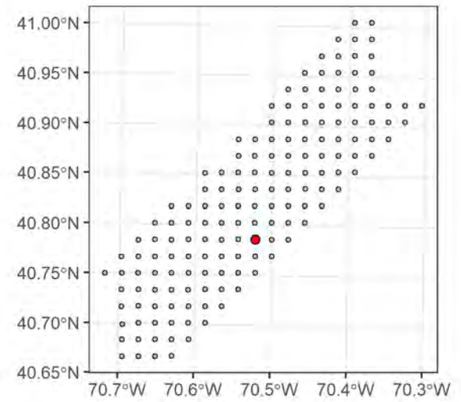
Figure E-399: WTG-100-B-PV

Sediment Profile Image



Figure E-400: WTG-100-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 20:30
Station (Replicate):	WTG-100 (2 of 2)
Depth (m):	-51.4
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug, 1 crangonid
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, faint crab track, large and small burrows

Plan-View Image

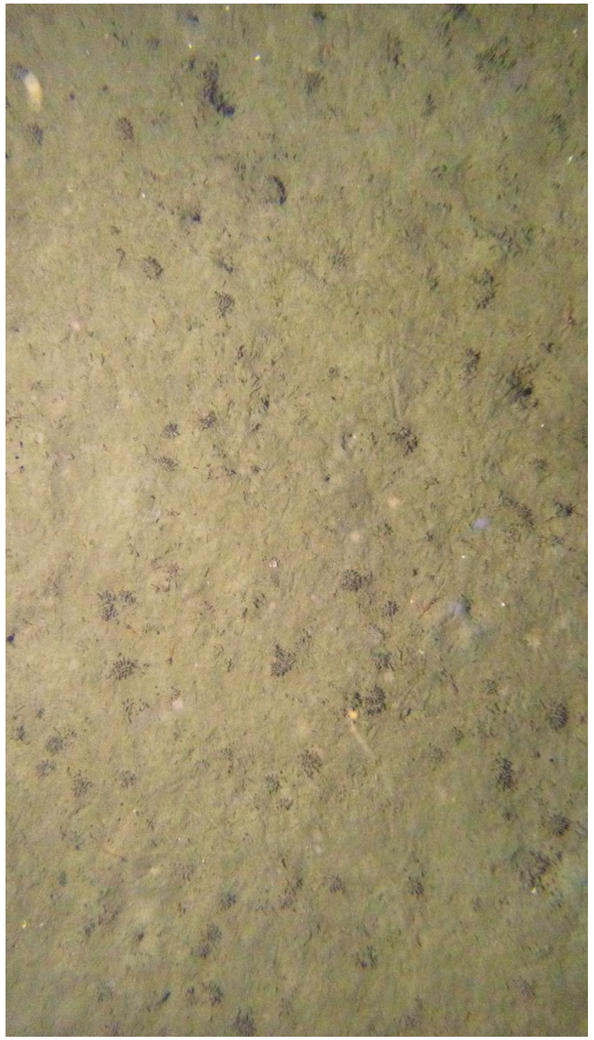


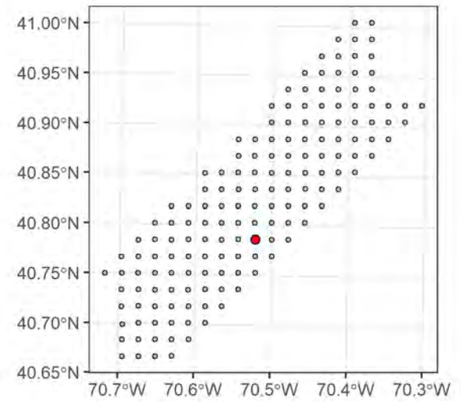
Figure E-401: WTG-100-A-PV

Sediment Profile Image



Figure E-402: WTG-100-C-SPI

Location



Attributes

Date Time (EST):	07/28/21 20:36
Station (Replicate):	WTG-100 (1 of 2)
Depth (m):	-51.3
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, faint crab track, large and small burrows

Plan-View Image

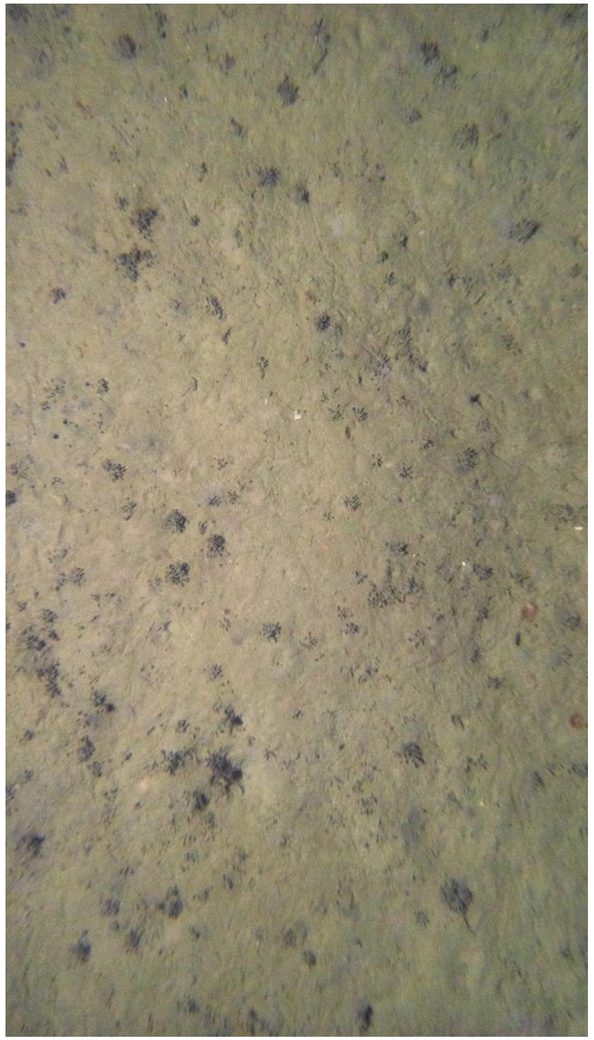


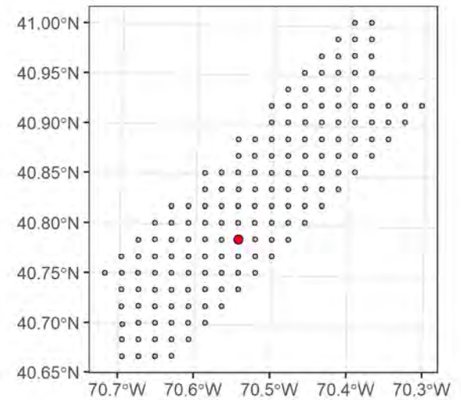
Figure E-403: WTG-101-A-PV

Sediment Profile Image



Figure E-404: WTG-101-A-SPI

Location



Attributes

Date Time (EST):	07/20/21 13:18
Station (Replicate):	WTG-101 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 Ceriantharia
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present

Plan-View Image



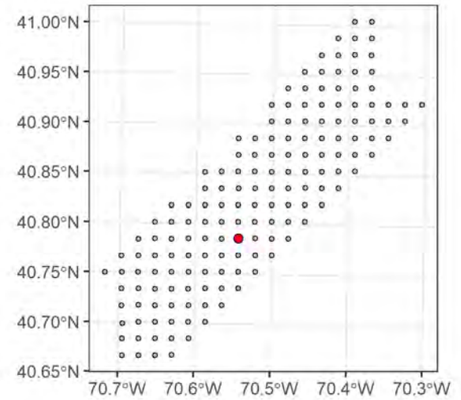
Figure E-405: WTG-101-B-PV

Sediment Profile Image



Figure E-406: WTG-101-C-SPI

Location



Attributes

Date Time (EST):	07/20/21 13:28
Station (Replicate):	WTG-101 (1 of 2)
Depth (m):	-52.1
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some amphipod tube clusters, faint crab tracks

Plan-View Image



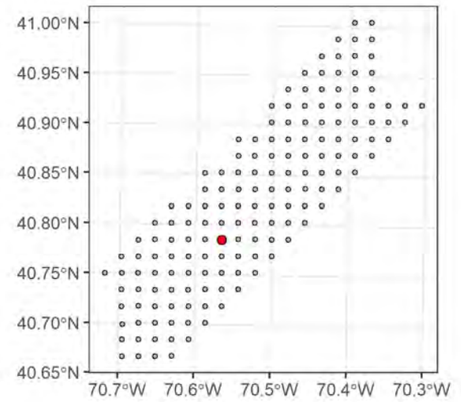
Figure E-407: WTG-102-B-PV

Sediment Profile Image



Figure E-408: WTG-102-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 22:21
Station (Replicate):	WTG-102 (2 of 2)
Depth (m):	-53.4
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	faint crab tracks, few small burrows

Plan-View Image



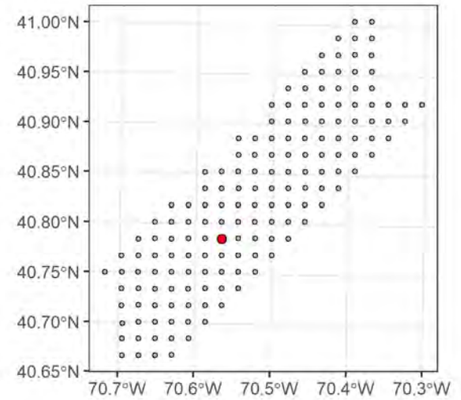
Figure E-409: WTG-102-A-PV

Sediment Profile Image



Figure E-410: WTG-102-C-SPI

Location



Attributes

Date Time (EST):	07/28/21 22:27
Station (Replicate):	WTG-102 (1 of 2)
Depth (m):	-53.3
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	one large, few small burrows

Plan-View Image



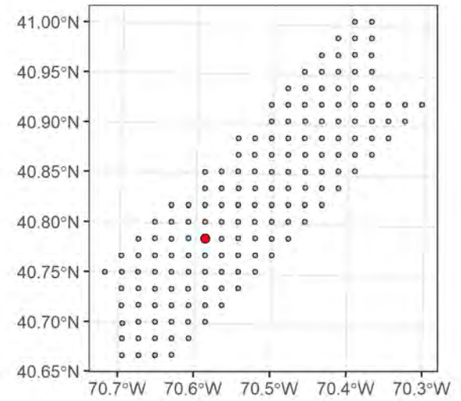
Figure E-411: WTG-103-A-PV

Sediment Profile Image



Figure E-412: WTG-103-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 00:37
Station (Replicate):	WTG-103 (2 of 2)
Depth (m):	-53
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few large and small burrows

Plan-View Image



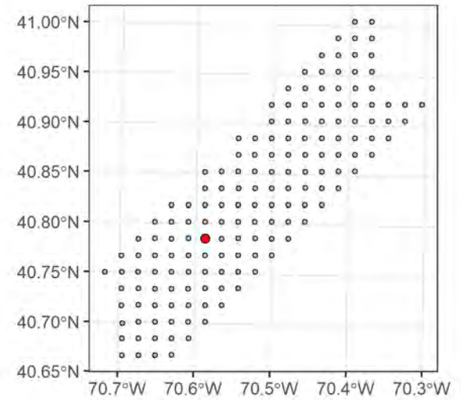
Figure E-413: WTG-103-B-PV

Sediment Profile Image



Figure E-414: WTG-103-B-SPI

Location



Attributes

Date Time (EST):	07/24/21 00:43
Station (Replicate):	WTG-103 (1 of 2)
Depth (m):	-53
Prism Penetration (cm):	12
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large and small burrows

Plan-View Image



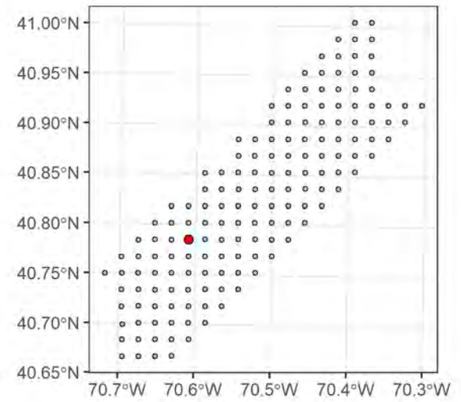
Figure E-415: WTG-104-A-PV

Sediment Profile Image



Figure E-416: WTG-104-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 04:46
Station (Replicate):	WTG-104 (2 of 2)
Depth (m):	-54.3
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Ceriantharia 2 shrimp 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, large burrows, few amphipod tube clusters

Plan-View Image



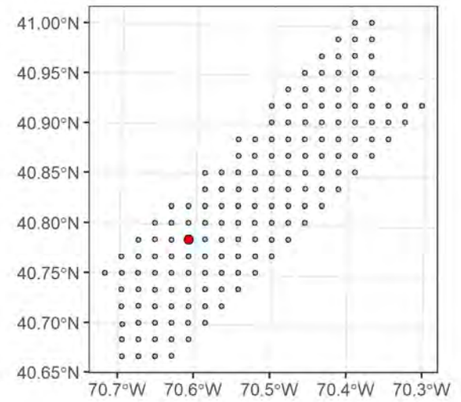
Figure E-417: WTG-104-B-PV

Sediment Profile Image



Figure E-418: WTG-104-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 04:56
Station (Replicate):	WTG-104 (1 of 2)
Depth (m):	-54.3
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, large burrows (one with reduced sediment), few amphipod tube clusters

Plan-View Image



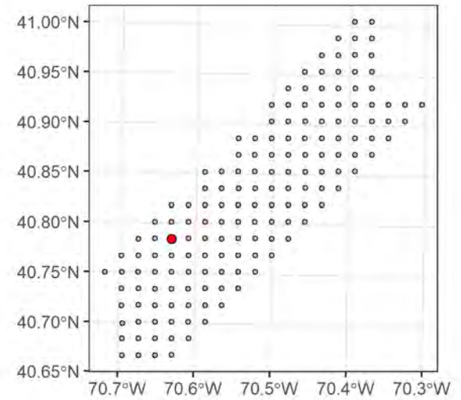
Figure E-419: WTG-105-B-PV

Sediment Profile Image



Figure E-420: WTG-105-B-SPI

Location



Attributes

Date Time (EST):	07/24/21 06:04
Station (Replicate):	WTG-105 (2 of 2)
Depth (m):	-55.3
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows

Plan-View Image



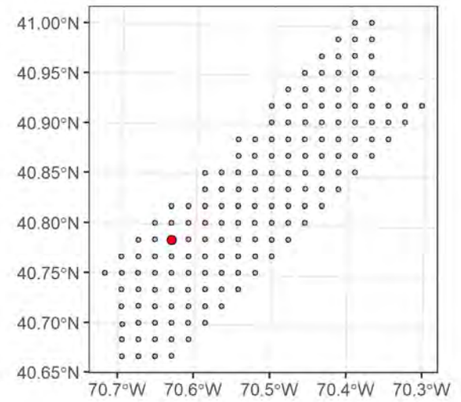
Figure E-421: WTG-105-C-PV

Sediment Profile Image



Figure E-422: WTG-105-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 06:10
Station (Replicate):	WTG-105 (1 of 2)
Depth (m):	-55.3
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 pleuronectidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube d(Erichthonius?) clusters, crab tracks, focus/lighting a little off

Plan-View Image



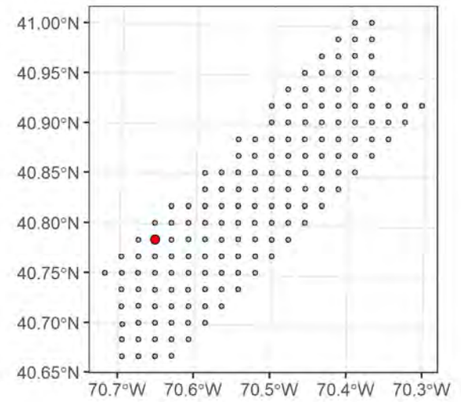
Figure E-423: WTG-106-C-PV

Sediment Profile Image



Figure E-424: WTG-106-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 06:08
Station (Replicate):	WTG-106 (2 of 2)
Depth (m):	-55.3
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing anemone
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large burrows, crab tracks, focus/lighting a little off

Plan-View Image



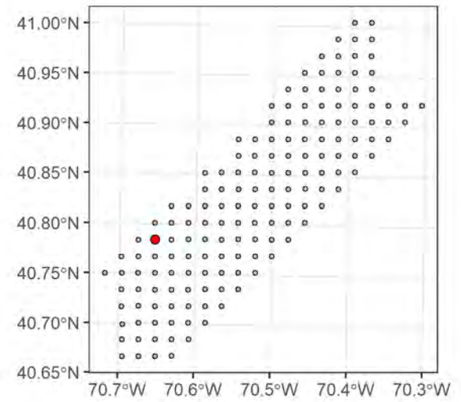
Figure E-425: WTG-106-B-PV

Sediment Profile Image



Figure E-426: WTG-106-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 06:13
Station (Replicate):	WTG-106 (1 of 2)
Depth (m):	-55.5
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large burrows, crab tracks, focus/lighting a little off

Plan-View Image



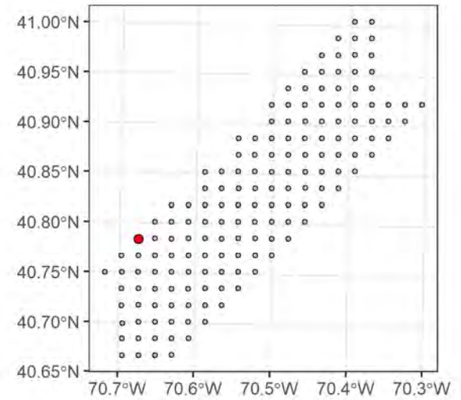
Figure E-427: WTG-107-A-PV

Sediment Profile Image



Figure E-428: WTG-107-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 01:03
Station (Replicate):	WTG-107 (2 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 1 sea slug, 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, large burrows

Plan-View Image



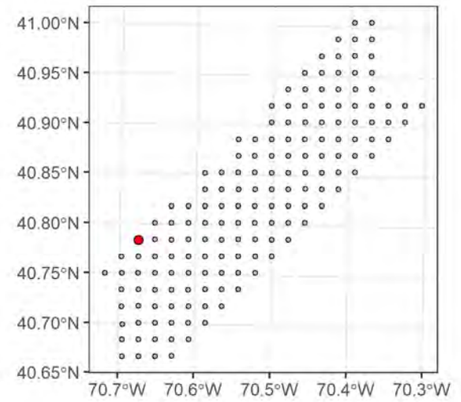
Figure E-429: WTG-107-B-PV

Sediment Profile Image



Figure E-430: WTG-107-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 01:15
Station (Replicate):	WTG-107 (1 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	0.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, large burrows

Plan-View Image



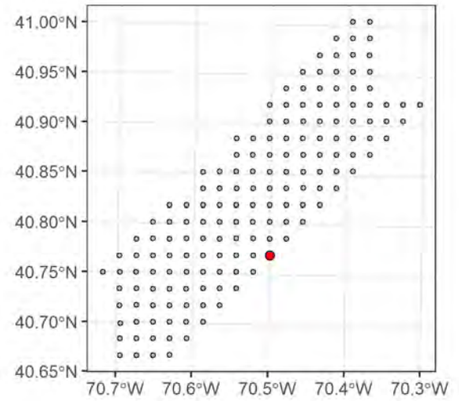
Figure E-431: WTG-108-B-PV

Sediment Profile Image



Figure E-432: WTG-108-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 07:05
Station (Replicate):	WTG-108 (2 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 juvenile crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, crab tracks, small burrows

Plan-View Image



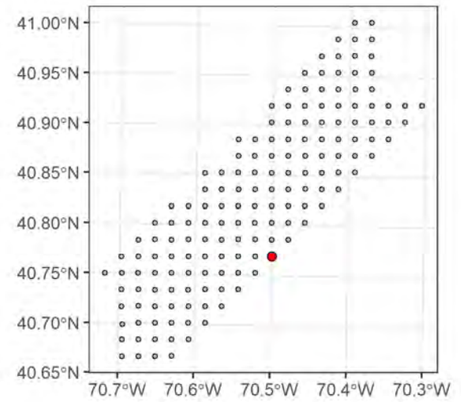
Figure E-433: WTG-108-C-PV

Sediment Profile Image



Figure E-434: WTG-108-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 07:10
Station (Replicate):	WTG-108 (1 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Cancer borealis/irroratus
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, crab tracks, small burrows

Plan-View Image



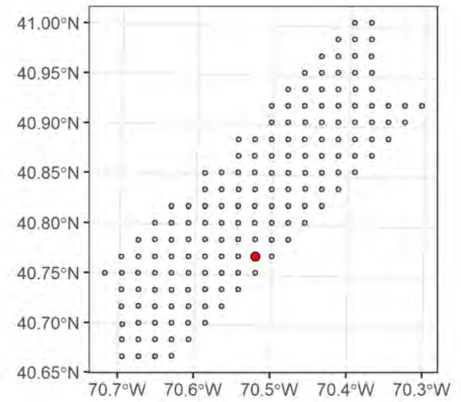
Figure E-435: WTG-109-A-PV

Sediment Profile Image



Figure E-436: WTG-109-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 18:56
Station (Replicate):	WTG-109 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, crab tracks, large and small burrows

Plan-View Image

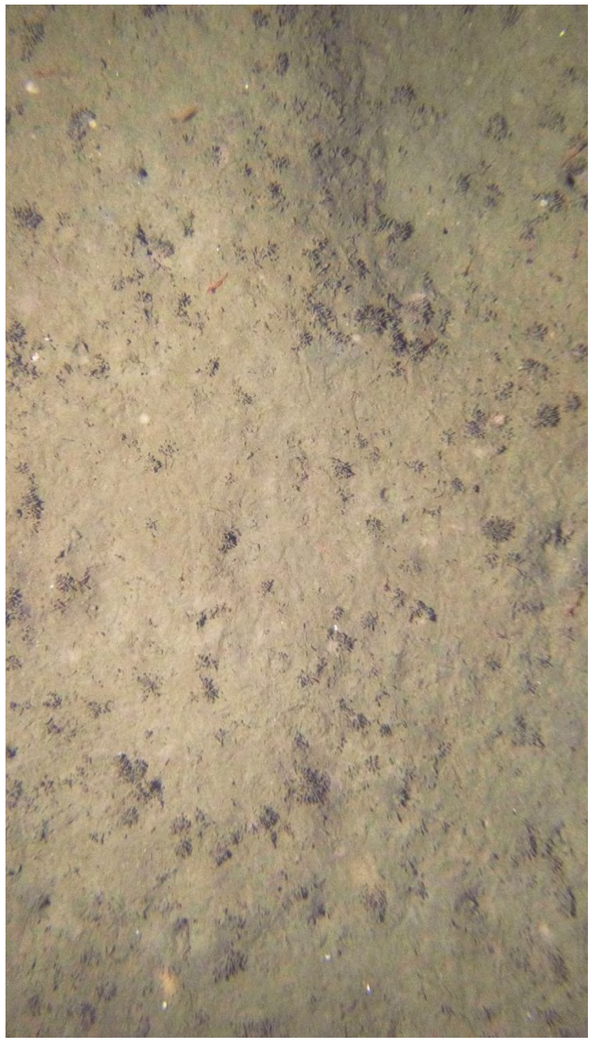


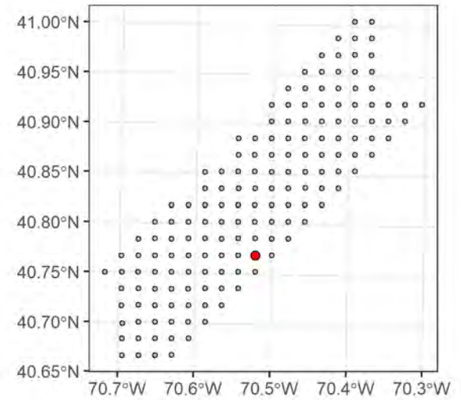
Figure E-437: WTG-109-B-PV

Sediment Profile Image



Figure E-438: WTG-109-C-SPI

Location



Attributes

Date Time (EST):	07/28/21 19:06
Station (Replicate):	WTG-109 (1 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, crab tracks, large and small burrows, large tubes

Plan-View Image



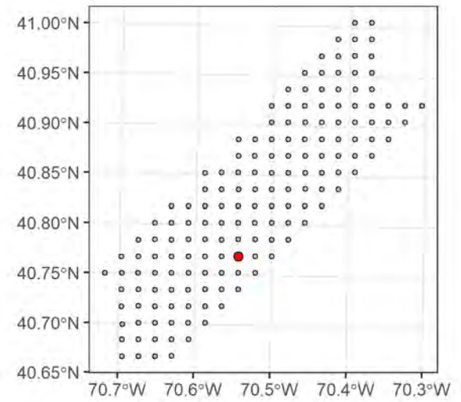
Figure E-439: WTG-110-A-PV

Sediment Profile Image



Figure E-440: WTG-110-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 15:28
Station (Replicate):	WTG-110 (2 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, faint crab tracks, large and small burrows

Plan-View Image

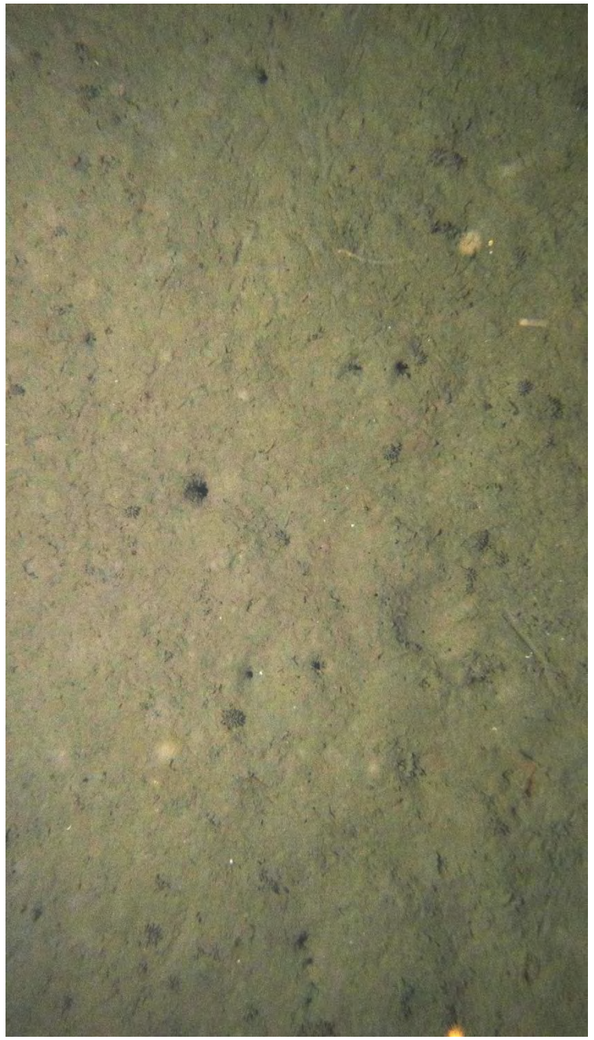


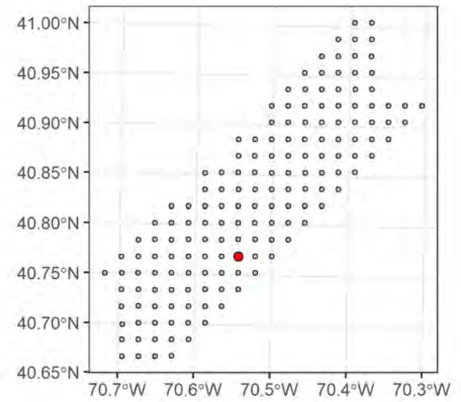
Figure E-441: WTG-110-C-PV

Sediment Profile Image



Figure E-442: WTG-110-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 15:32
Station (Replicate):	WTG-110 (1 of 2)
Depth (m):	-53.2
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, faint crab tracks, small burrows

Plan-View Image

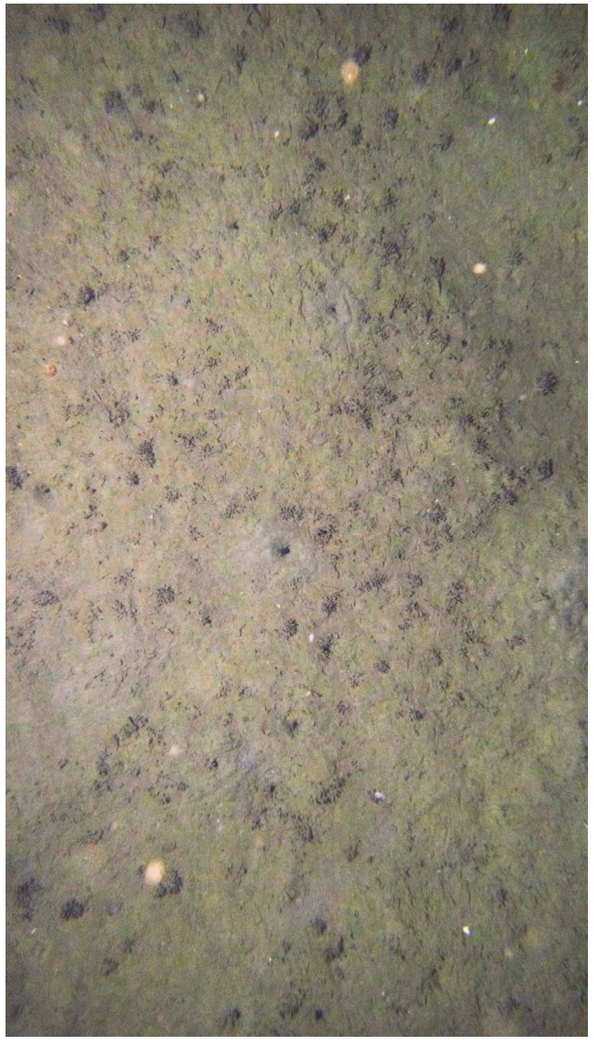


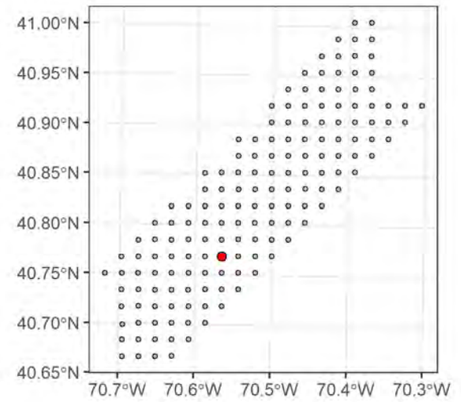
Figure E-443: WTG-111-A-PV

Sediment Profile Image



Figure E-444: WTG-111-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 03:33
Station (Replicate):	WTG-111 (2 of 2)
Depth (m):	-53.9
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



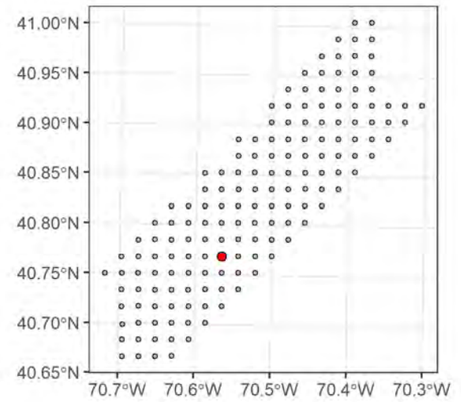
Figure E-445: WTG-111-C-PV

Sediment Profile Image



Figure E-446: WTG-111-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 03:44
Station (Replicate):	WTG-111 (1 of 2)
Depth (m):	-53.9
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

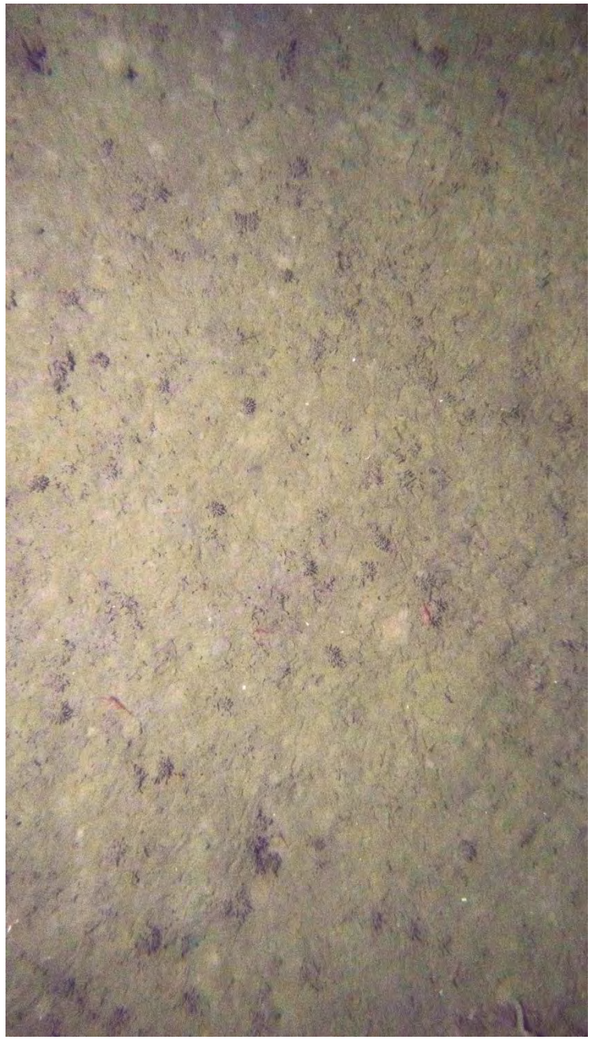


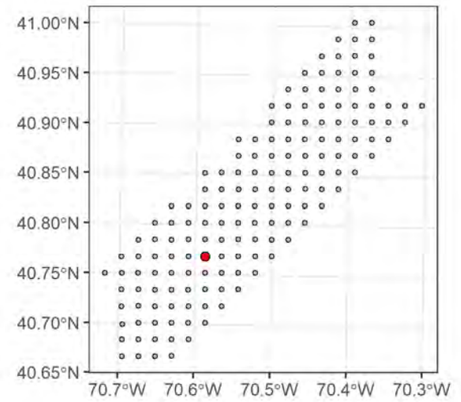
Figure E-447: WTG-112-C-PV

Sediment Profile Image



Figure E-448: WTG-112-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 13:39
Station (Replicate):	WTG-112 (2 of 2)
Depth (m):	-54.5
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, crab tracks

Plan-View Image



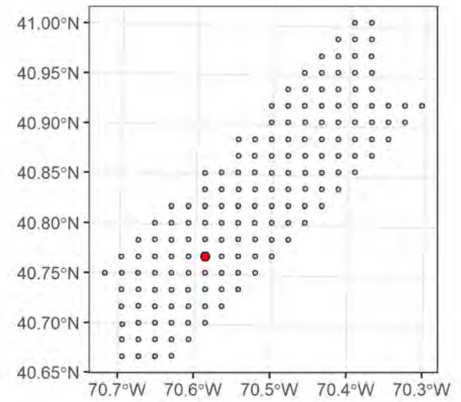
Figure E-449: WTG-112-B-PV

Sediment Profile Image



Figure E-450: WTG-112-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 13:43
Station (Replicate):	WTG-112 (1 of 2)
Depth (m):	-54.4
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, crab tracks

Plan-View Image



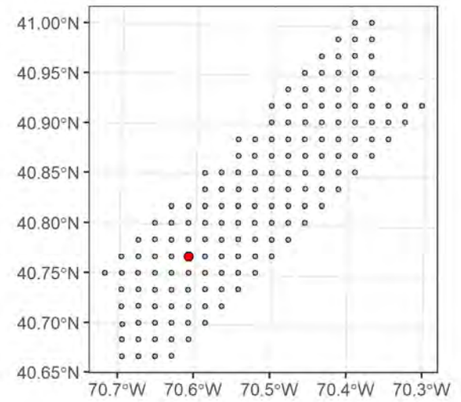
Figure E-451: WTG-113-B-PV

Sediment Profile Image



Figure E-452: WTG-113-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 11:52
Station (Replicate):	WTG-113 (2 of 2)
Depth (m):	-55.8
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tubes, crab tracks, some small burrows

Plan-View Image



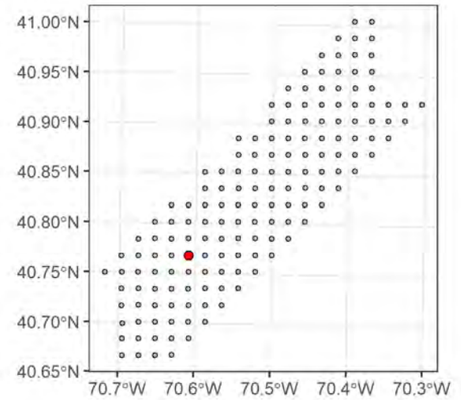
Figure E-453: WTG-113-A-PV

Sediment Profile Image



Figure E-454: WTG-113-C-SPI

Location



Attributes

Date Time (EST):	07/28/21 11:56
Station (Replicate):	WTG-113 (1 of 2)
Depth (m):	-55.8
Prism Penetration (cm):	11.4
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tubes, crab tracks, some small burrows

Plan-View Image

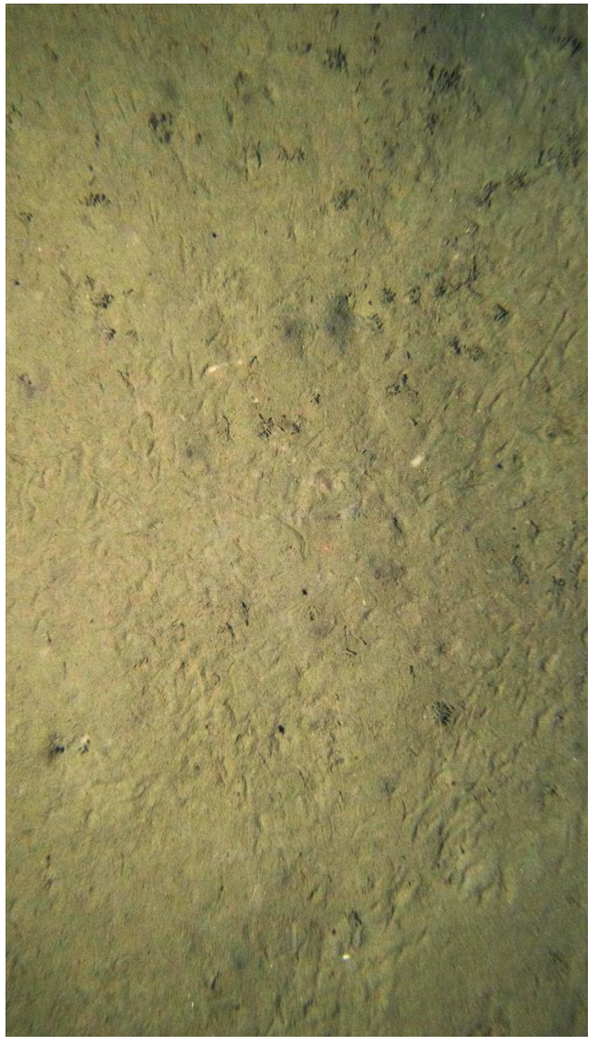


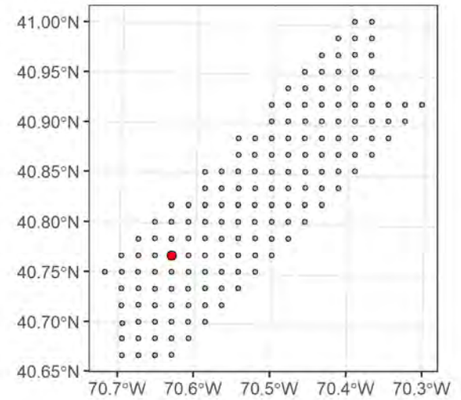
Figure E-455: WTG-114-A-PV

Sediment Profile Image



Figure E-456: WTG-114-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 10:18
Station (Replicate):	WTG-114 (2 of 2)
Depth (m):	-56.4
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	sparse amphipod tubes, abundant crab tracks, few burrows

Plan-View Image



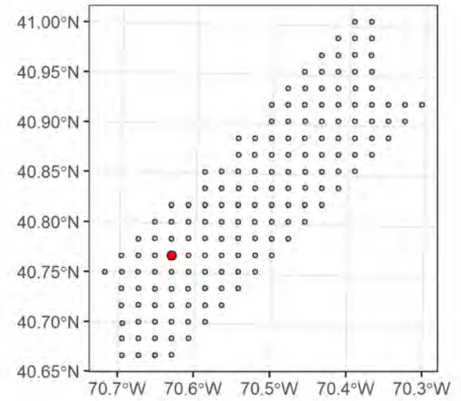
Figure E-457: WTG-114-C-PV

Sediment Profile Image



Figure E-458: WTG-114-C-SPI

Location



Attributes

Date Time (EST):	07/28/21 10:23
Station (Replicate):	WTG-114 (1 of 2)
Depth (m):	-56.3
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	sparse amphipod tubes, abundant crab tracks, few burrows

Plan-View Image



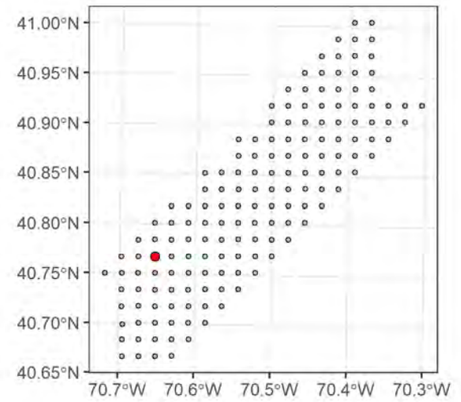
Figure E-459: WTG-115-A-PV

Sediment Profile Image



Figure E-460: WTG-115-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 08:11
Station (Replicate):	WTG-115 (2 of 2)
Depth (m):	-56.8
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	1 large burrow

Plan-View Image



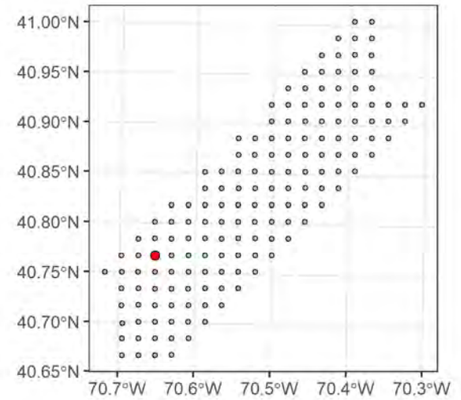
Figure E-461: WTG-115-B-PV

Sediment Profile Image



Figure E-462: WTG-115-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 08:19
Station (Replicate):	WTG-115 (1 of 2)
Depth (m):	-57
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks

Plan-View Image



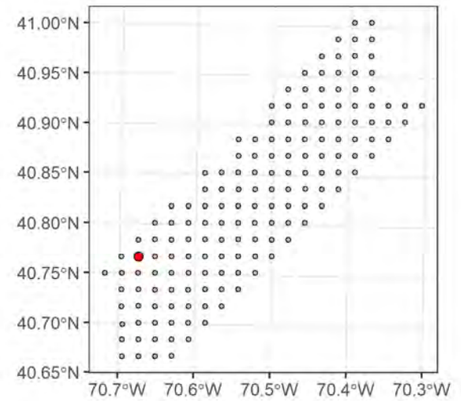
Figure E-463: WTG-116-A-PV

Sediment Profile Image



Figure E-464: WTG-116-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 03:25
Station (Replicate):	WTG-116 (2 of 2)
Depth (m):	-57.1
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, few large burrows

Plan-View Image



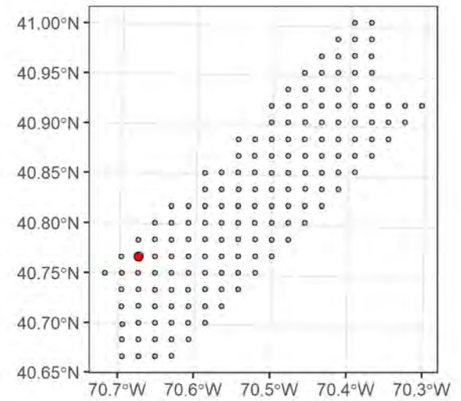
Figure E-465: WTG-116-D-PV

Sediment Profile Image



Figure E-466: WTG-116-D-SPI

Location



Attributes

Date Time (EST):	07/28/21 04:15
Station (Replicate):	WTG-116 (1 of 2)
Depth (m):	-56.8
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, few large burrows, some light and focus issues

Plan-View Image

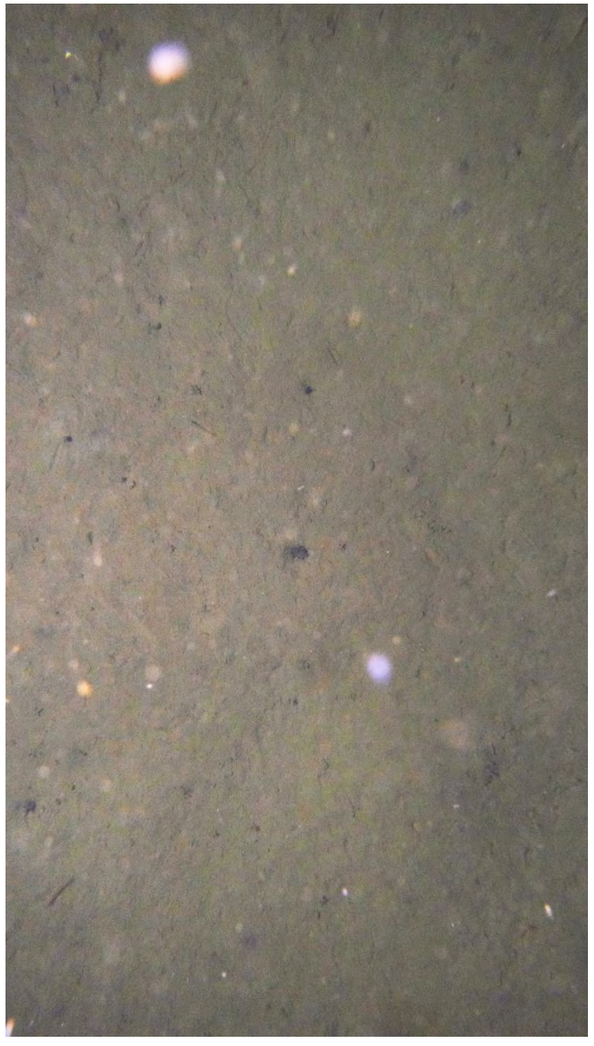


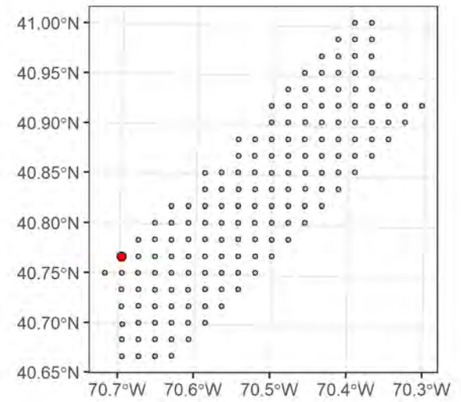
Figure E-467: WTG-117-G-PV

Sediment Profile Image



Figure E-468: WTG-117-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 22:29
Station (Replicate):	WTG-117 (2 of 2)
Depth (m):	-58.5
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	crab tracks, few large burrows

Plan-View Image



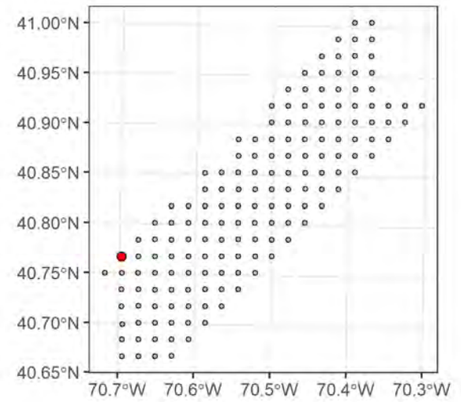
Figure E-469: WTG-117-I-PV

Sediment Profile Image



Figure E-470: WTG-117-I-SPI

Location



Attributes

Date Time (EST):	07/28/21 00:20
Station (Replicate):	WTG-117 (1 of 2)
Depth (m):	-58.5
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	crab tracks, few large burrows, some light and focus issues

Plan-View Image

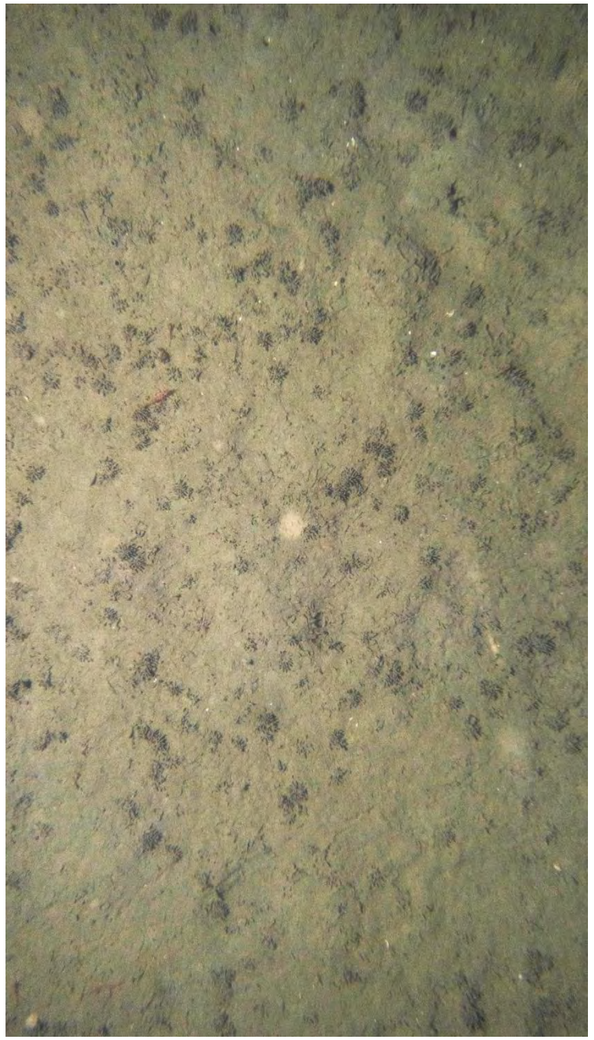


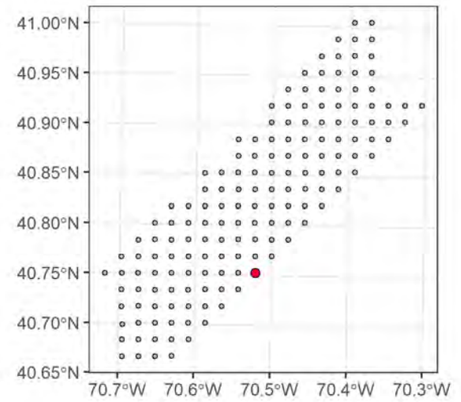
Figure E-471: WTG-118-A-PV

Sediment Profile Image



Figure E-472: WTG-118-A-SPI

Location



Attributes

Date Time (EST):	07/28/21 17:11
Station (Replicate):	WTG-118 (2 of 2)
Depth (m):	-52.6
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, small burrows

Plan-View Image



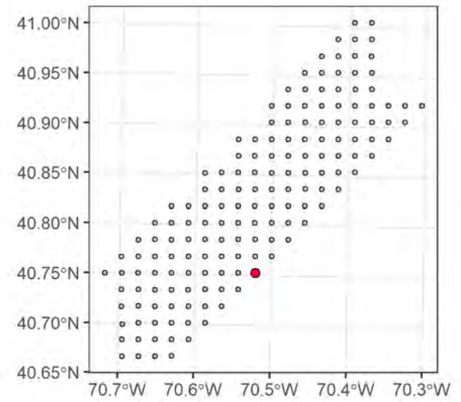
Figure E-473: WTG-118-B-PV

Sediment Profile Image



Figure E-474: WTG-118-B-SPI

Location



Attributes

Date Time (EST):	07/28/21 17:14
Station (Replicate):	WTG-118 (1 of 2)
Depth (m):	-52.7
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image



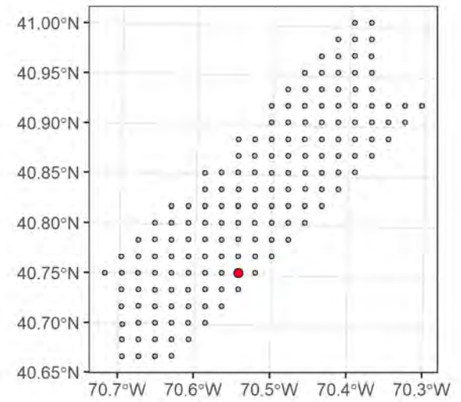
Figure E-475: WTG-119-A-PV

Sediment Profile Image



Figure E-476: WTG-119-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 05:10
Station (Replicate):	WTG-119 (2 of 2)
Depth (m):	-54.5
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some amphipod tube clusters, small burrows, crab tracks

Plan-View Image

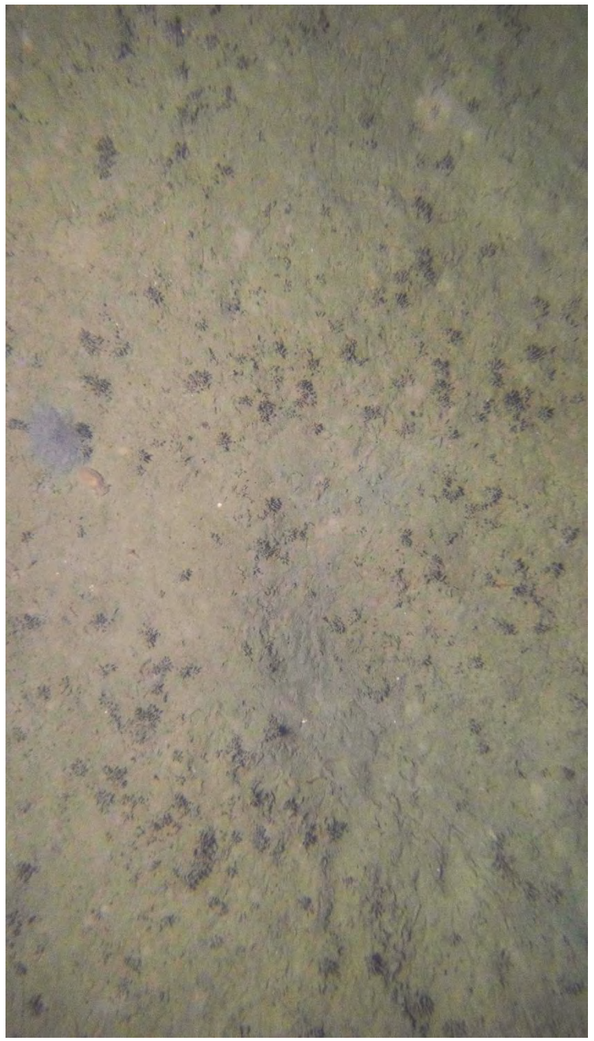


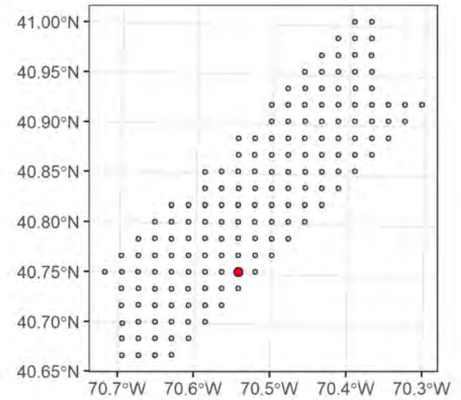
Figure E-477: WTG-119-C-PV

Sediment Profile Image



Figure E-478: WTG-119-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 05:15
Station (Replicate):	WTG-119 (1 of 2)
Depth (m):	-54.5
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some amphipod tube clusters, small burrows, crab tracks

Plan-View Image



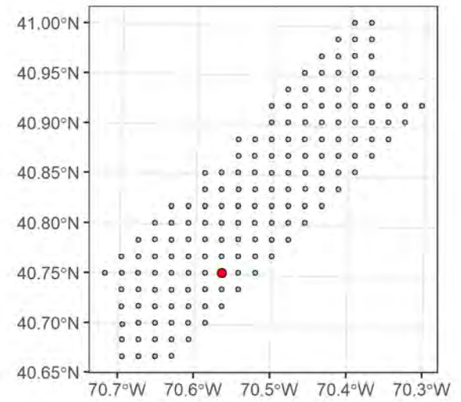
Figure E-479: WTG-120-A-PV

Sediment Profile Image



Figure E-480: WTG-120-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 04:54
Station (Replicate):	WTG-120 (2 of 2)
Depth (m):	-54.4
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 large crab, 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



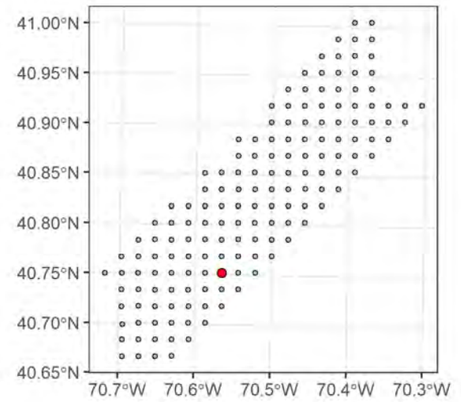
Figure E-481: WTG-120-C-PV

Sediment Profile Image



Figure E-482: WTG-120-C-SPI

Location



Attributes

Date Time (EST):	07/27/21 05:04
Station (Replicate):	WTG-120 (1 of 2)
Depth (m):	-54.3
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	13 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, 1 skate egg case, 1 large feeding void/burrow

Plan-View Image



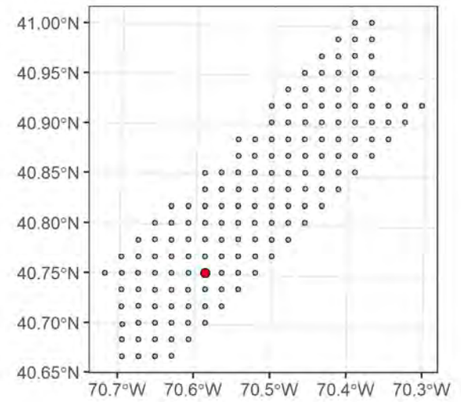
Figure E-483: WTG-121-A-PV

Sediment Profile Image



Figure E-484: WTG-121-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 06:40
Station (Replicate):	WTG-121 (2 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

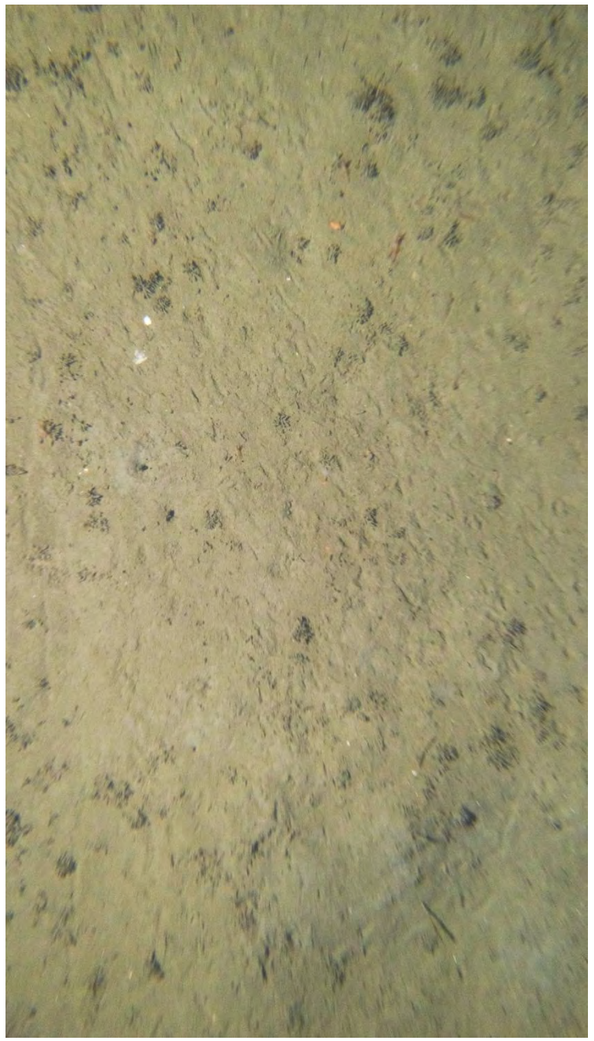


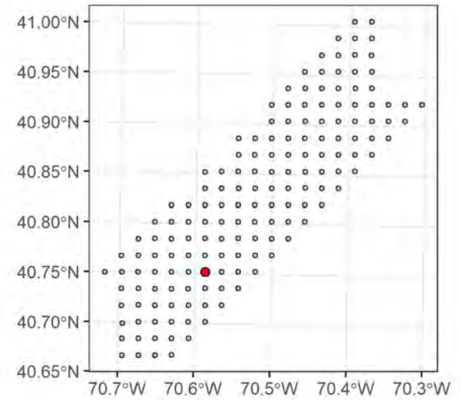
Figure E-485: WTG-121-B-PV

Sediment Profile Image



Figure E-486: WTG-121-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 06:45
Station (Replicate):	WTG-121 (1 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

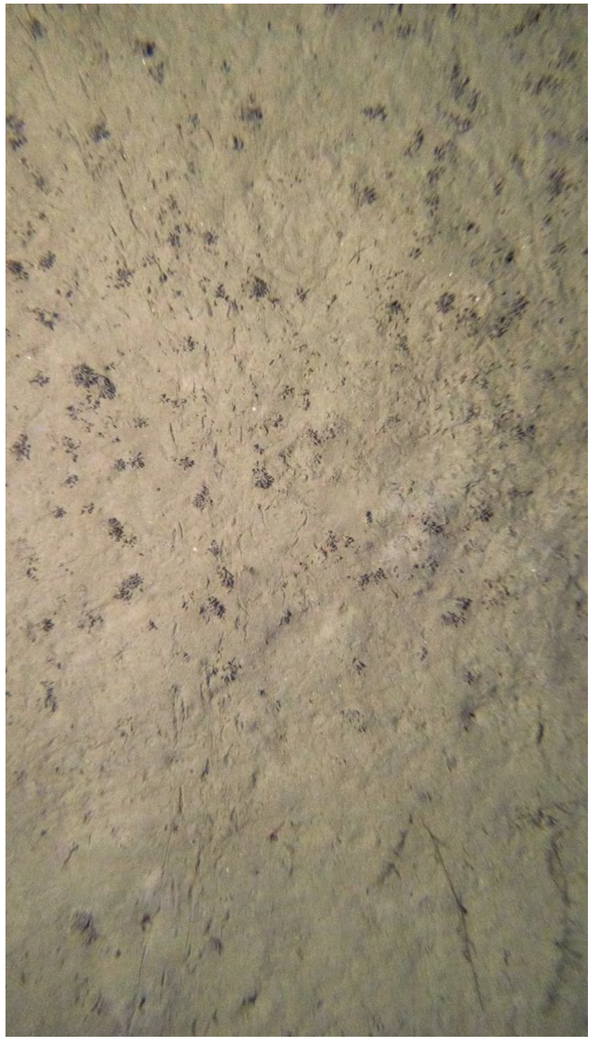


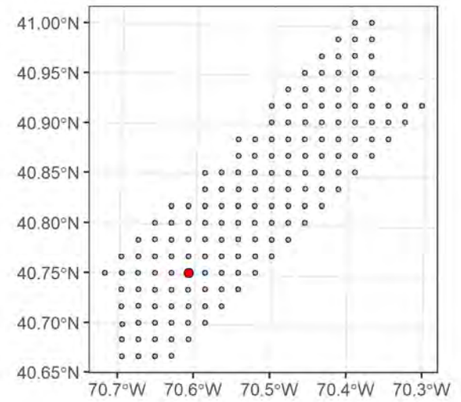
Figure E-487: WTG-122-A-PV

Sediment Profile Image



Figure E-488: WTG-122-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 10:51
Station (Replicate):	WTG-122 (2 of 2)
Depth (m):	-55.3
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, crab tracks

Plan-View Image



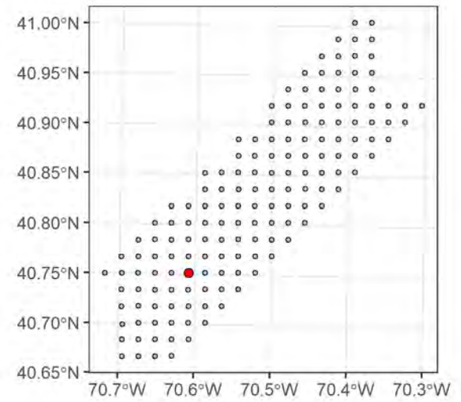
Figure E-489: WTG-122-B-PV

Sediment Profile Image



Figure E-490: WTG-122-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 10:59
Station (Replicate):	WTG-122 (1 of 2)
Depth (m):	-55.4
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, faint crab tracks, 1 large burrow

Plan-View Image



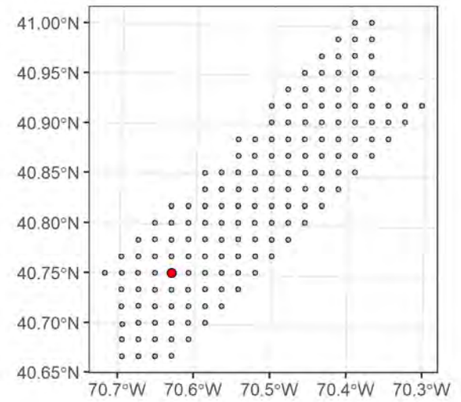
Figure E-491: WTG-123-A-PV

Sediment Profile Image



Figure E-492: WTG-123-B-SPI

Location



Attributes

Date Time (EST):	07/21/21 08:46
Station (Replicate):	WTG-123 (2 of 2)
Depth (m):	-56.3
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, crab tracks

Plan-View Image

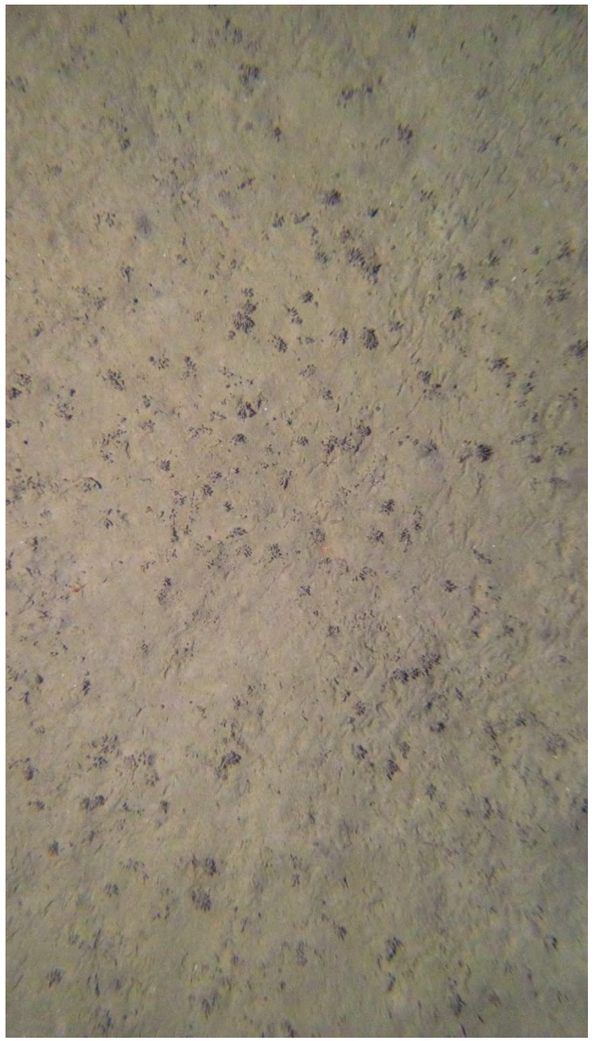


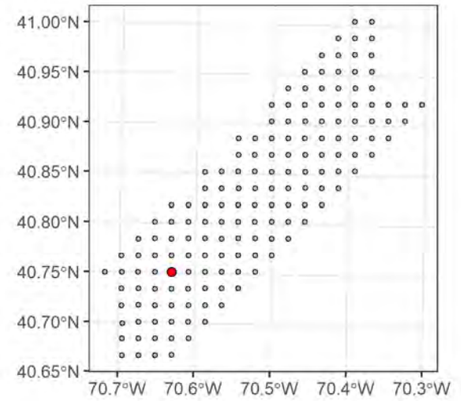
Figure E-493: WTG-123-D-PV

Sediment Profile Image



Figure E-494: WTG-123-E-SPI

Location



Attributes

Date Time (EST):	07/21/21 09:27
Station (Replicate):	WTG-123 (1 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, crab tracks

Plan-View Image

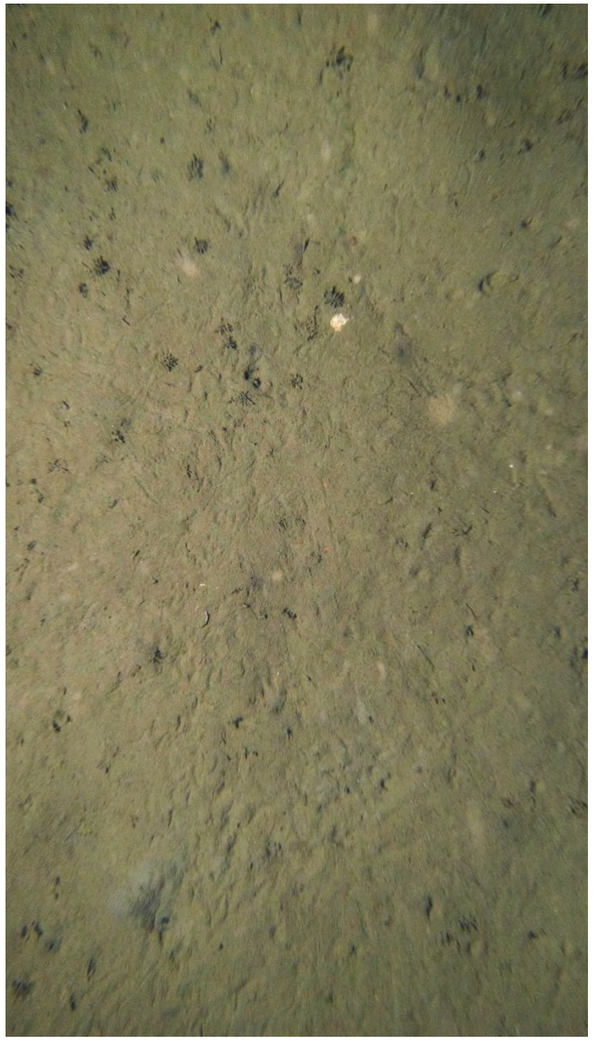


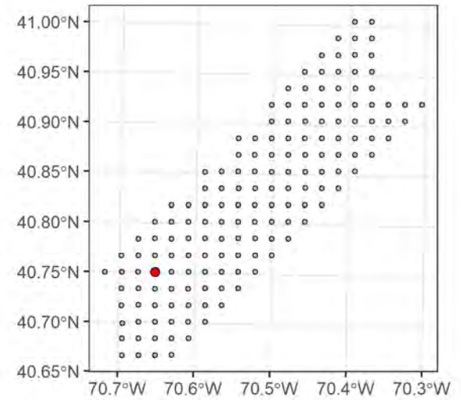
Figure E-495: WTG-124-A-PV

Sediment Profile Image



Figure E-496: WTG-124-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 13:13
Station (Replicate):	WTG-124 (2 of 2)
Depth (m):	-57.6
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, some burrows, crab tracks

Plan-View Image



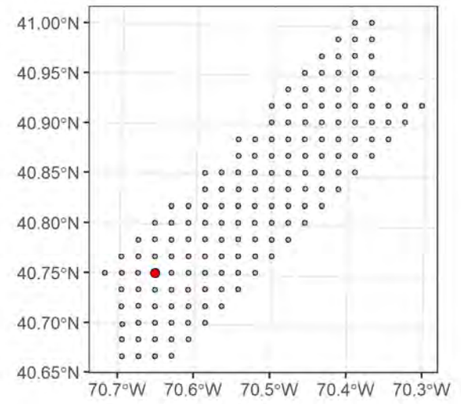
Figure E-497: WTG-124-C-PV

Sediment Profile Image



Figure E-498: WTG-124-C-SPI

Location



Attributes

Date Time (EST):	07/27/21 13:22
Station (Replicate):	WTG-124 (1 of 2)
Depth (m):	-57.6
Prism Penetration (cm):	17.2
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, some burrows, crab tracks, out of focus

Plan-View Image

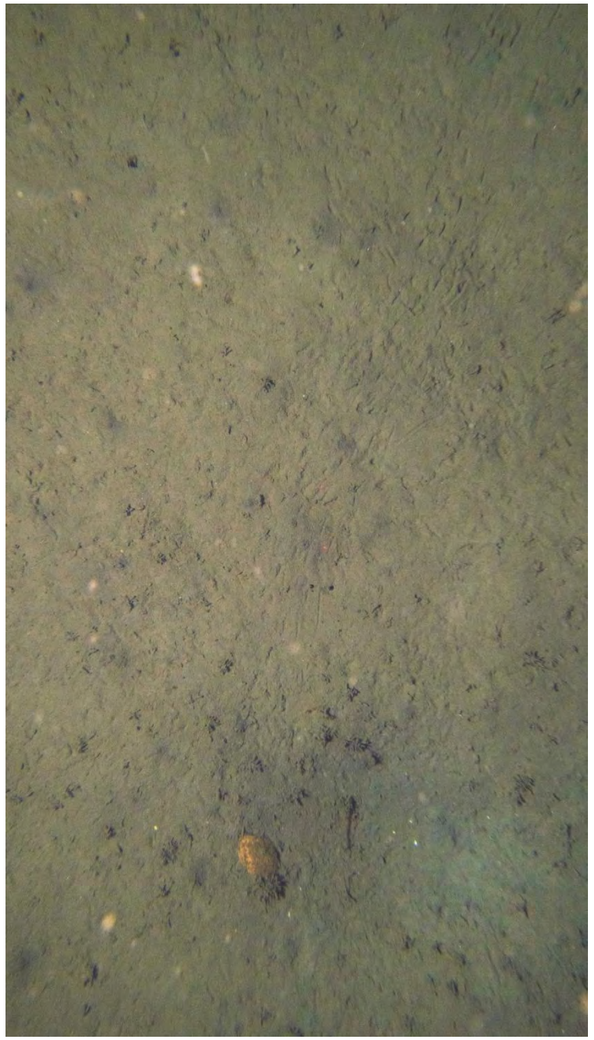


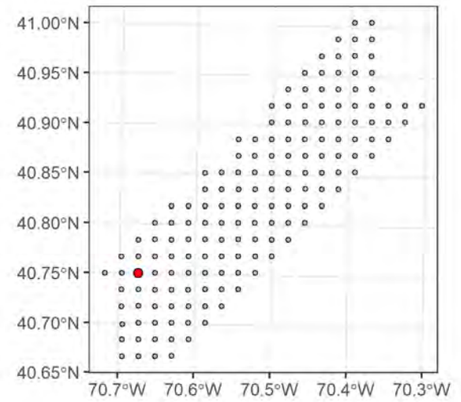
Figure E-499: WTG-125-A-PV

Sediment Profile Image



Figure E-500: WTG-125-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 14:59
Station (Replicate):	WTG-125 (2 of 2)
Depth (m):	-57.8
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	some amphipod tube clusters, some burrows, crab tracks. One dead Cancer carapace

Plan-View Image



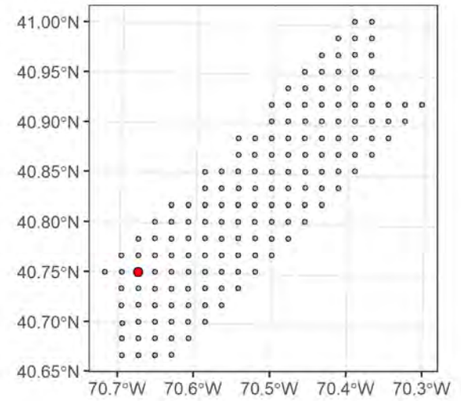
Figure E-501: WTG-125-B-PV

Sediment Profile Image



Figure E-502: WTG-125-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 15:03
Station (Replicate):	WTG-125 (1 of 2)
Depth (m):	-58.1
Prism Penetration (cm):	17.5
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	some amphipod tube clusters, some burrows, crab and gastropod tracks.

Plan-View Image



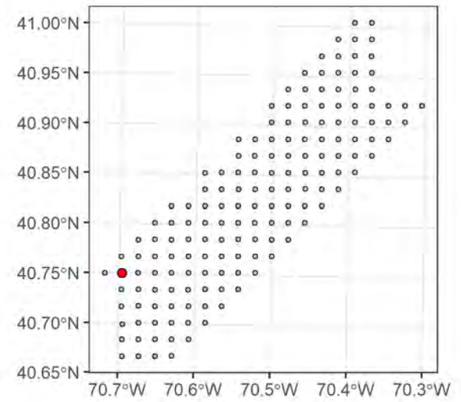
Figure E-503: WTG-126-A-PV

Sediment Profile Image



Figure E-504: WTG-126-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 09:48
Station (Replicate):	WTG-126 (2 of 2)
Depth (m):	-58.8
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, crab tracks, sea star trace

Plan-View Image



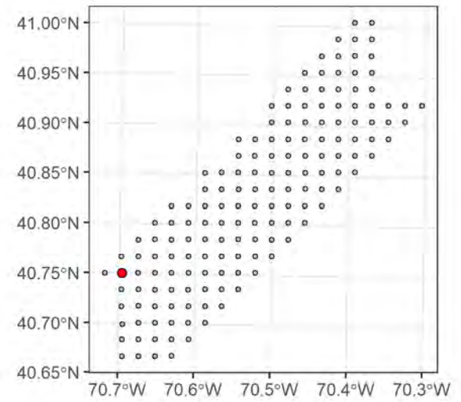
Figure E-505: WTG-126-C-PV

Sediment Profile Image



Figure E-506: WTG-126-B-SPI

Location



Attributes

Date Time (EST):	07/24/21 09:53
Station (Replicate):	WTG-126 (1 of 2)
Depth (m):	-58.9
Prism Penetration (cm):	11.7
aRPD Mean Depth (cm):	1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, crab tracks, sea star trace, out of focus

Plan-View Image



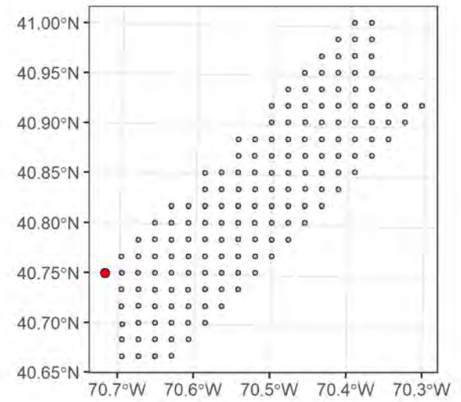
Figure E-507: WTG-127-A-PV

Sediment Profile Image



Figure E-508: WTG-127-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 20:31
Station (Replicate):	WTG-127 (2 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, microbial mats?

Plan-View Image



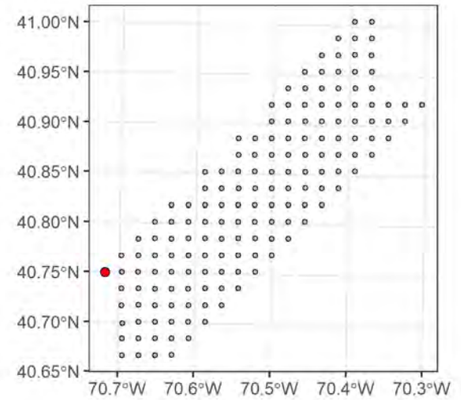
Figure E-509: WTG-127-C-PV

Sediment Profile Image



Figure E-510: WTG-127-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 20:36
Station (Replicate):	WTG-127 (1 of 2)
Depth (m):	-59.4
Prism Penetration (cm):	13
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



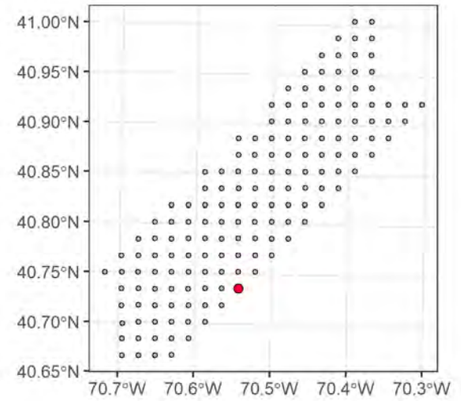
Figure E-511: WTG-128-A-PV

Sediment Profile Image



Figure E-512: WTG-128-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 13:18
Station (Replicate):	WTG-128 (2 of 2)
Depth (m):	-54.3
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, numerous small burrows

Plan-View Image



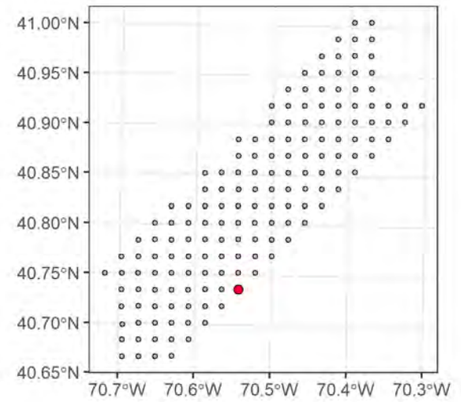
Figure E-513: WTG-128-B-PV

Sediment Profile Image



Figure E-514: WTG-128-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 13:31
Station (Replicate):	WTG-128 (1 of 2)
Depth (m):	-54.1
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

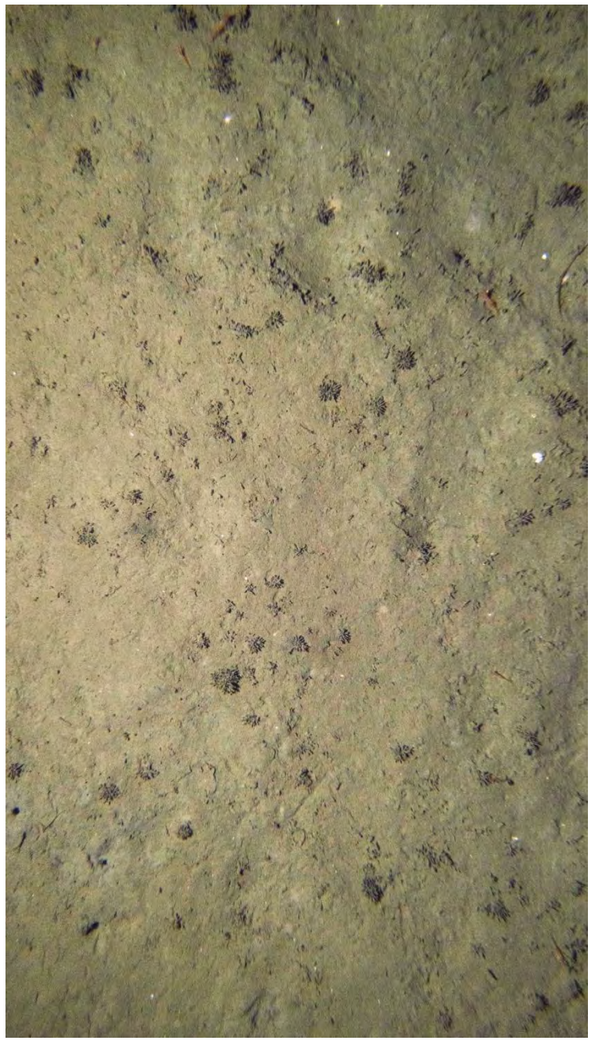


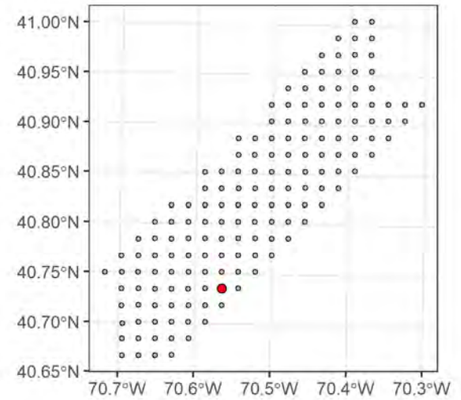
Figure E-515: WTG-129-A-PV

Sediment Profile Image



Figure E-516: WTG-129-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 03:09
Station (Replicate):	WTG-129 (2 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, few crab tracks

Plan-View Image



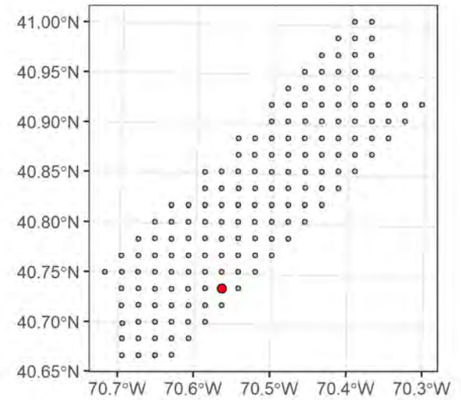
Figure E-517: WTG-129-B-PV

Sediment Profile Image



Figure E-518: WTG-129-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 03:14
Station (Replicate):	WTG-129 (1 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

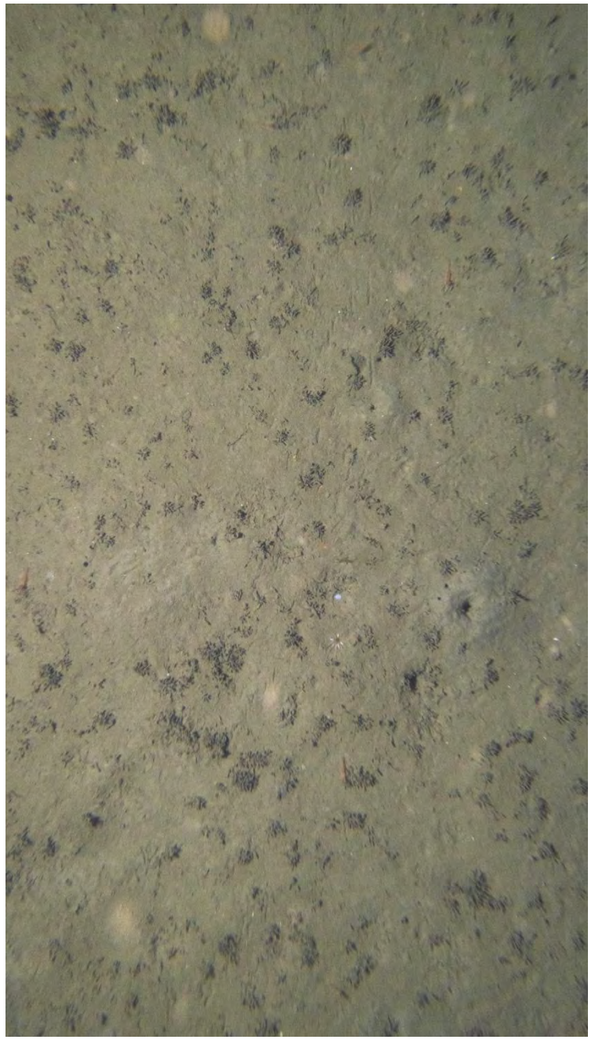


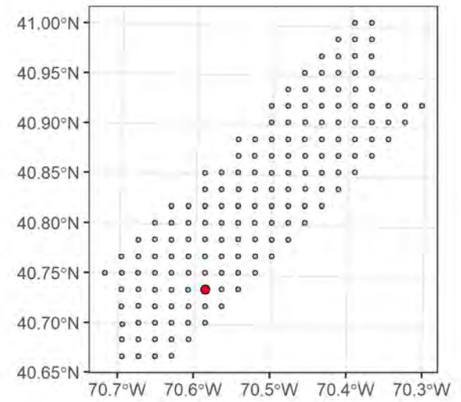
Figure E-519: WTG-130-A-PV

Sediment Profile Image



Figure E-520: WTG-130-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 08:12
Station (Replicate):	WTG-130 (2 of 2)
Depth (m):	-55.8
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing anemone 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



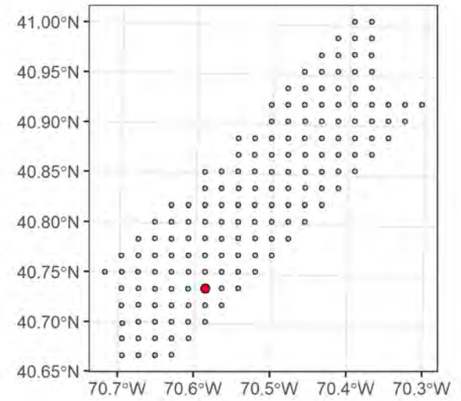
Figure E-521: WTG-130-B-PV

Sediment Profile Image



Figure E-522: WTG-130-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 08:16
Station (Replicate):	WTG-130 (1 of 2)
Depth (m):	-55.9
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 shrimp 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



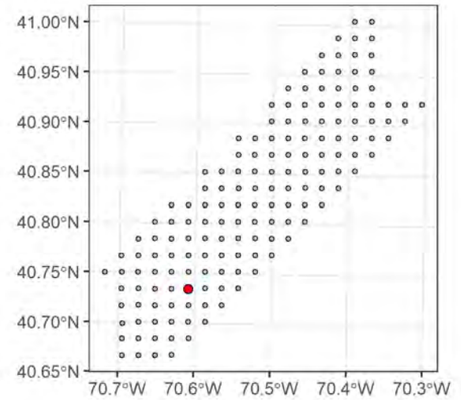
Figure E-523: WTG-131-A-PV

Sediment Profile Image



Figure E-524: WTG-131-A-SPI

Location



Attributes

Date Time (EST):	07/22/21 01:24
Station (Replicate):	WTG-131 (2 of 2)
Depth (m):	-55.7
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

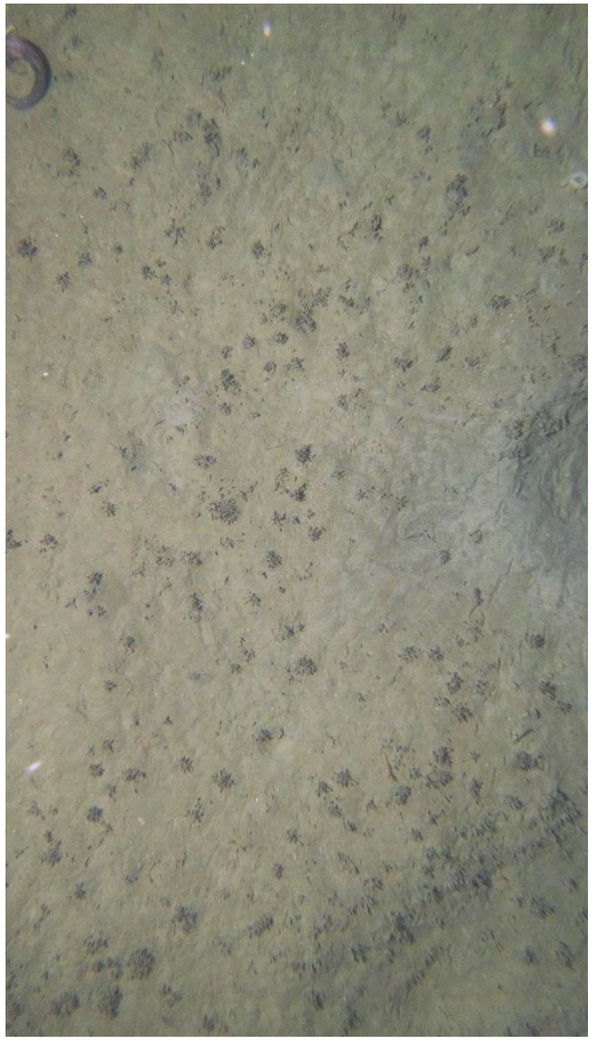


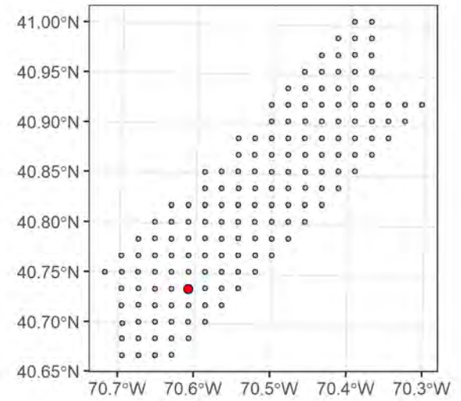
Figure E-525: WTG-131-B-PV

Sediment Profile Image



Figure E-526: WTG-131-B-SPI

Location



Attributes

Date Time (EST):	07/22/21 01:30
Station (Replicate):	WTG-131 (1 of 2)
Depth (m):	-55.7
Prism Penetration (cm):	12.7
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	1 gastropod egg case, amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

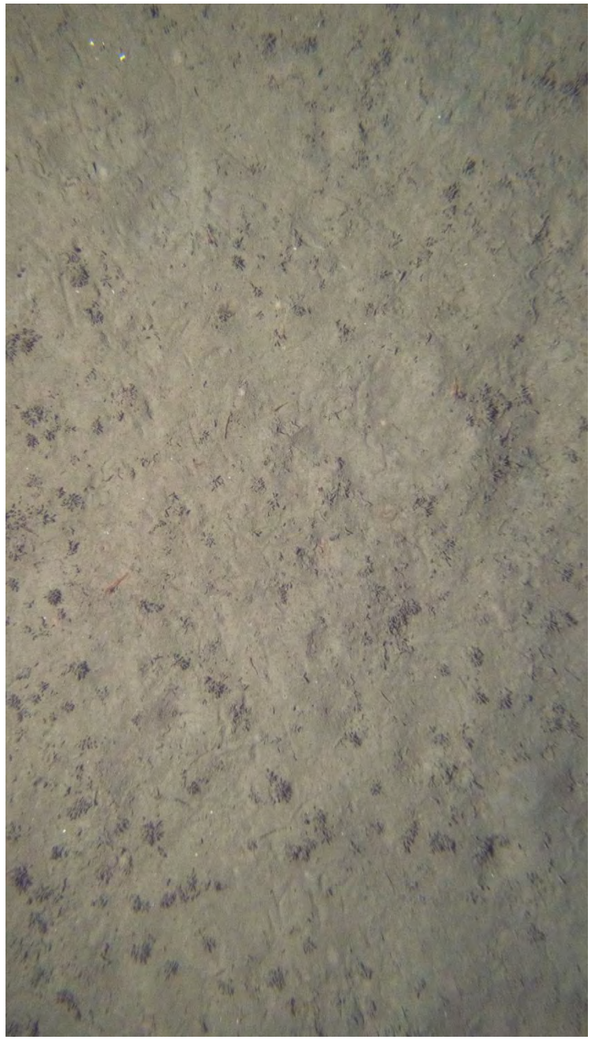


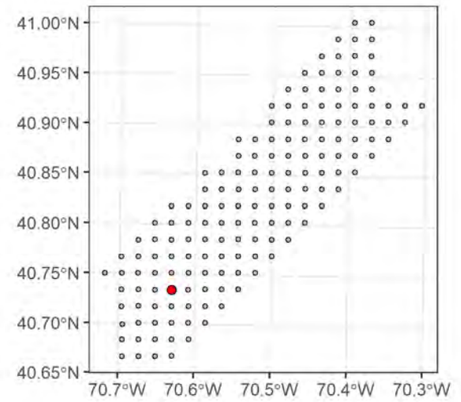
Figure E-527: WTG-132-B-PV

Sediment Profile Image



Figure E-528: WTG-132-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 10:04
Station (Replicate):	WTG-132 (2 of 2)
Depth (m):	-57.3
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

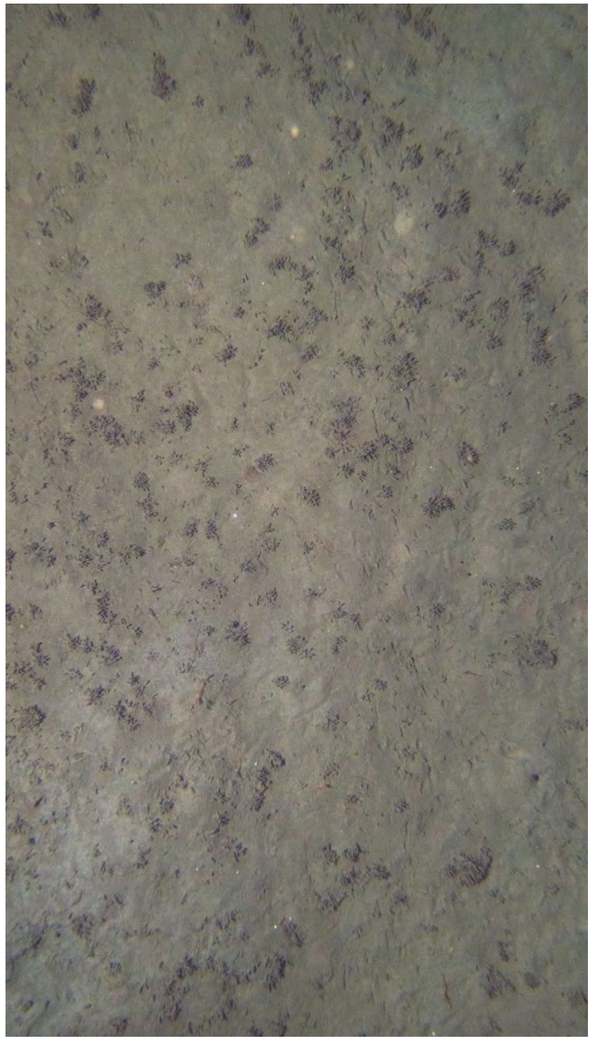


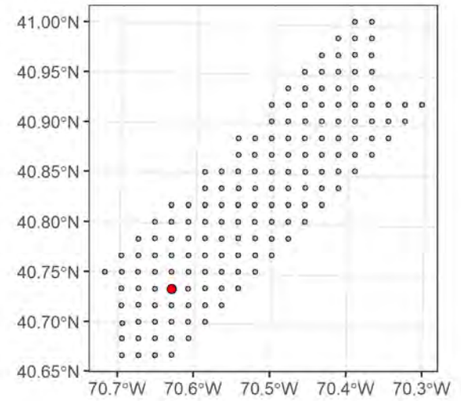
Figure E-529: WTG-132-A-PV

Sediment Profile Image



Figure E-530: WTG-132-C-SPI

Location



Attributes

Date Time (EST):	07/27/21 10:10
Station (Replicate):	WTG-132 (1 of 2)
Depth (m):	-57.2
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

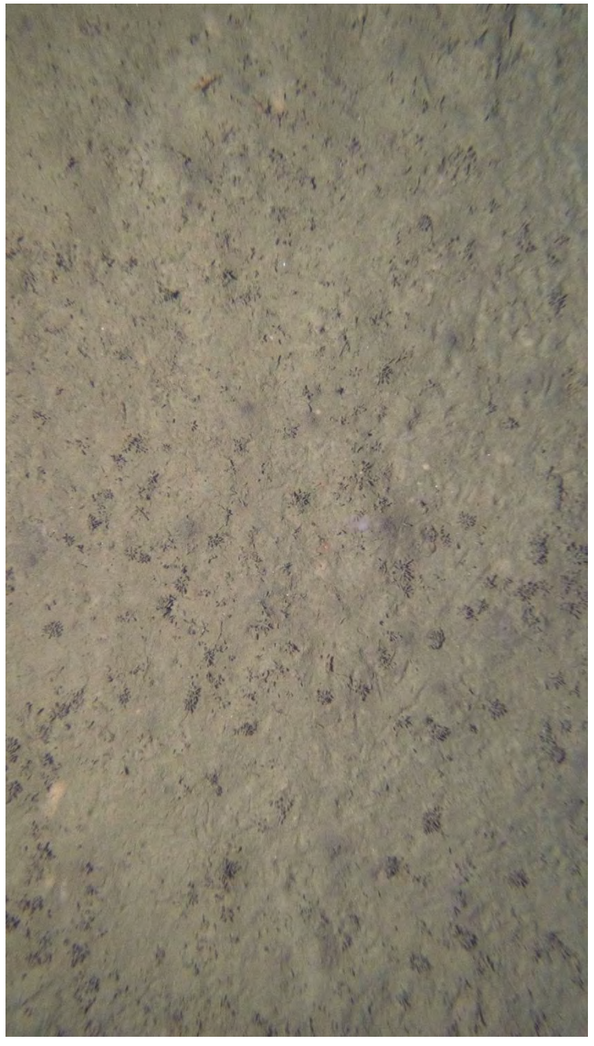


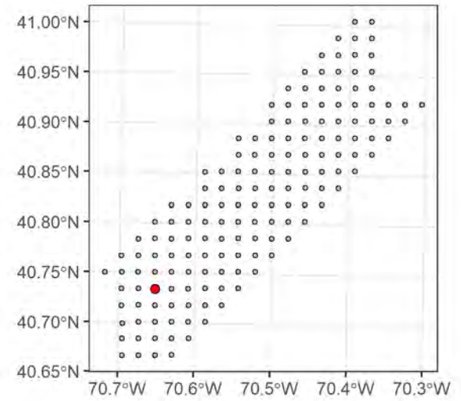
Figure E-531: WTG-133-A-PV

Sediment Profile Image



Figure E-532: WTG-133-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 11:33
Station (Replicate):	WTG-133 (2 of 2)
Depth (m):	-58
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

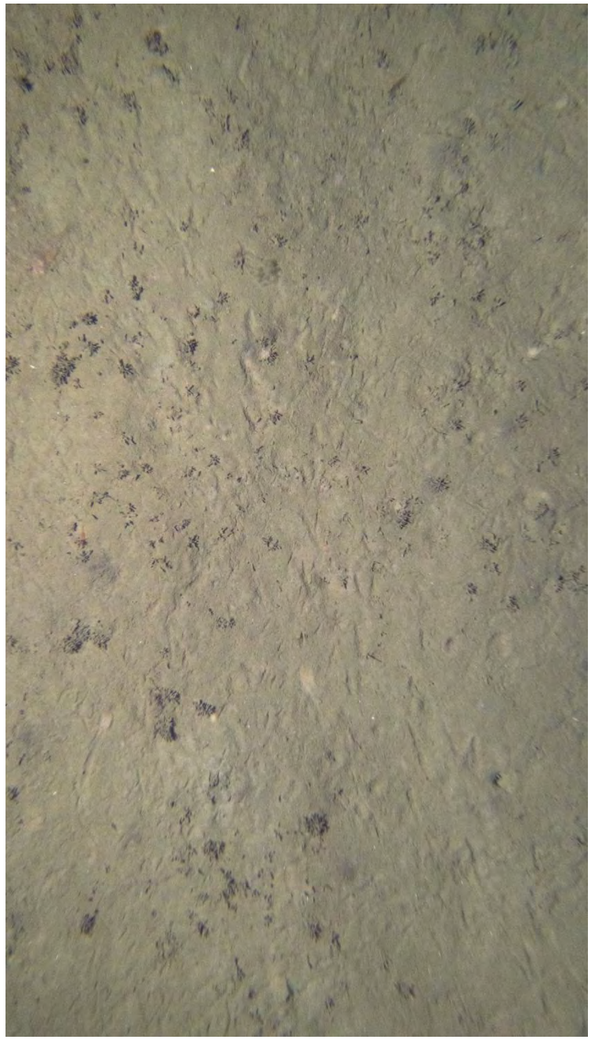


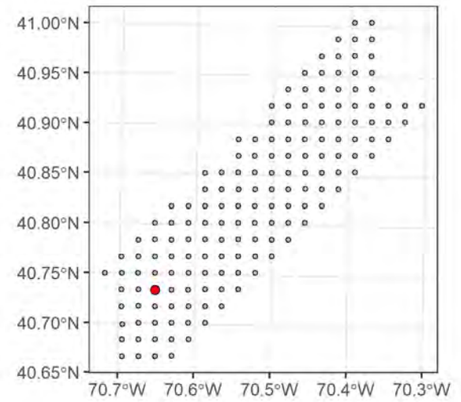
Figure E-533: WTG-133-B-PV

Sediment Profile Image



Figure E-534: WTG-133-C-SPI

Location



Attributes

Date Time (EST):	07/27/21 11:43
Station (Replicate):	WTG-133 (1 of 2)
Depth (m):	-58.1
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

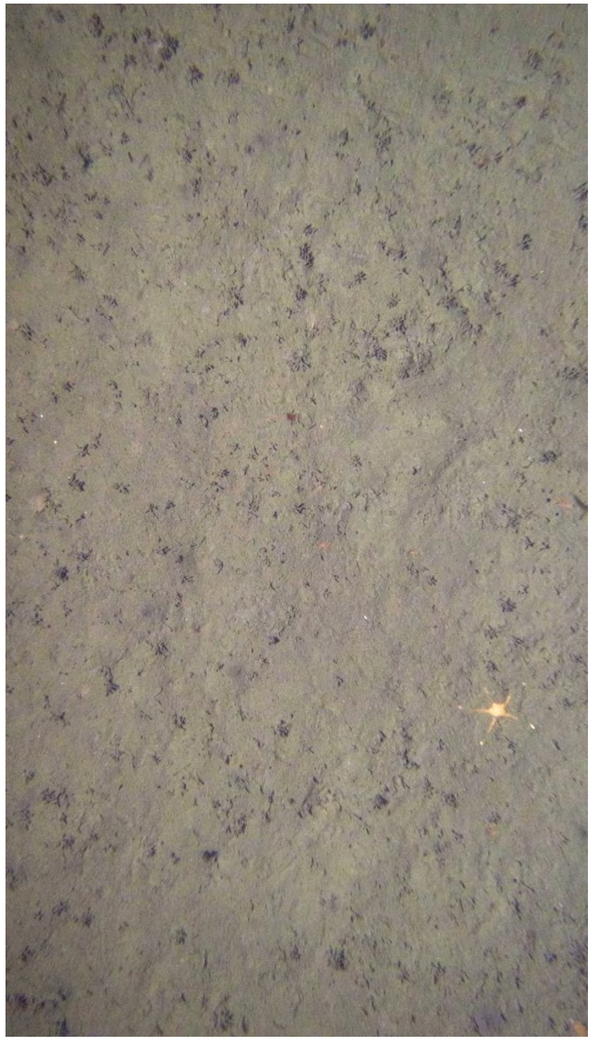


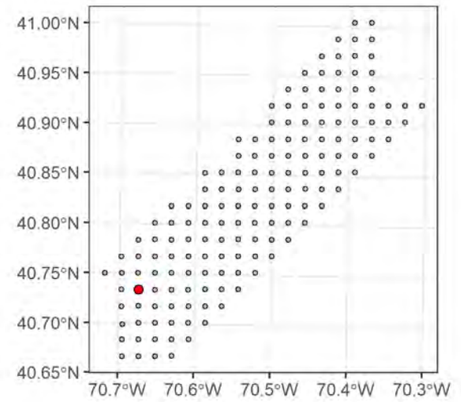
Figure E-535: WTG-134-A-PV

Sediment Profile Image



Figure E-536: WTG-134-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 06:57
Station (Replicate):	WTG-134 (2 of 2)
Depth (m):	-58
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia 1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters

Plan-View Image

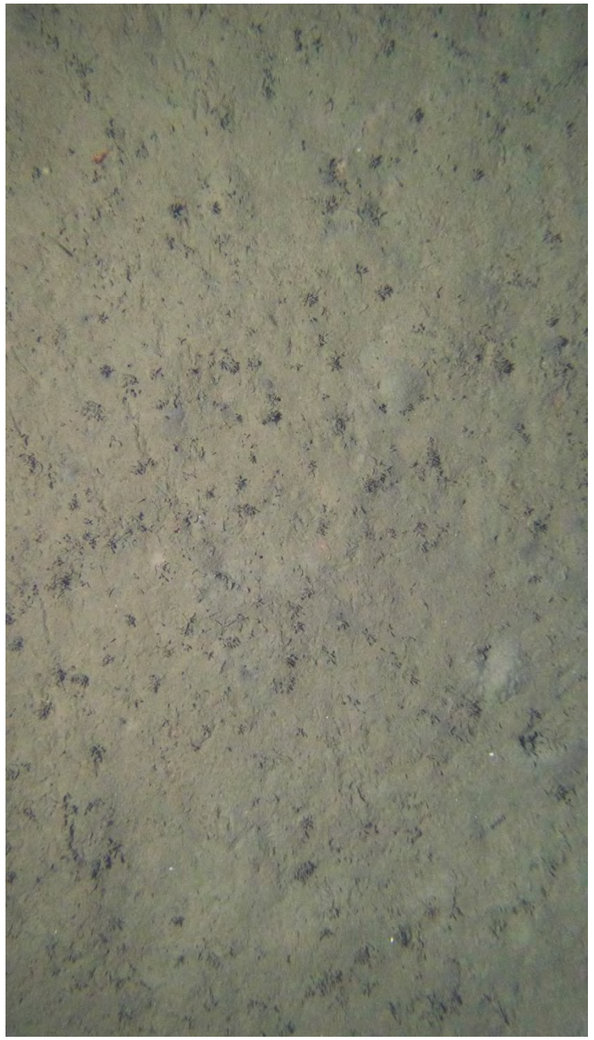


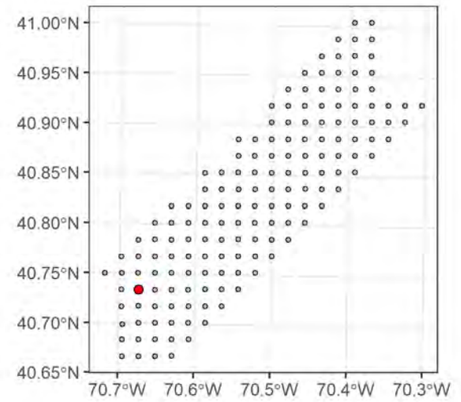
Figure E-537: WTG-134-B-PV

Sediment Profile Image



Figure E-538: WTG-134-B-SPI

Location



Attributes

Date Time (EST):	07/21/21 07:02
Station (Replicate):	WTG-134 (1 of 2)
Depth (m):	-58
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters

Plan-View Image



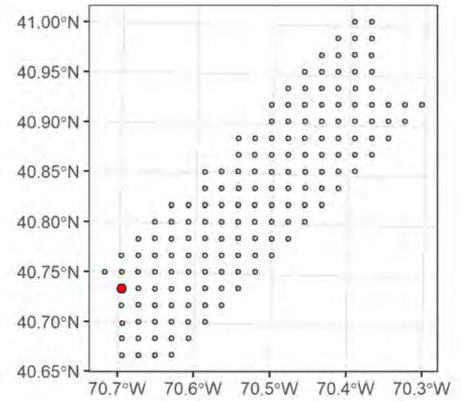
Figure E-539: WTG-135-A-PV

Sediment Profile Image



Figure E-540: WTG-135-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 16:28
Station (Replicate):	WTG-135 (2 of 2)
Depth (m):	-58.2
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, microbial mat?

Plan-View Image

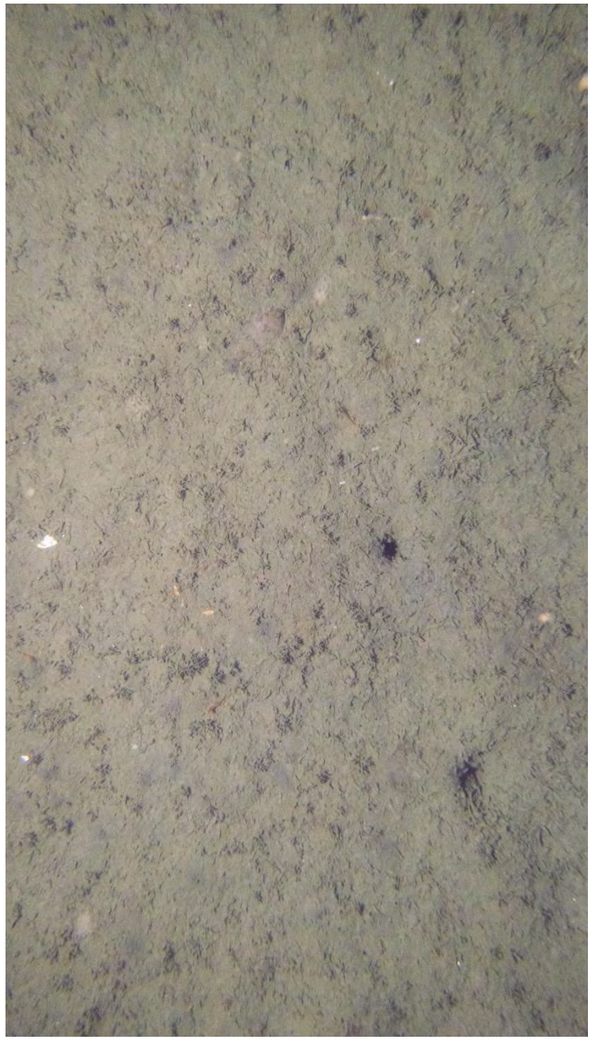


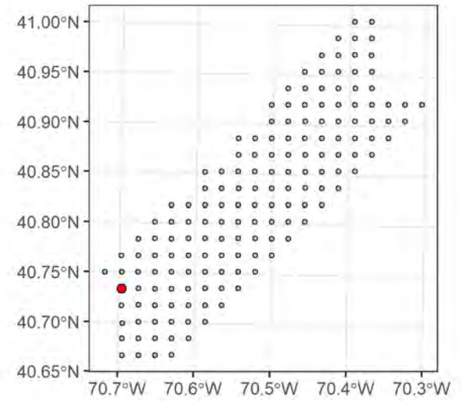
Figure E-541: WTG-135-C-PV

Sediment Profile Image



Figure E-542: WTG-135-C-SPI

Location



Attributes

Date Time (EST):	07/27/21 16:37
Station (Replicate):	WTG-135 (1 of 2)
Depth (m):	-58.2
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 Ceriantharia 3 shrimp, 1 burrowing sea star (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, microbial mat?, 2 large burrows

Plan-View Image

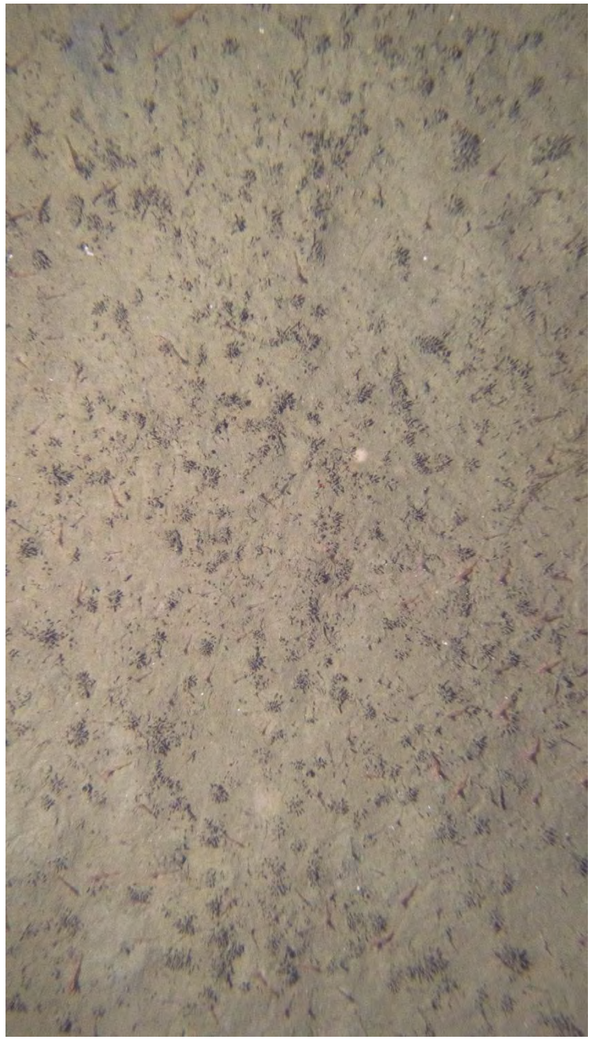


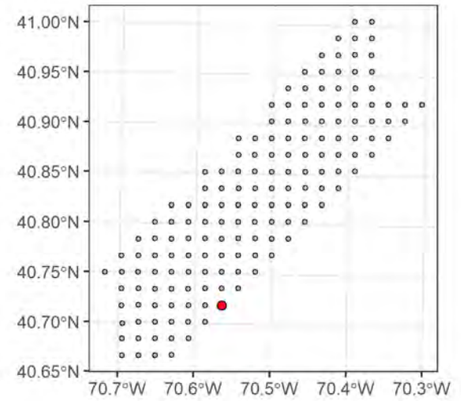
Figure E-543: WTG-136-A-PV

Sediment Profile Image



Figure E-544: WTG-136-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 01:36
Station (Replicate):	WTG-136 (2 of 2)
Depth (m):	-55.9
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	85 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters

Plan-View Image

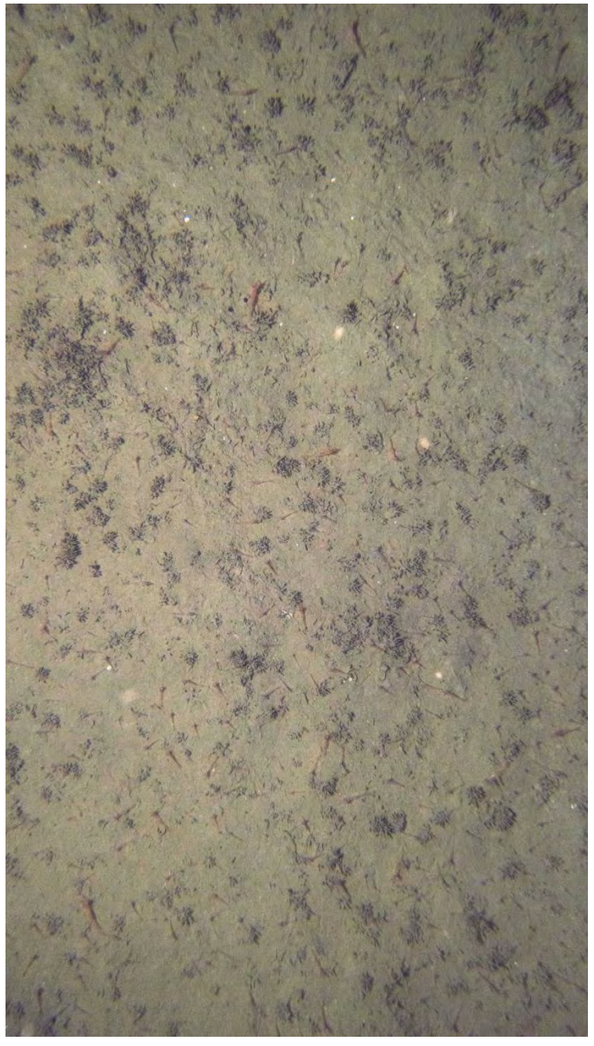


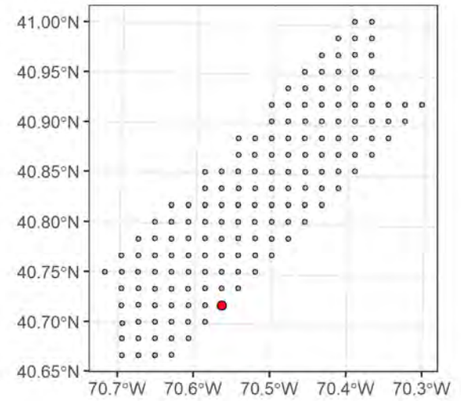
Figure E-545: WTG-136-B-PV

Sediment Profile Image



Figure E-546: WTG-136-B-SPI

Location



Attributes

Date Time (EST):	07/27/21 01:42
Station (Replicate):	WTG-136 (1 of 2)
Depth (m):	-55.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	152 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters

Plan-View Image

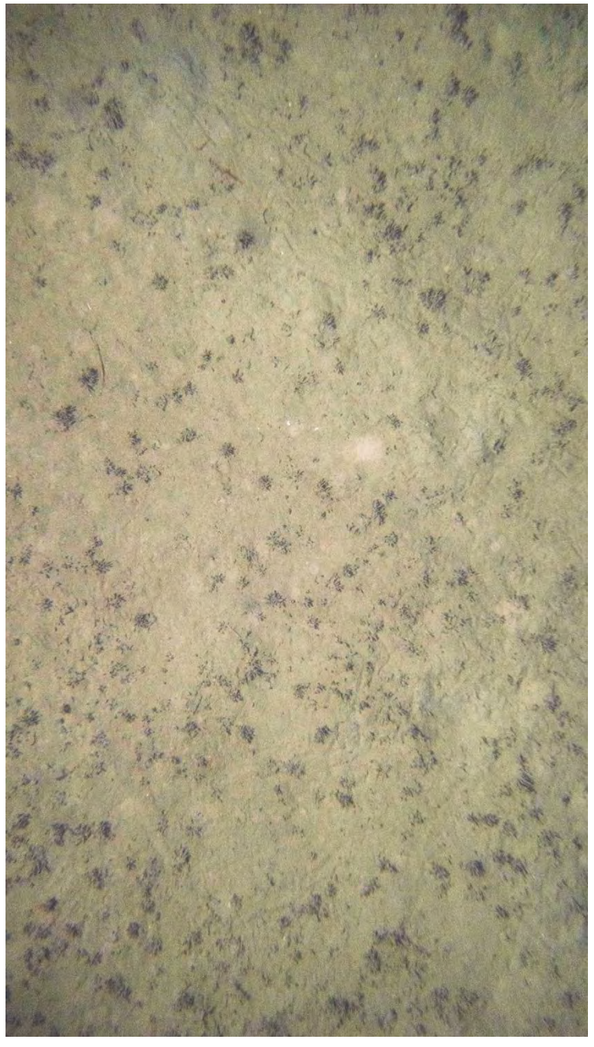


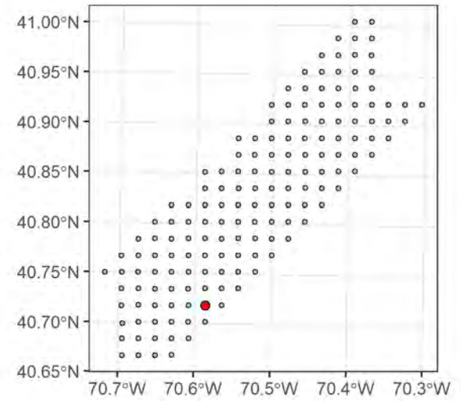
Figure E-547: WTG-137-A-PV

Sediment Profile Image



Figure E-548: WTG-137-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 15:07
Station (Replicate):	WTG-137 (2 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



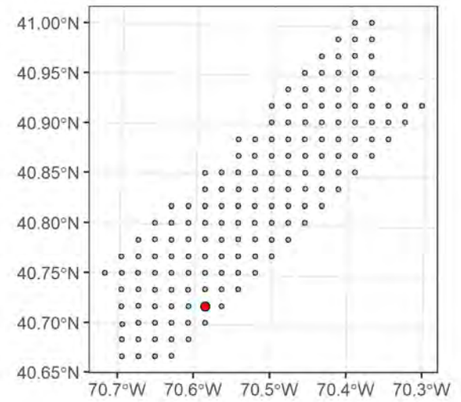
Figure E-549: WTG-137-B-PV

Sediment Profile Image



Figure E-550: WTG-137-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 15:17
Station (Replicate):	WTG-137 (1 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Mud
Type of Common Taxa:	1 burrowing anemone
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

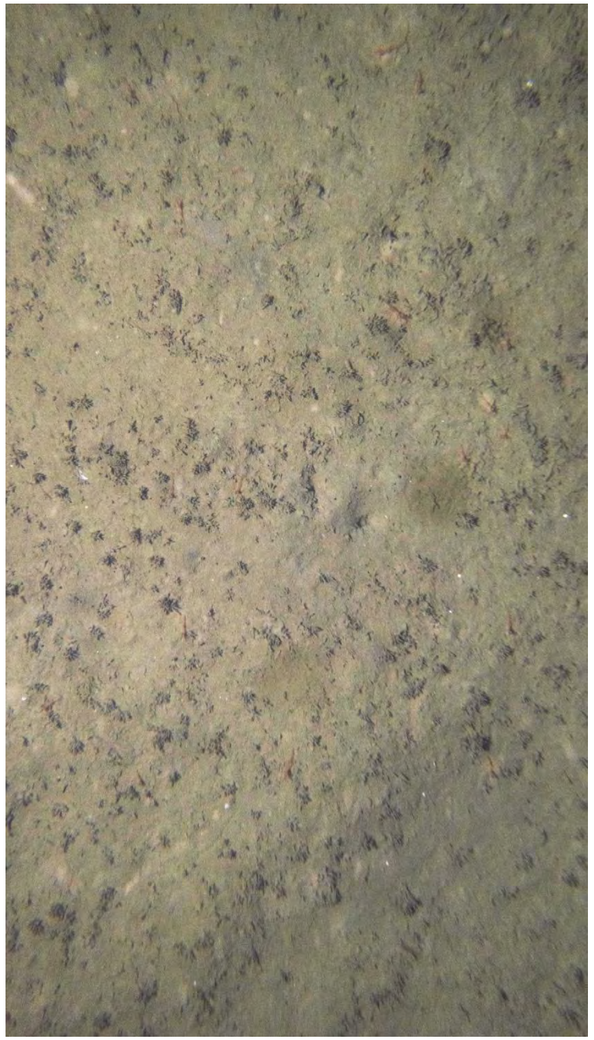


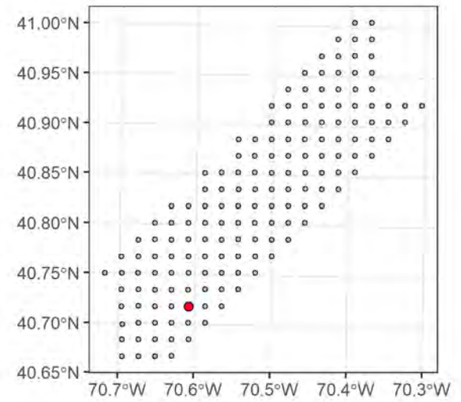
Figure E-551: WTG-138-A-PV

Sediment Profile Image



Figure E-552: WTG-138-B-SPI

Location



Attributes

Date Time (EST):	07/25/21 14:52
Station (Replicate):	WTG-138 (2 of 2)
Depth (m):	-55.9
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

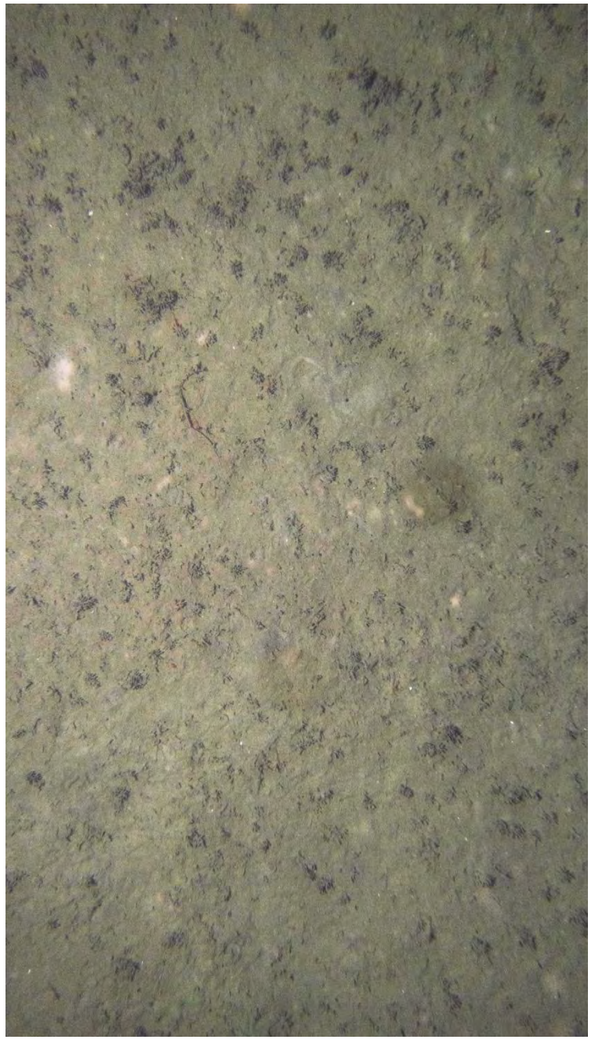


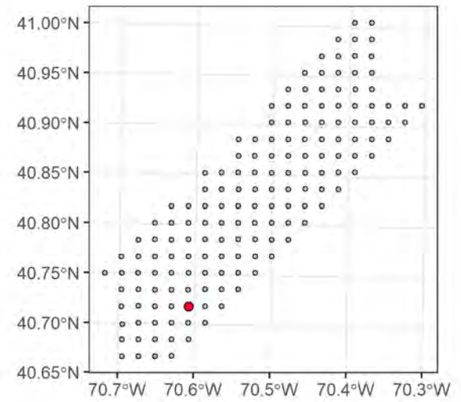
Figure E-553: WTG-138-C-PV

Sediment Profile Image



Figure E-554: WTG-138-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 14:57
Station (Replicate):	WTG-138 (1 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows

Plan-View Image

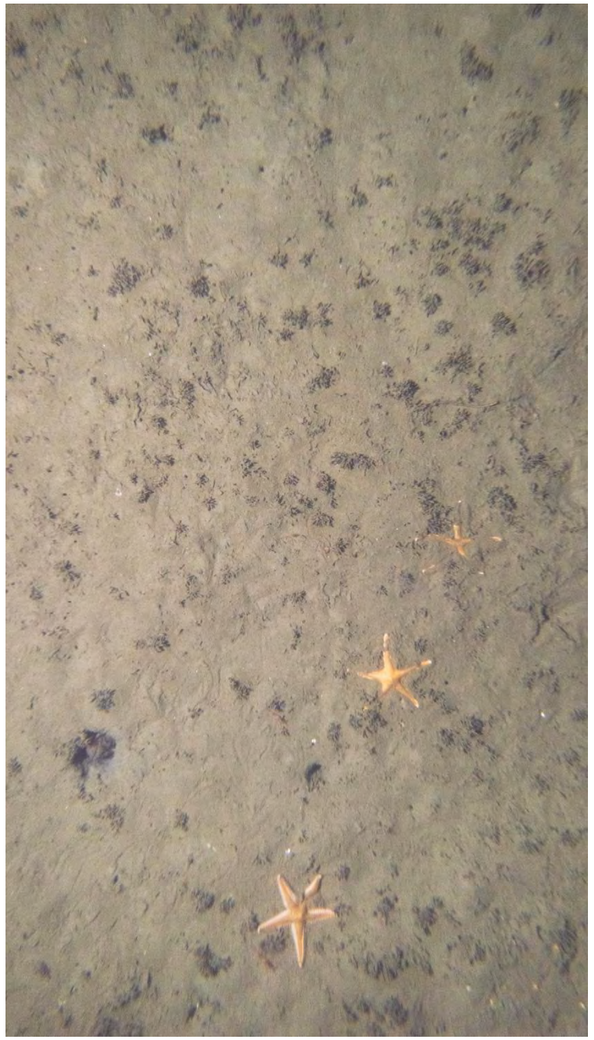


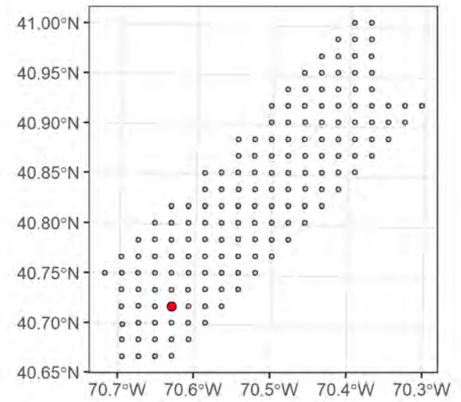
Figure E-555: WTG-139-A-PV

Sediment Profile Image



Figure E-556: WTG-139-A-SPI

Location



Attributes

Date Time (EST):	07/25/21 09:36
Station (Replicate):	WTG-139 (2 of 2)
Depth (m):	-57.8
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 burrowing sea stars (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube (Erichthonius) clusters, 1 large burrow, small burrows, crab tracks, burrowing sea star traces.

Plan-View Image



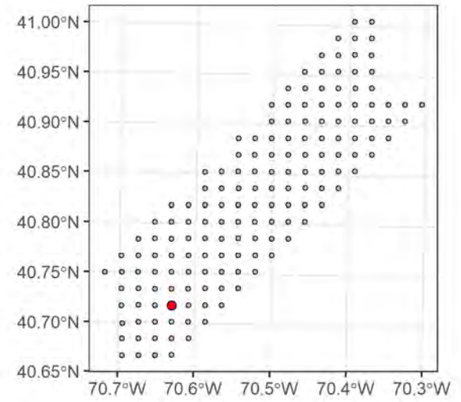
Figure E-557: WTG-139-C-PV

Sediment Profile Image



Figure E-558: WTG-139-B-SPI

Location



Attributes

Date Time (EST):	07/25/21 09:40
Station (Replicate):	WTG-139 (1 of 2)
Depth (m):	-57.8
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows, gastropod track. Some focus issues

Plan-View Image

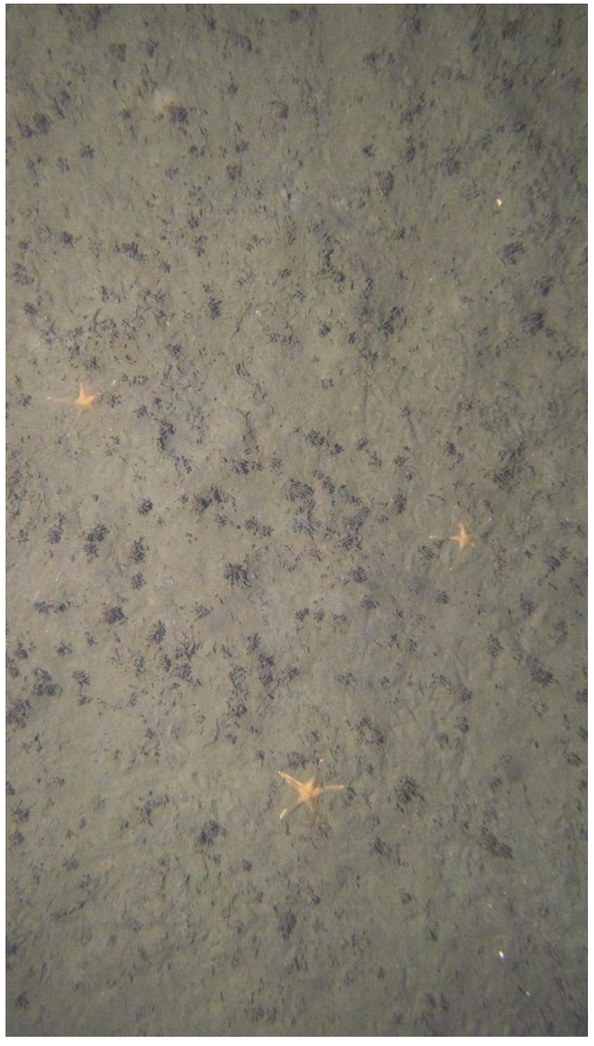


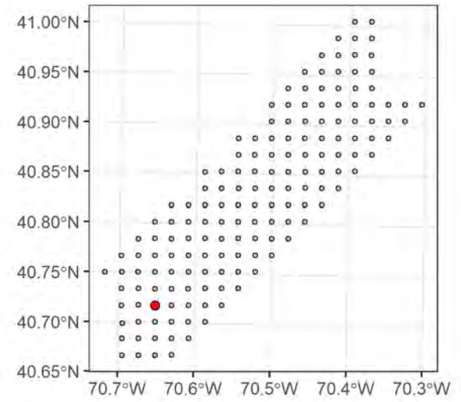
Figure E-559: WTG-140-A-PV

Sediment Profile Image



Figure E-560: WTG-140-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 15:00
Station (Replicate):	WTG-140 (2 of 2)
Depth (m):	-57.5
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube (Ericthtonius?) clusters, small burrows, faint crab? tracks

Plan-View Image

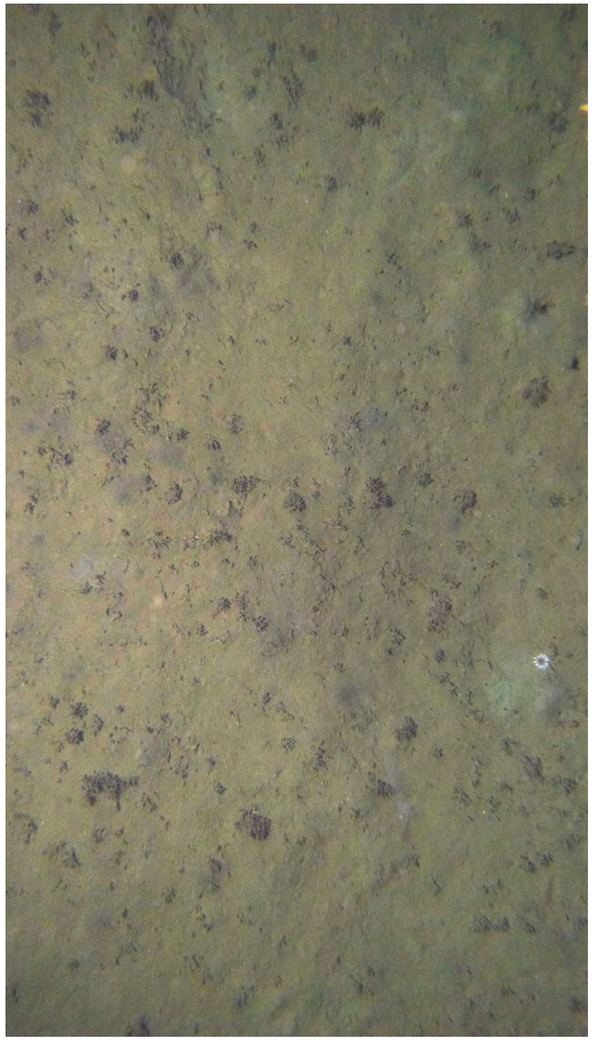


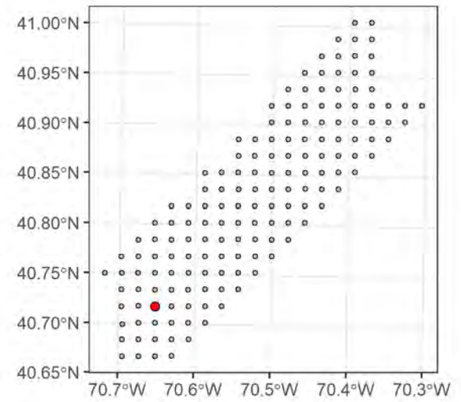
Figure E-561: WTG-140-C-PV

Sediment Profile Image



Figure E-562: WTG-140-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 15:08
Station (Replicate):	WTG-140 (1 of 2)
Depth (m):	-57.6
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing anemone
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube (Ericthtonius?) clusters, small burrows

Plan-View Image



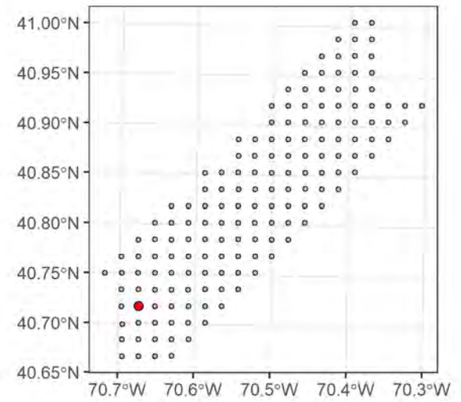
Figure E-563: WTG-141-B-PV

Sediment Profile Image



Figure E-564: WTG-141-B-SPI

Location



Attributes

Date Time (EST):	07/25/21 08:09
Station (Replicate):	WTG-141 (2 of 2)
Depth (m):	-59
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing anemone 5 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows, small patch of Ampeliscid amphipod burrows

Plan-View Image



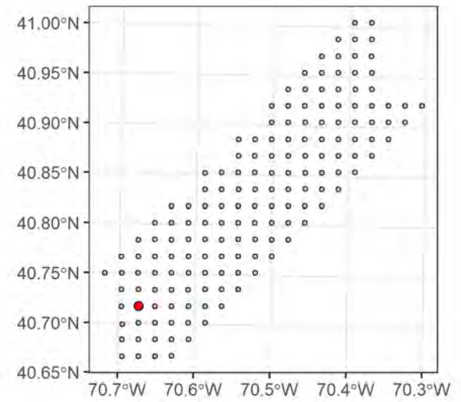
Figure E-565: WTG-141-C-PV

Sediment Profile Image



Figure E-566: WTG-141-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 08:13
Station (Replicate):	WTG-141 (1 of 2)
Depth (m):	-59
Prism Penetration (cm):	17.7
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 1 shrimp, 4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows

Plan-View Image

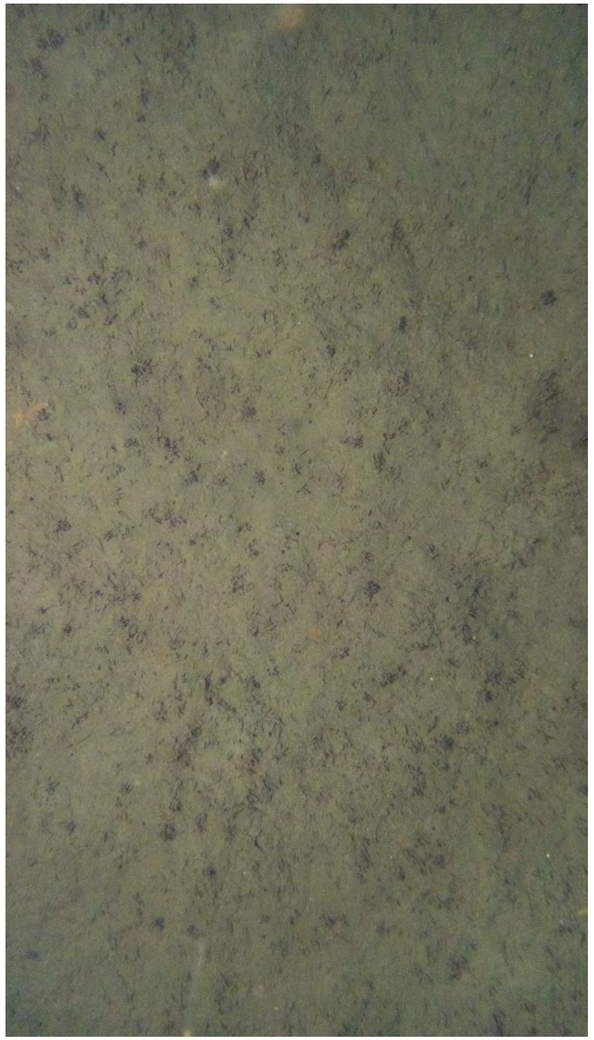


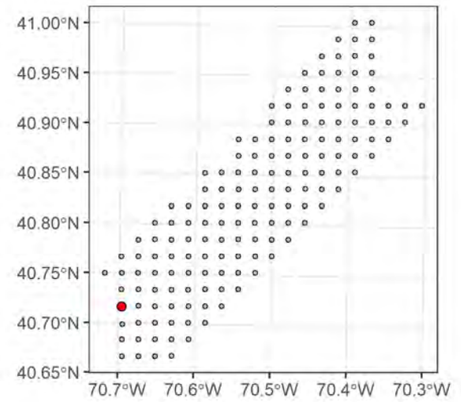
Figure E-567: WTG-142-H-PV

Sediment Profile Image



Figure E-568: WTG-142-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 11:20
Station (Replicate):	WTG-142 (2 of 2)
Depth (m):	-59.3
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows

Plan-View Image



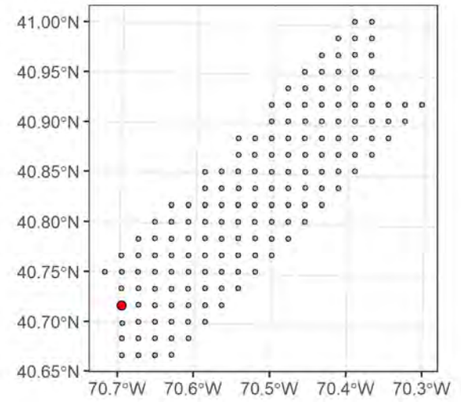
Figure E-569: WTG-142-I-PV

Sediment Profile Image



Figure E-570: WTG-142-D-SPI

Location



Attributes

Date Time (EST):	07/24/21 12:40
Station (Replicate):	WTG-142 (1 of 2)
Depth (m):	-58.9
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tube clusters, small burrows, crab tracks, one large feeding void/burrow

Plan-View Image

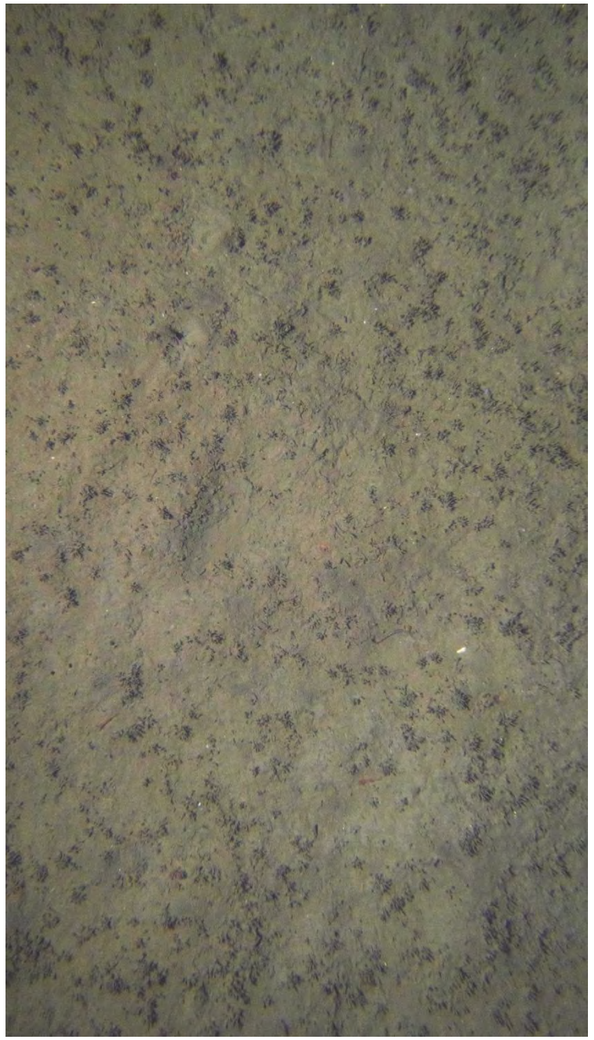


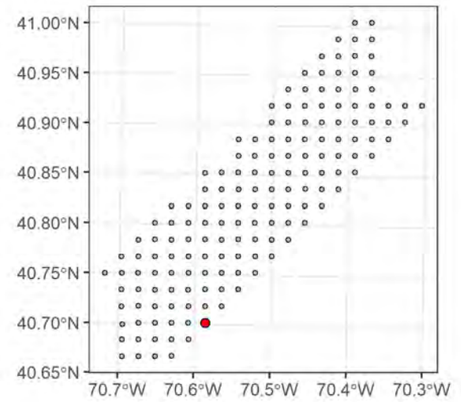
Figure E-571: WTG-143-A-PV

Sediment Profile Image



Figure E-572: WTG-143-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 23:42
Station (Replicate):	WTG-143 (2 of 2)
Depth (m):	-56
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image

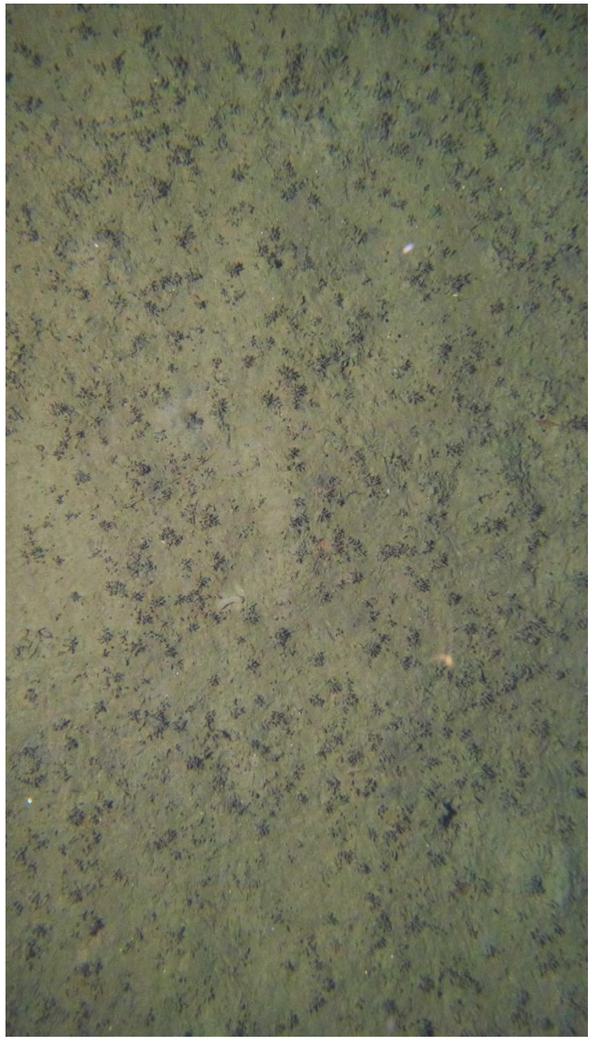


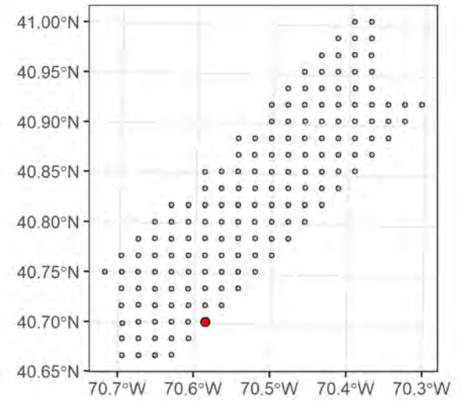
Figure E-573: WTG-143-C-PV

Sediment Profile Image



Figure E-574: WTG-143-C-SPI

Location



Attributes

Date Time (EST):	07/22/21 01:03
Station (Replicate):	WTG-143 (1 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image



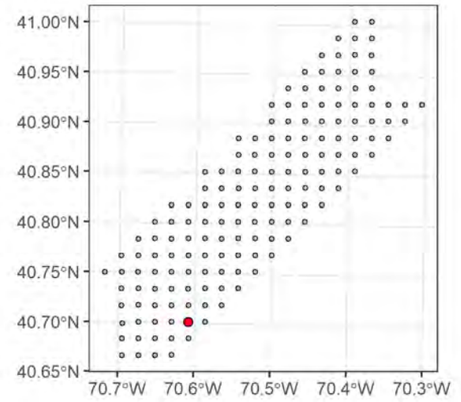
Figure E-575: WTG-144-B-PV

Sediment Profile Image



Figure E-576: WTG-144-B-SPI

Location



Attributes

Date Time (EST):	07/25/21 13:18
Station (Replicate):	WTG-144 (2 of 2)
Depth (m):	-56.6
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, large and small burrows, out of focus

Plan-View Image

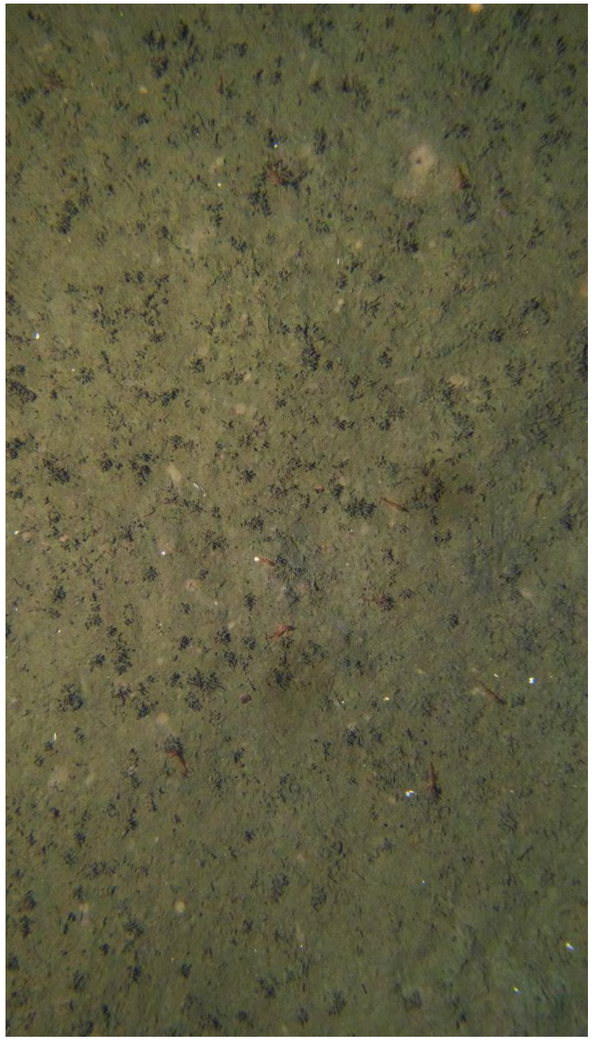


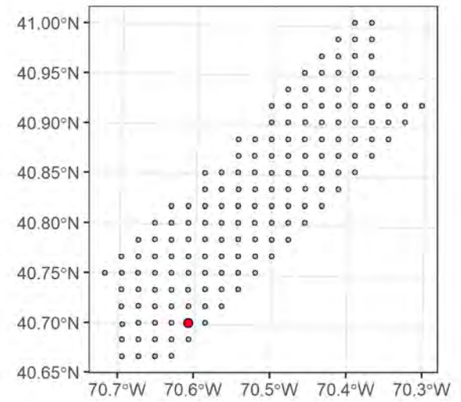
Figure E-577: WTG-144-A-PV

Sediment Profile Image



Figure E-578: WTG-144-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 13:22
Station (Replicate):	WTG-144 (1 of 2)
Depth (m):	-56.5
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	12 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image

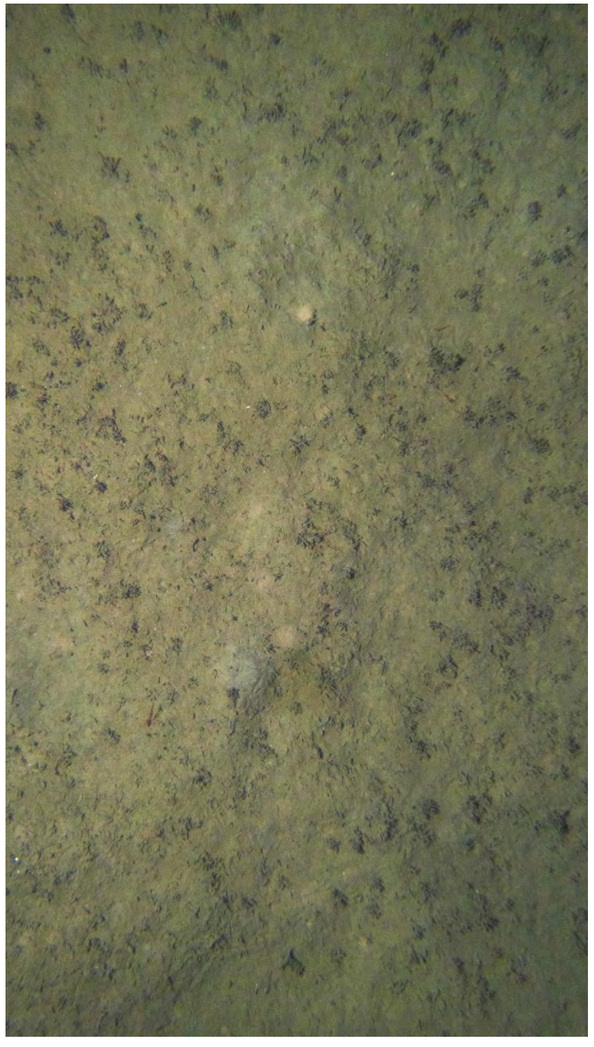


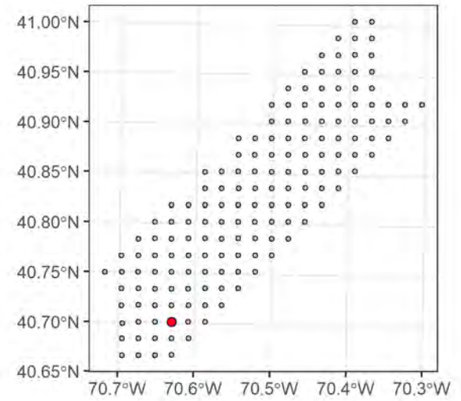
Figure E-579: WTG-145-B-PV

Sediment Profile Image



Figure E-580: WTG-145-A-SPI

Location



Attributes

Date Time (EST):	07/25/21 11:12
Station (Replicate):	WTG-145 (2 of 2)
Depth (m):	-57.8
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image

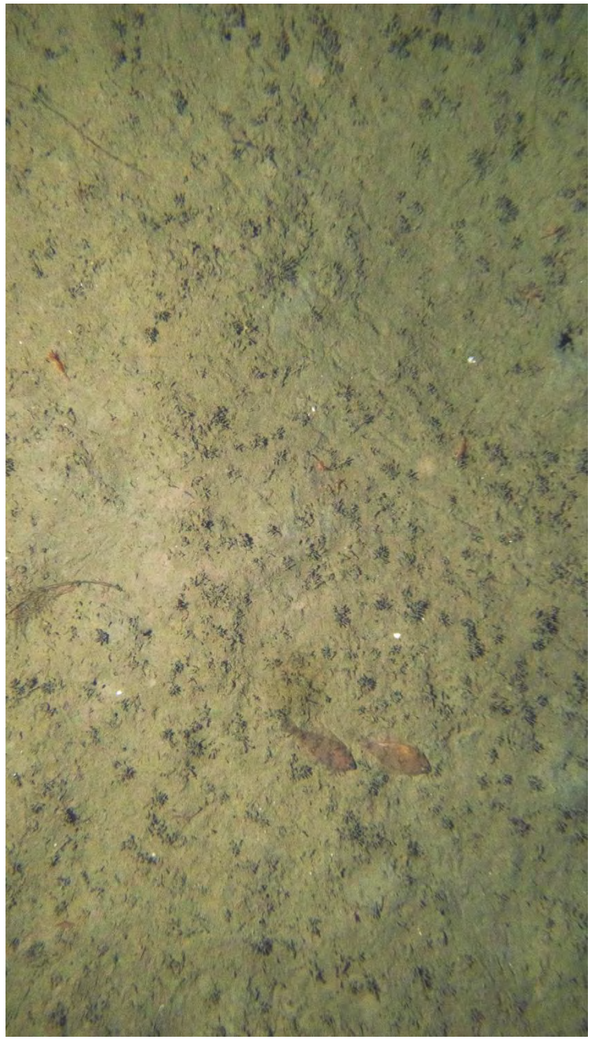


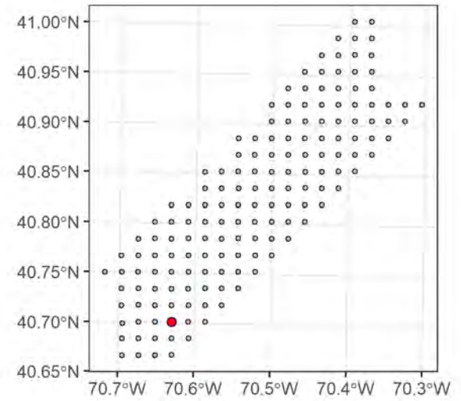
Figure E-581: WTG-145-C-PV

Sediment Profile Image



Figure E-582: WTG-145-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 11:20
Station (Replicate):	WTG-145 (1 of 2)
Depth (m):	-57.7
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	Hydroid 3 shrimp 2 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



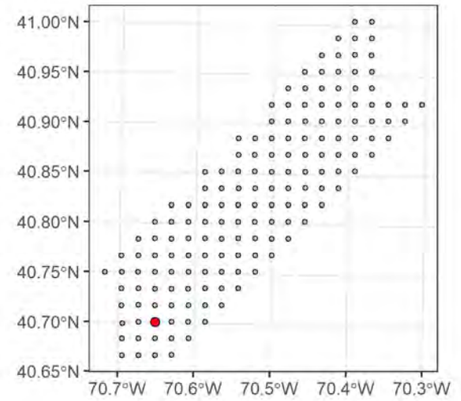
Figure E-583: WTG-146-A-PV

Sediment Profile Image



Figure E-584: WTG-146-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 16:36
Station (Replicate):	WTG-146 (2 of 2)
Depth (m):	-58
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



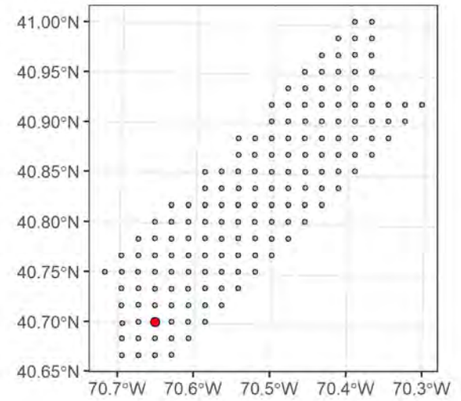
Figure E-585: WTG-146-C-PV

Sediment Profile Image



Figure E-586: WTG-146-B-SPI

Location



Attributes

Date Time (EST):	07/24/21 16:41
Station (Replicate):	WTG-146 (1 of 2)
Depth (m):	-58.3
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 burrowing sea stars (Astropecten?), 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



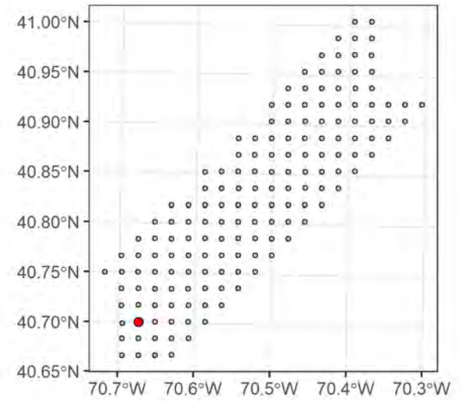
Figure E-587: WTG-147-A-PV

Sediment Profile Image



Figure E-588: WTG-147-A-SPI

Location



Attributes

Date Time (EST):	07/25/21 06:36
Station (Replicate):	WTG-147 (2 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

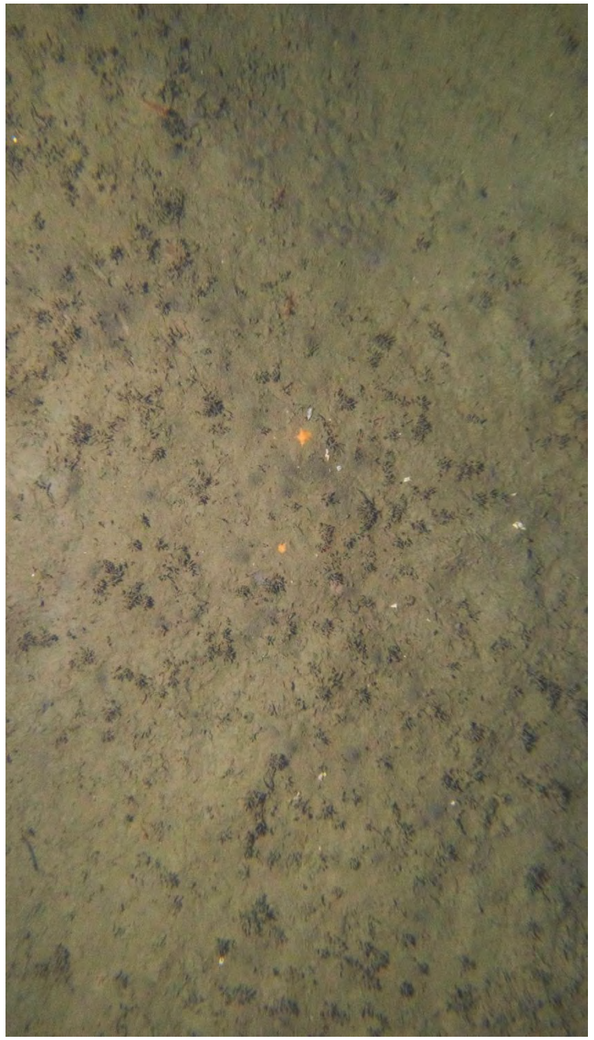


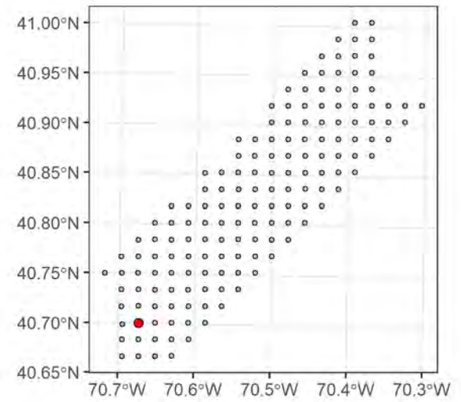
Figure E-589: WTG-147-B-PV

Sediment Profile Image



Figure E-590: WTG-147-B-SPI

Location



Attributes

Date Time (EST):	07/25/21 06:41
Station (Replicate):	WTG-147 (1 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	17
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea star (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



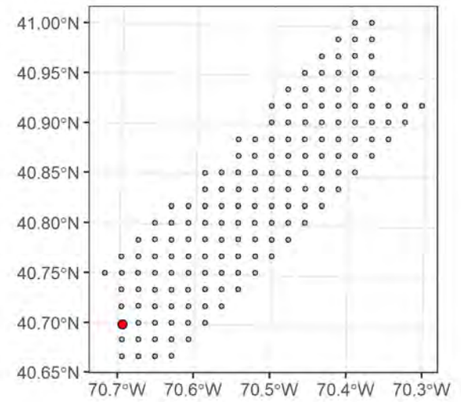
Figure E-591: WTG-148-A-PV

Sediment Profile Image



Figure E-592: WTG-148-A-SPI

Location



Attributes

Date Time (EST):	07/27/21 18:26
Station (Replicate):	WTG-148 (2 of 2)
Depth (m):	-59.5
Prism Penetration (cm):	17.3
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



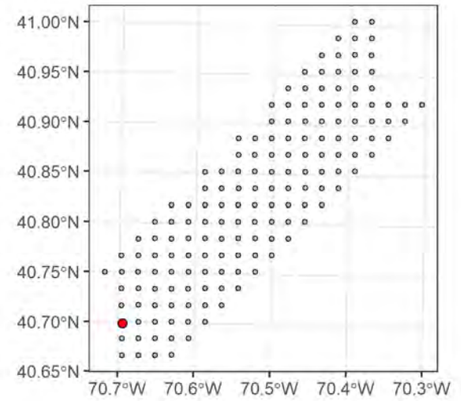
Figure E-593: WTG-148-C-PV

Sediment Profile Image



Figure E-594: WTG-148-C-SPI

Location



Attributes

Date Time (EST):	07/27/21 18:40
Station (Replicate):	WTG-148 (1 of 2)
Depth (m):	-59.6
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 Ceriantharia Hydroid 1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

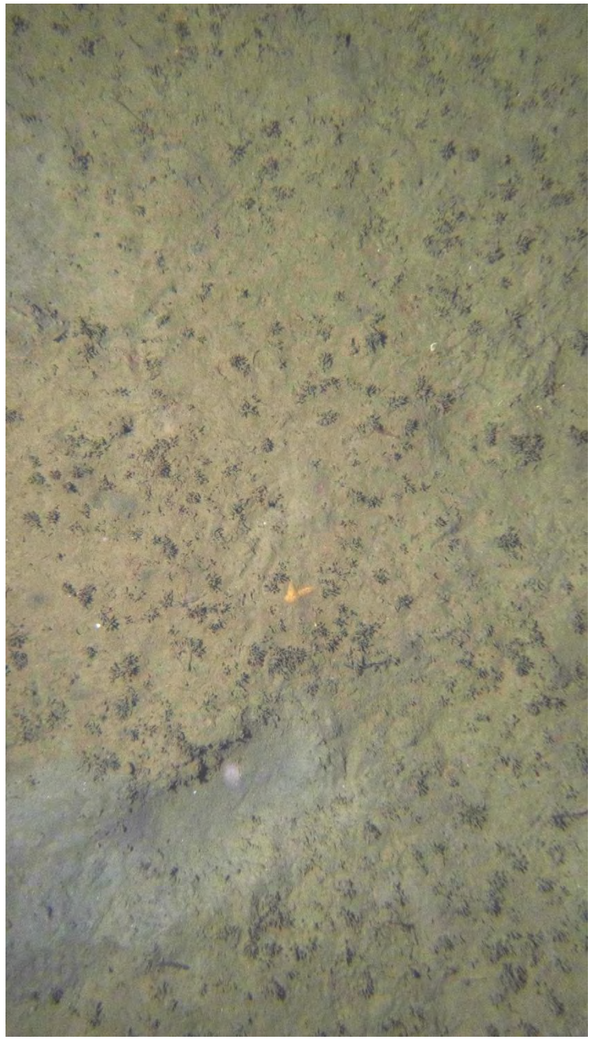


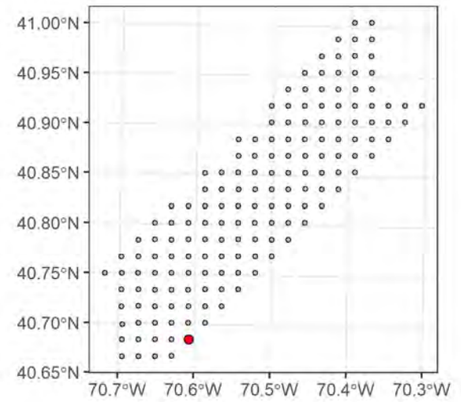
Figure E-595: WTG-149-A-PV

Sediment Profile Image



Figure E-596: WTG-149-B-SPI

Location



Attributes

Date Time (EST):	07/24/21 22:03
Station (Replicate):	WTG-149 (2 of 2)
Depth (m):	-58.4
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?), 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



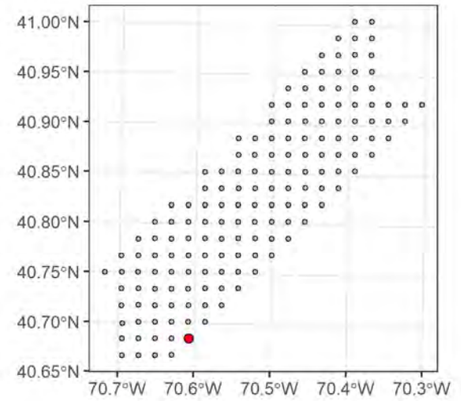
Figure E-597: WTG-149-C-PV

Sediment Profile Image



Figure E-598: WTG-149-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 22:09
Station (Replicate):	WTG-149 (1 of 2)
Depth (m):	-58.4
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?), 5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



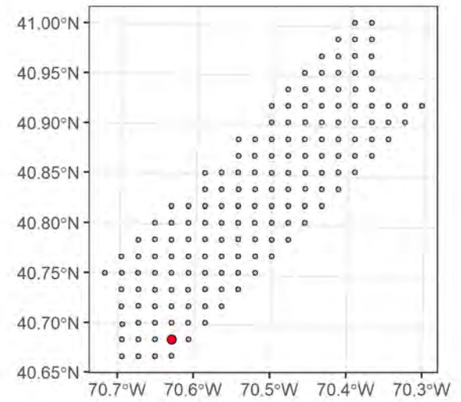
Figure E-599: WTG-150-A-PV

Sediment Profile Image



Figure E-600: WTG-150-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 20:32
Station (Replicate):	WTG-150 (2 of 2)
Depth (m):	-59
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	Hydroid 7 burrowing sea stars (Astropecten?), 1 Crangon septempsinosa
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows/tubes

Plan-View Image



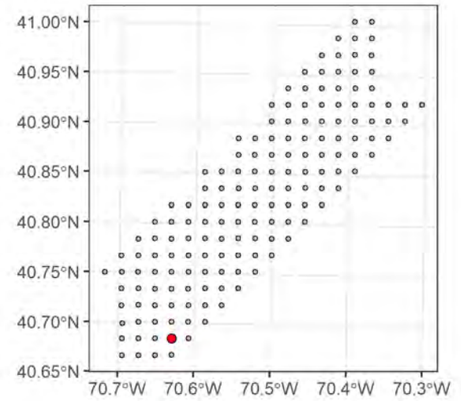
Figure E-601: WTG-150-C-PV

Sediment Profile Image



Figure E-602: WTG-150-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 20:43
Station (Replicate):	WTG-150 (1 of 2)
Depth (m):	-59
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	10 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows/tubes

Plan-View Image



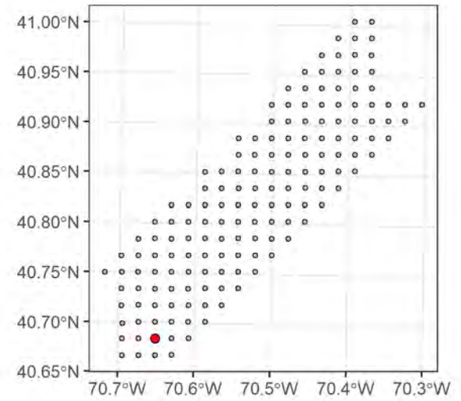
Figure E-603: WTG-151-B-PV

Sediment Profile Image



Figure E-604: WTG-151-B-SPI

Location



Attributes

Date Time (EST):	07/25/21 01:09
Station (Replicate):	WTG-151 (2 of 2)
Depth (m):	-58.6
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	8 burrowing sea stars (Astropecten?), 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows/tubes, microbial mat?

Plan-View Image

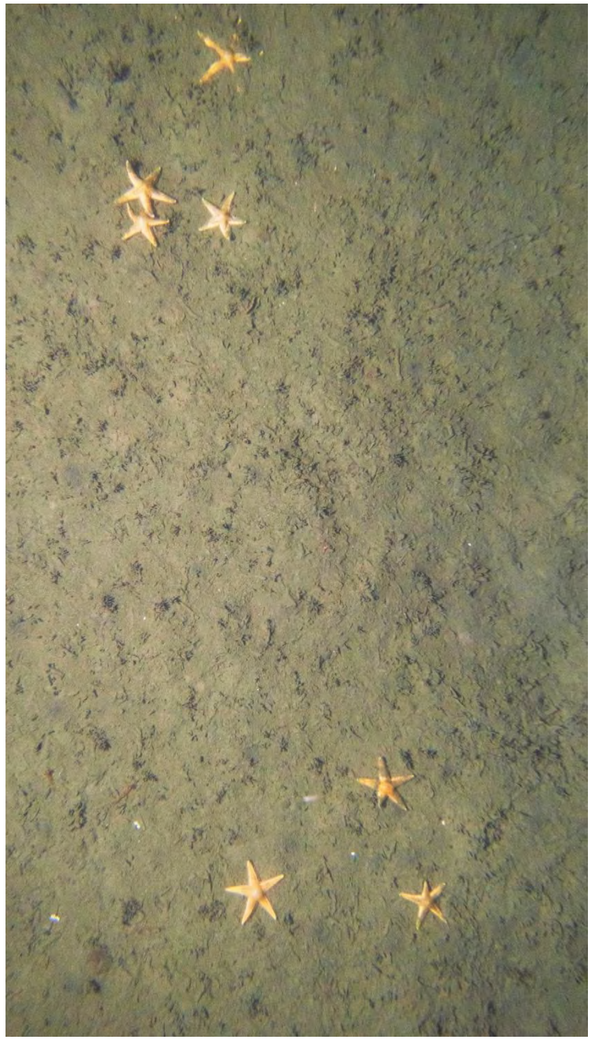


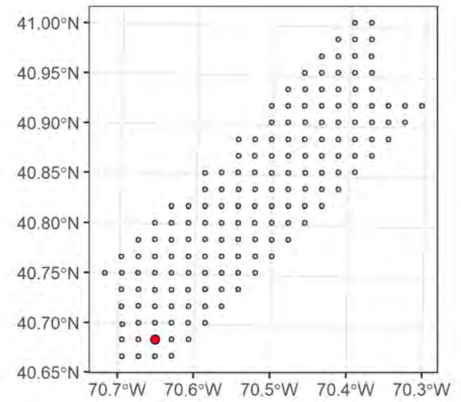
Figure E-605: WTG-151-A-PV

Sediment Profile Image



Figure E-606: WTG-151-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 01:15
Station (Replicate):	WTG-151 (1 of 2)
Depth (m):	-58.6
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	7 burrowing sea stars (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, small burrows/tubes, microbial mat?

Plan-View Image

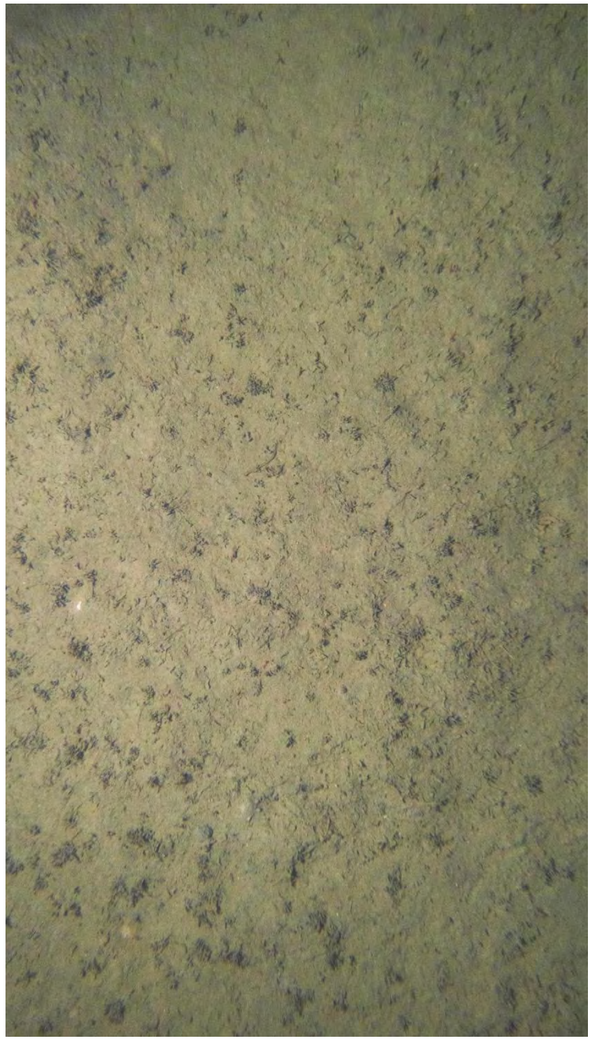


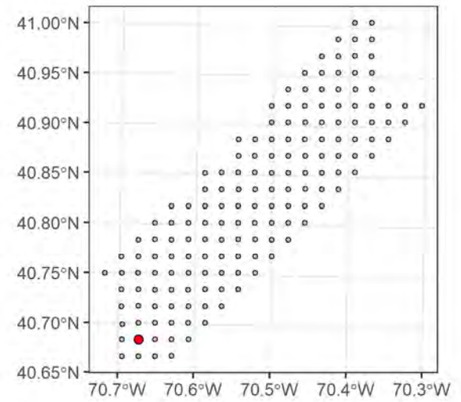
Figure E-607: WTG-152-A-PV

Sediment Profile Image



Figure E-608: WTG-152-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 18:50
Station (Replicate):	WTG-152 (2 of 2)
Depth (m):	-60
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, some small burrows present

Plan-View Image



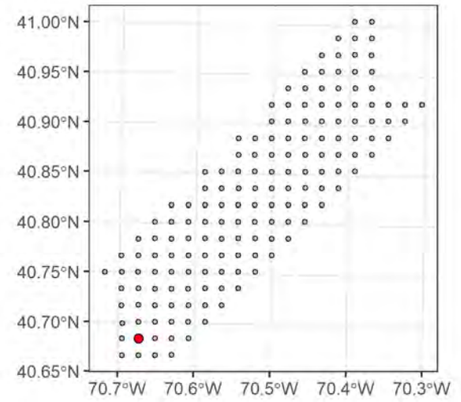
Figure E-609: WTG-152-B-PV

Sediment Profile Image



Figure E-610: WTG-152-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 19:00
Station (Replicate):	WTG-152 (1 of 2)
Depth (m):	-59.9
Prism Penetration (cm):	17.2
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 1 burrowing sea star (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present, crab tracks

Plan-View Image



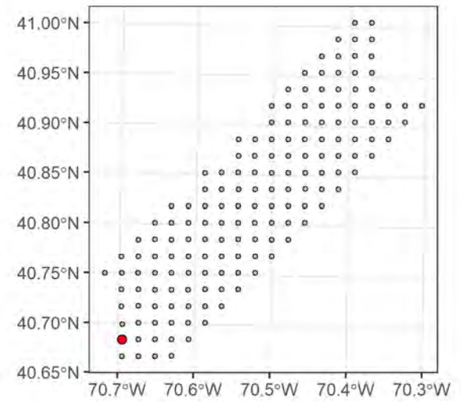
Figure E-611: WTG-153-B-PV

Sediment Profile Image



Figure E-612: WTG-153-A-SPI

Location



Attributes

Date Time (EST):	07/25/21 04:25
Station (Replicate):	WTG-153 (2 of 2)
Depth (m):	-59.8
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 7 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present, crab tracks

Plan-View Image



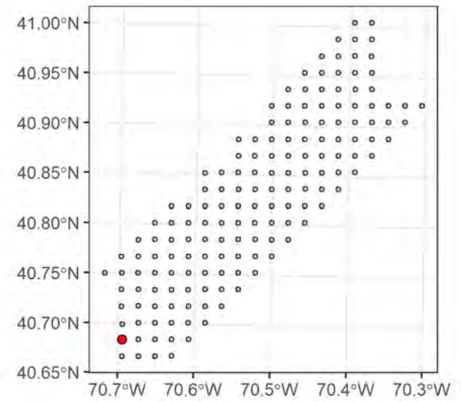
Figure E-613: WTG-153-C-PV

Sediment Profile Image



Figure E-614: WTG-153-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 04:36
Station (Replicate):	WTG-153 (1 of 2)
Depth (m):	-59.8
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	Hydroid 7 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present, crab tracks, microbial mat

Plan-View Image



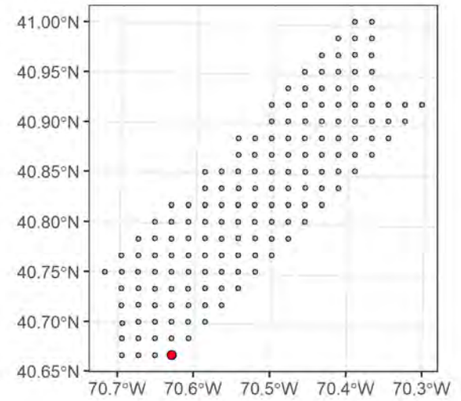
Figure E-615: WTG-154-A-PV

Sediment Profile Image



Figure E-616: WTG-154-A-SPI

Location



Attributes

Date Time (EST):	07/24/21 23:24
Station (Replicate):	WTG-154 (2 of 2)
Depth (m):	-58.9
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	13 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present

Plan-View Image



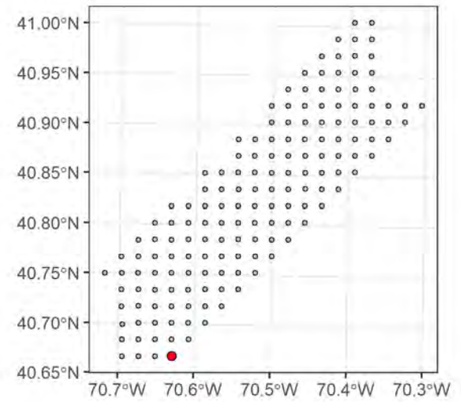
Figure E-617: WTG-154-B-PV

Sediment Profile Image



Figure E-618: WTG-154-C-SPI

Location



Attributes

Date Time (EST):	07/24/21 23:34
Station (Replicate):	WTG-154 (1 of 2)
Depth (m):	-58.9
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	10 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present, crab tracks

Plan-View Image



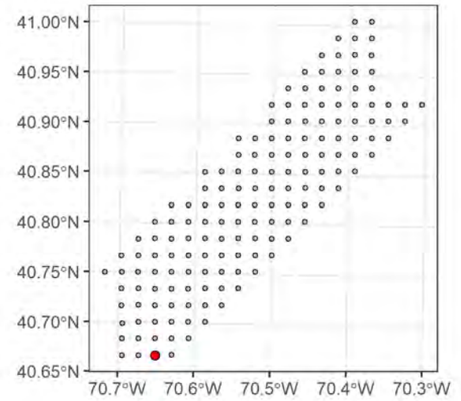
Figure E-619: WTG-155-A-PV

Sediment Profile Image



Figure E-620: WTG-155-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 21:41
Station (Replicate):	WTG-155 (2 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	13.1
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large burrows, faint crab tracks, some amphipod tube clusters

Plan-View Image



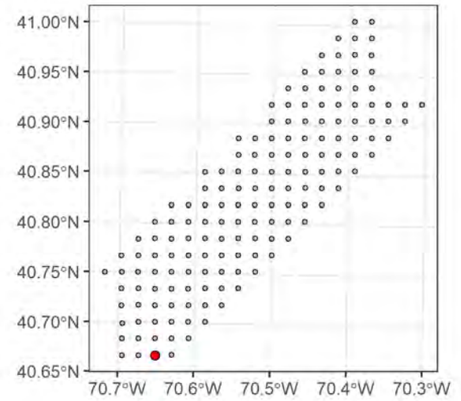
Figure E-621: WTG-155-B-PV

Sediment Profile Image



Figure E-622: WTG-155-B-SPI

Location



Attributes

Date Time (EST):	07/21/21 21:46
Station (Replicate):	WTG-155 (1 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large burrows, some amphipod tube clusters

Plan-View Image



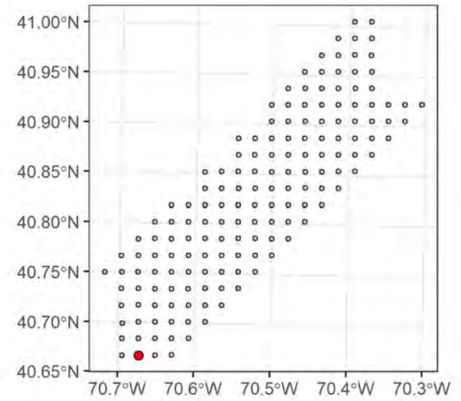
Figure E-623: WTG-156-A-PV

Sediment Profile Image



Figure E-624: WTG-156-A-SPI

Location



Attributes

Date Time (EST):	07/25/21 02:47
Station (Replicate):	WTG-156 (2 of 2)
Depth (m):	-59.1
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 Ceriantharia 1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tube clusters, burrows, crab and gastropod tracks

Plan-View Image



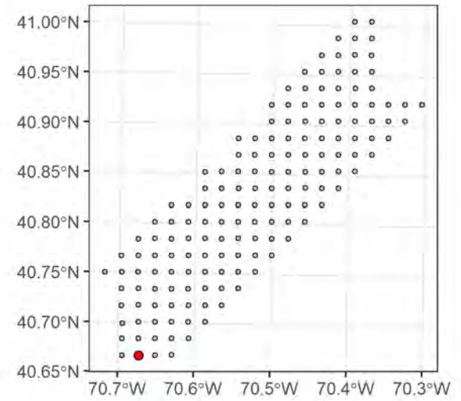
Figure E-625: WTG-156-B-PV

Sediment Profile Image



Figure E-626: WTG-156-C-SPI

Location



Attributes

Date Time (EST):	07/25/21 02:57
Station (Replicate):	WTG-156 (1 of 2)
Depth (m):	-58.8
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	sparse amphipod tube clusters, burrows

Plan-View Image



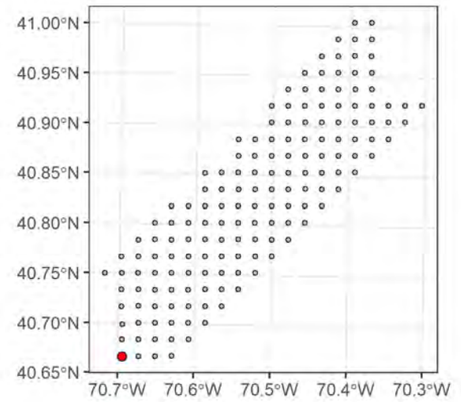
Figure E-627: WTG-157-A-PV

Sediment Profile Image



Figure E-628: WTG-157-A-SPI

Location



Attributes

Date Time (EST):	07/21/21 20:04
Station (Replicate):	WTG-157 (2 of 2)
Depth (m):	-60.9
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 burrowing sea stars (Astropecten?), 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present

Plan-View Image



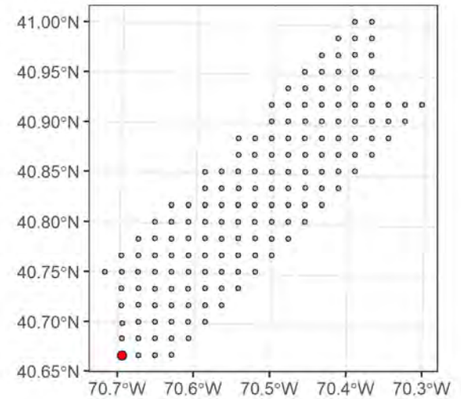
Figure E-629: WTG-157-B-PV

Sediment Profile Image



Figure E-630: WTG-157-C-SPI

Location



Attributes

Date Time (EST):	07/21/21 20:14
Station (Replicate):	WTG-157 (1 of 2)
Depth (m):	-60.8
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, some small burrows present

ADDENDUM F | SPI AND PV IMAGES CATALOG FOR INTERARRAY CABLE STATIONS

Plan-View Image



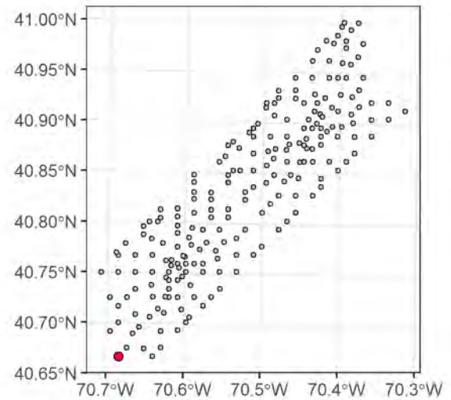
Figure F-1: IAC-001-B-PV

Sediment Profile Image



Figure F-2: IAC-001-B-SPI

Location



Attributes

Date Time (EST):	08/14/21 12:46
Station (Replicate):	IAC-001 (1 of 2)
Depth (m):	-60.5
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



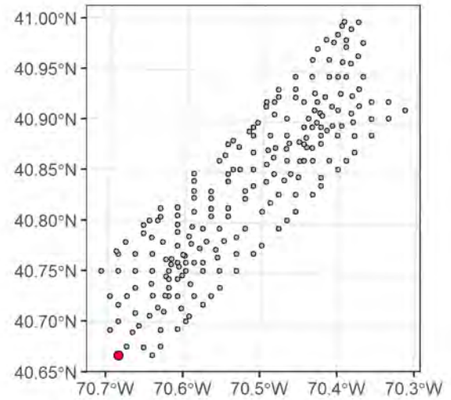
Figure F-3: IAC-001-C-PV

Sediment Profile Image



Figure F-4: IAC-001-C-SPI

Location



Attributes

Date Time (EST):	08/14/21 12:52
Station (Replicate):	IAC-001 (2 of 2)
Depth (m):	-60.5
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp, 2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

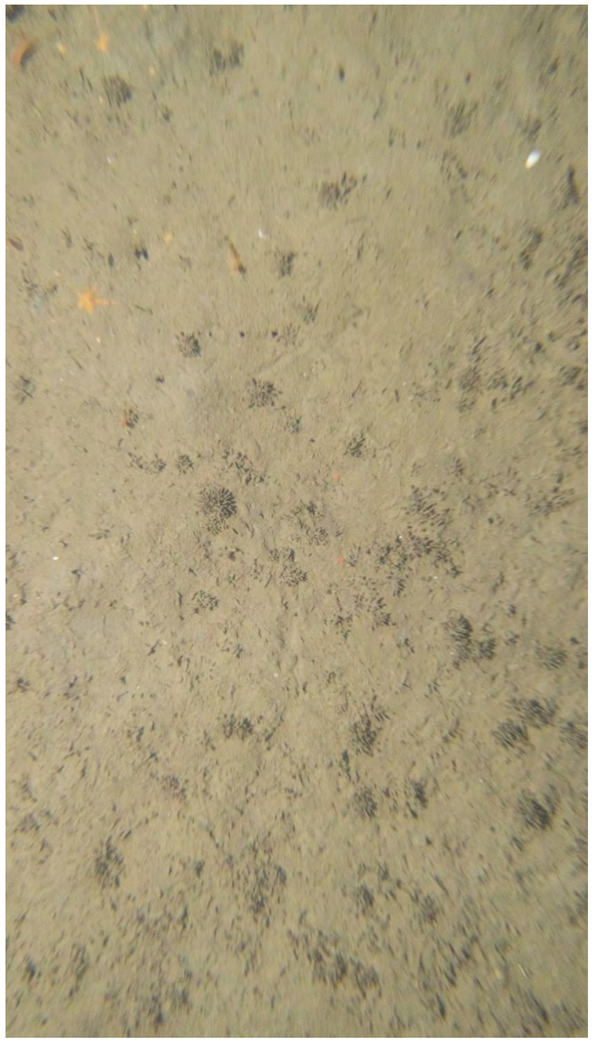


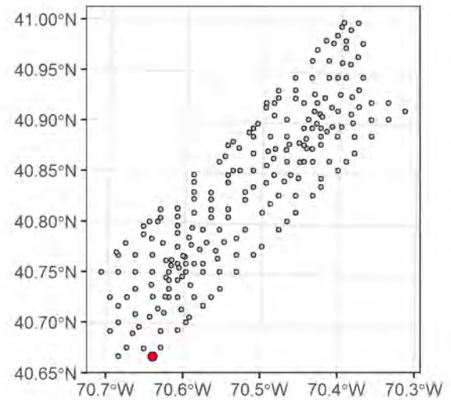
Figure F-5: IAC-002-B-PV

Sediment Profile Image



Figure F-6: IAC-002-B-SPI

Location



Attributes

Date Time (EST):	08/14/21 10:10
Station (Replicate):	IAC-002 (1 of 2)
Depth (m):	-59.1
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp, 2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

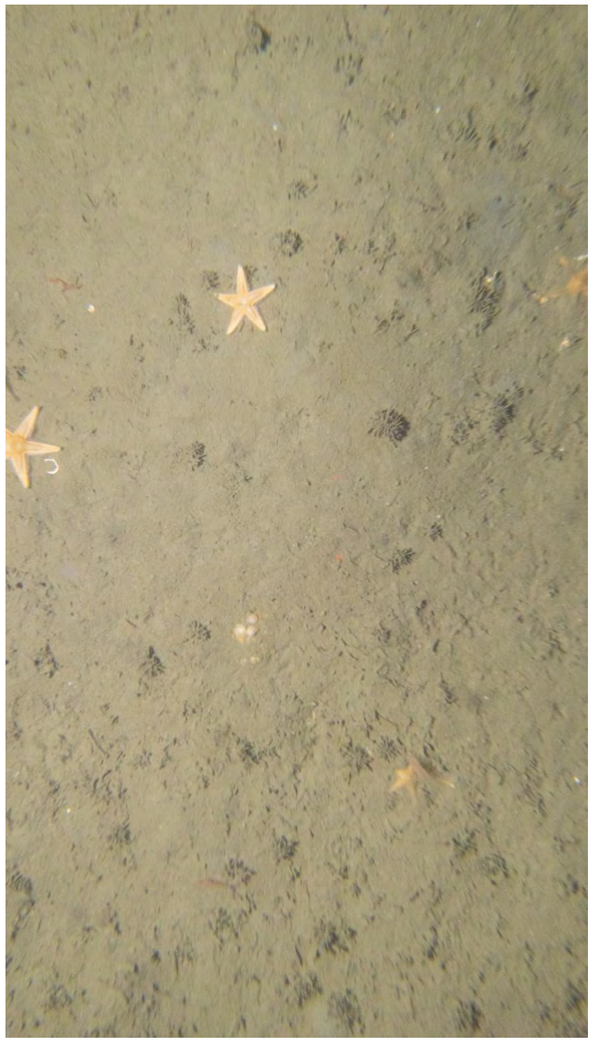


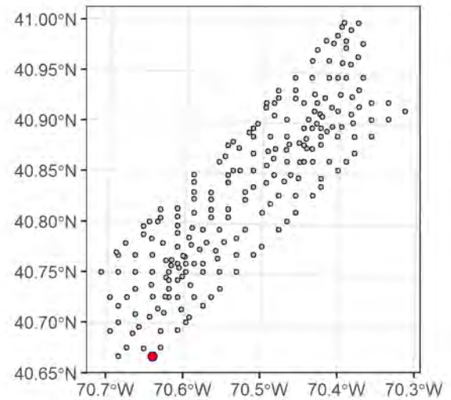
Figure F-7: IAC-002-C-PV

Sediment Profile Image



Figure F-8: IAC-002-C-SPI

Location



Attributes

Date Time (EST):	08/14/21 10:14
Station (Replicate):	IAC-002 (2 of 2)
Depth (m):	-59.1
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	burrowing ascidiacea? 2 shrimp, 4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



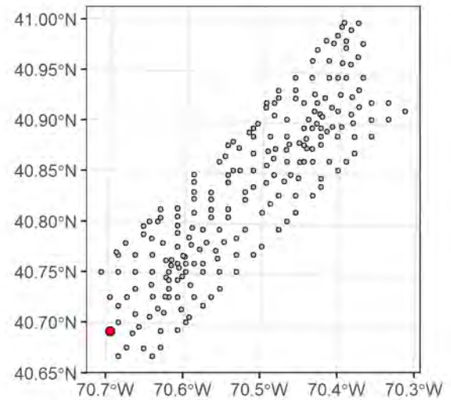
Figure F-9: IAC-003-A-PV

Sediment Profile Image



Figure F-10: IAC-003-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 15:14
Station (Replicate):	IAC-003 (1 of 2)
Depth (m):	-59.4
Prism Penetration (cm):	16.8
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	hydroid 8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	some amphipod tube clusters, microbial mat, 2 large burrows, crab tracks

Plan-View Image



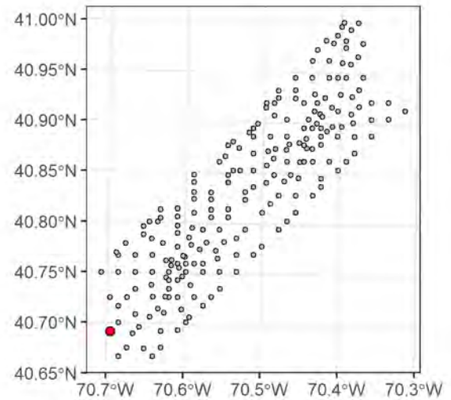
Figure F-11: IAC-003-B-PV

Sediment Profile Image



Figure F-12: IAC-003-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 15:25
Station (Replicate):	IAC-003 (2 of 2)
Depth (m):	-59.5
Prism Penetration (cm):	17.8
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?), 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, few burrows, faint crab tracks

Plan-View Image

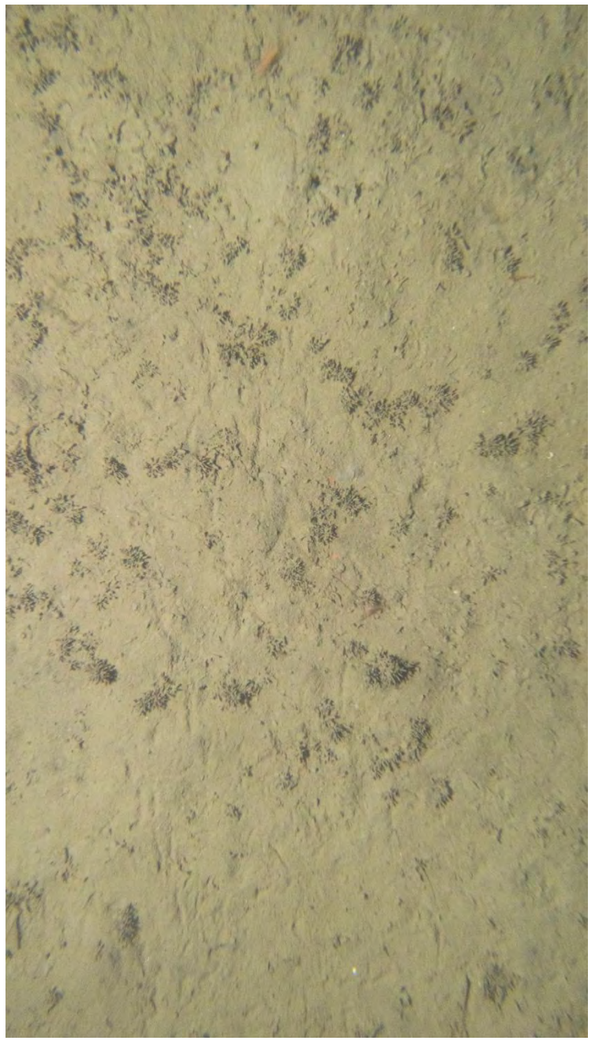


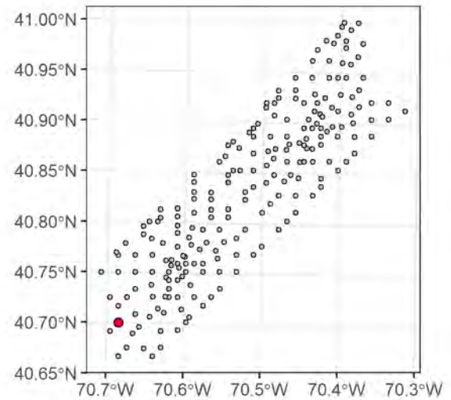
Figure F-13: IAC-004-A-PV

Sediment Profile Image



Figure F-14: IAC-004-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 14:27
Station (Replicate):	IAC-004 (1 of 2)
Depth (m):	-59.1
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, crab tracks

Plan-View Image



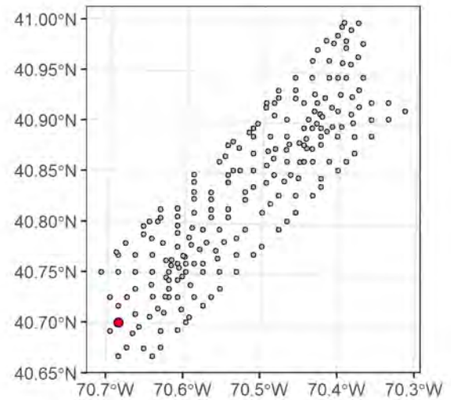
Figure F-15: IAC-004-B-PV

Sediment Profile Image



Figure F-16: IAC-004-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 14:37
Station (Replicate):	IAC-004 (2 of 2)
Depth (m):	-59
Prism Penetration (cm):	17.1
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, few small burrows, microbial mat, crab tracks

Plan-View Image



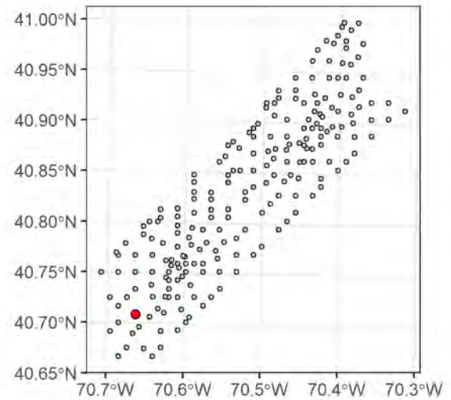
Figure F-17: IAC-005-A-PV

Sediment Profile Image



Figure F-18: IAC-005-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 17:42
Station (Replicate):	IAC-005 (1 of 2)
Depth (m):	-58.3
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, crab tracks

Plan-View Image



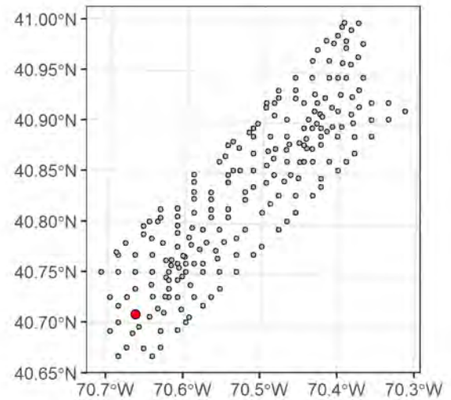
Figure F-19: IAC-005-B-PV

Sediment Profile Image



Figure F-20: IAC-005-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 17:52
Station (Replicate):	IAC-005 (2 of 2)
Depth (m):	-58.3
Prism Penetration (cm):	17.6
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 burrowing sea stars (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, crab tracks

Plan-View Image



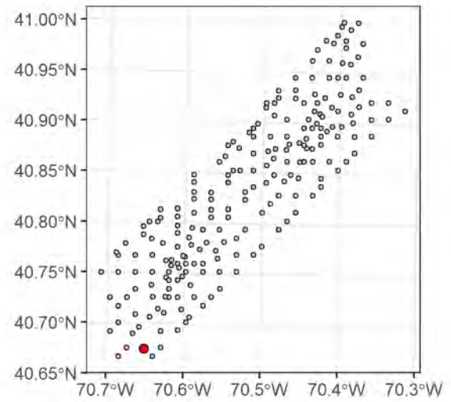
Figure F-21: IAC-006-A-PV

Sediment Profile Image



Figure F-22: IAC-006-A-SPI

Location



Attributes

Date Time (EST):	08/14/21 10:52
Station (Replicate):	IAC-006 (1 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

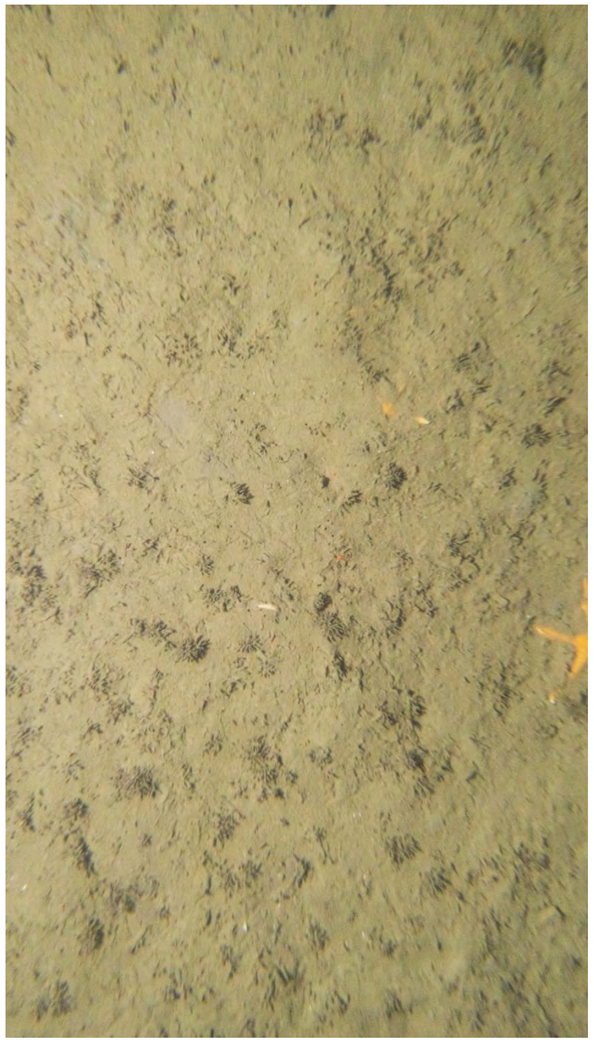


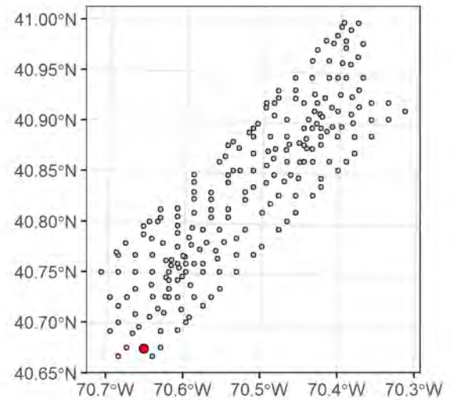
Figure F-23: IAC-006-B-PV

Sediment Profile Image



Figure F-24: IAC-006-C-SPI

Location



Attributes

Date Time (EST):	08/14/21 11:02
Station (Replicate):	IAC-006 (2 of 2)
Depth (m):	-59.2
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



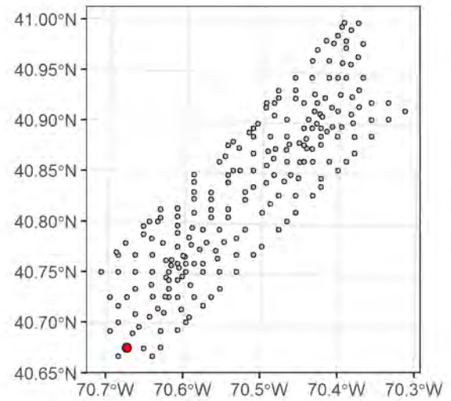
Figure F-25: IAC-007-C-PV

Sediment Profile Image



Figure F-26: IAC-007-A-SPI

Location



Attributes

Date Time (EST):	08/14/21 11:42
Station (Replicate):	IAC-007 (1 of 2)
Depth (m):	-60
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



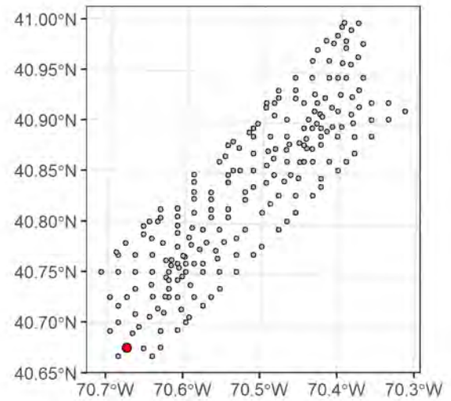
Figure F-27: IAC-007-B-PV

Sediment Profile Image



Figure F-28: IAC-007-B-SPI

Location



Attributes

Date Time (EST):	08/14/21 11:49
Station (Replicate):	IAC-007 (2 of 2)
Depth (m):	-60
Prism Penetration (cm):	17.5
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



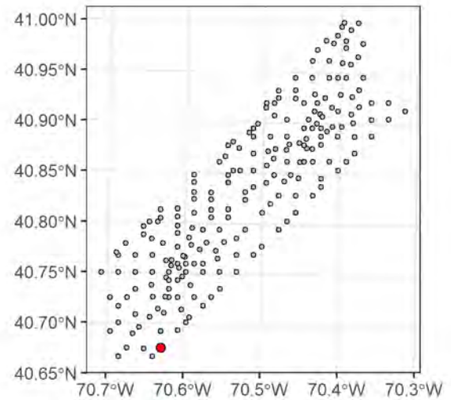
Figure F-29: IAC-008-A-PV

Sediment Profile Image



Figure F-30: IAC-008-A-SPI

Location



Attributes

Date Time (EST):	08/14/21 09:05
Station (Replicate):	IAC-008 (1 of 2)
Depth (m):	-58.3
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp, 2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks

Plan-View Image



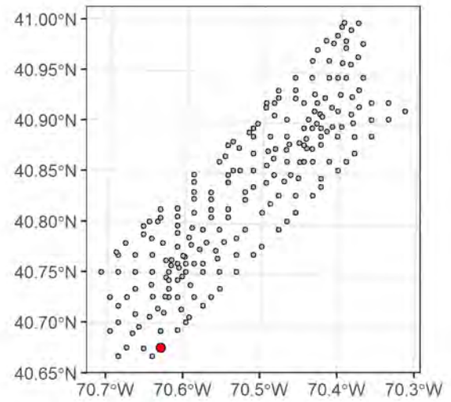
Figure F-31: IAC-008-C-PV

Sediment Profile Image



Figure F-32: IAC-008-B-SPI

Location



Attributes

Date Time (EST):	08/14/21 09:12
Station (Replicate):	IAC-008 (2 of 2)
Depth (m):	-58.2
Prism Penetration (cm):	17.2
aRPD Mean Depth (cm):	5.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp, 7 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

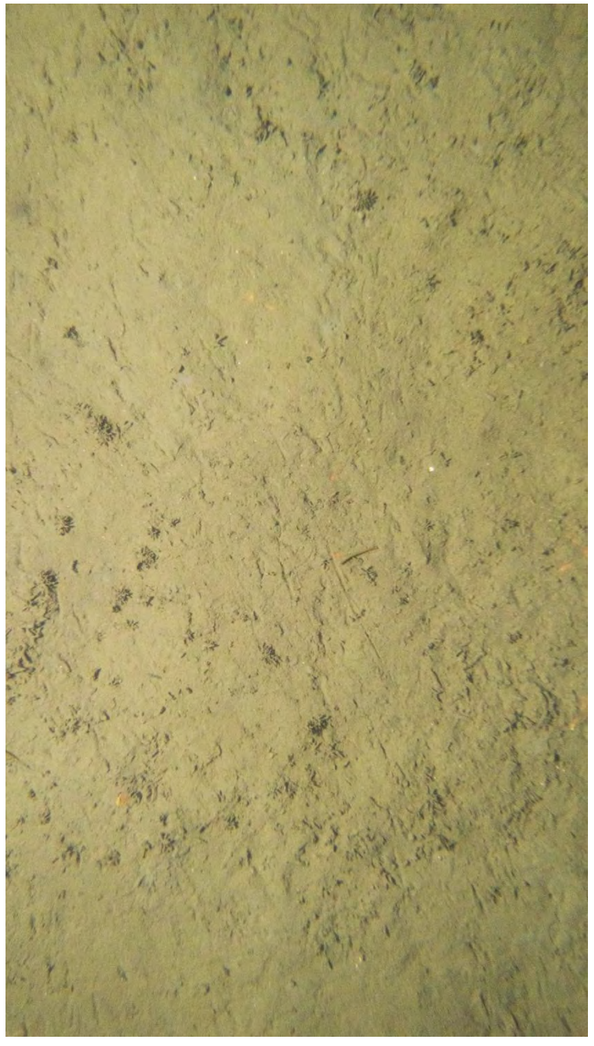


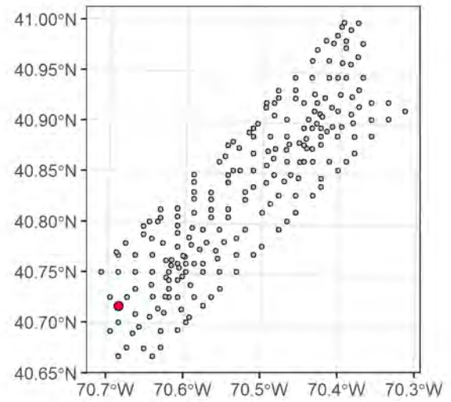
Figure F-33: IAC-009-B-PV

Sediment Profile Image



Figure F-34: IAC-009-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 13:43
Station (Replicate):	IAC-009 (1 of 2)
Depth (m):	-58.6
Prism Penetration (cm):	13.4
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



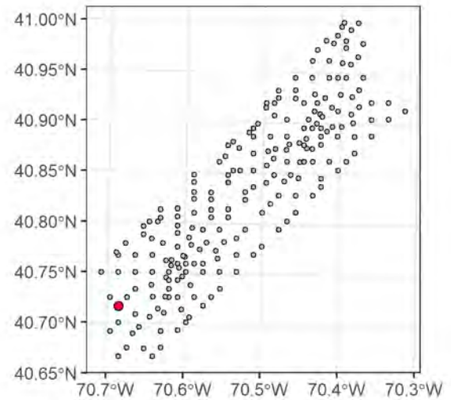
Figure F-35: IAC-009-A-PV

Sediment Profile Image



Figure F-36: IAC-009-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 13:49
Station (Replicate):	IAC-009 (2 of 2)
Depth (m):	-58.5
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star, 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

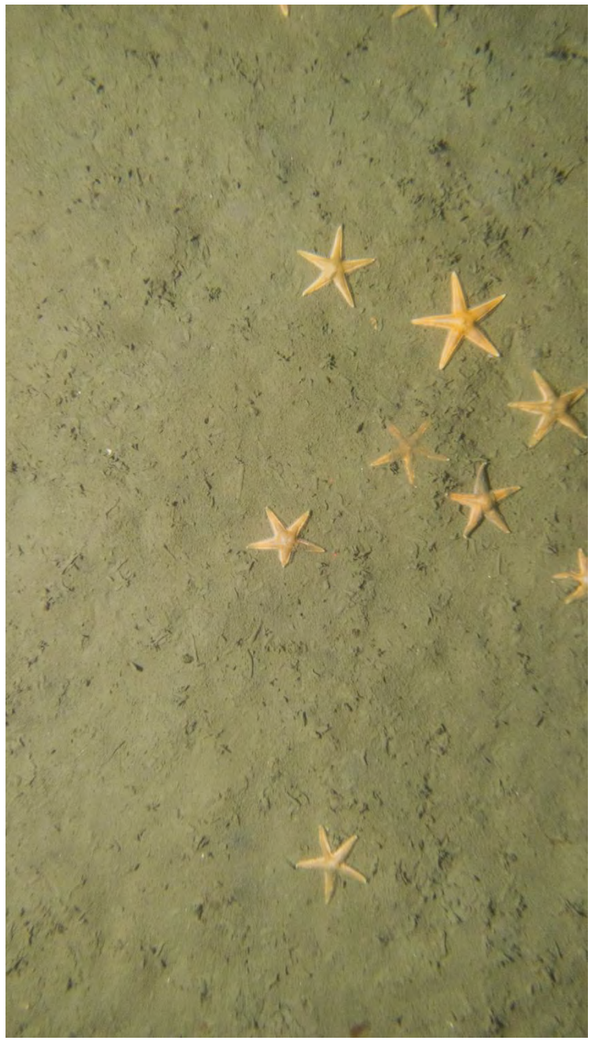


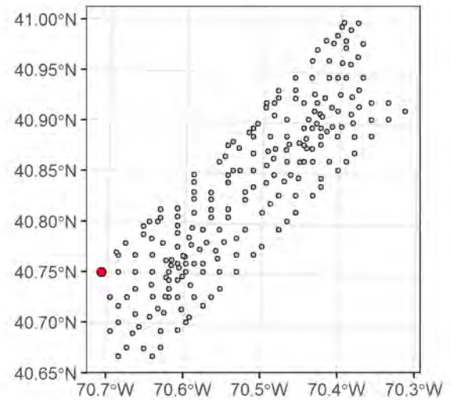
Figure F-37: IAC-010-D-PV

Sediment Profile Image



Figure F-38: IAC-010-D-SPI

Location



Attributes

Date Time (EST):	08/11/21 03:32
Station (Replicate):	IAC-010 (1 of 2)
Depth (m):	-58.2
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	10 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, worm castings

Plan-View Image



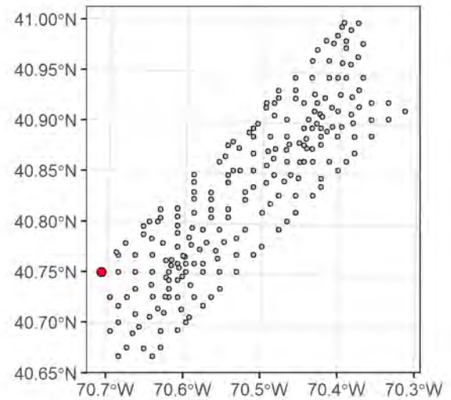
Figure F-39: IAC-010-A-PV

Sediment Profile Image



Figure F-40: IAC-010-E-SPI

Location



Attributes

Date Time (EST):	08/11/21 03:37
Station (Replicate):	IAC-010 (2 of 2)
Depth (m):	-58.2
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 burrowing sea stars (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

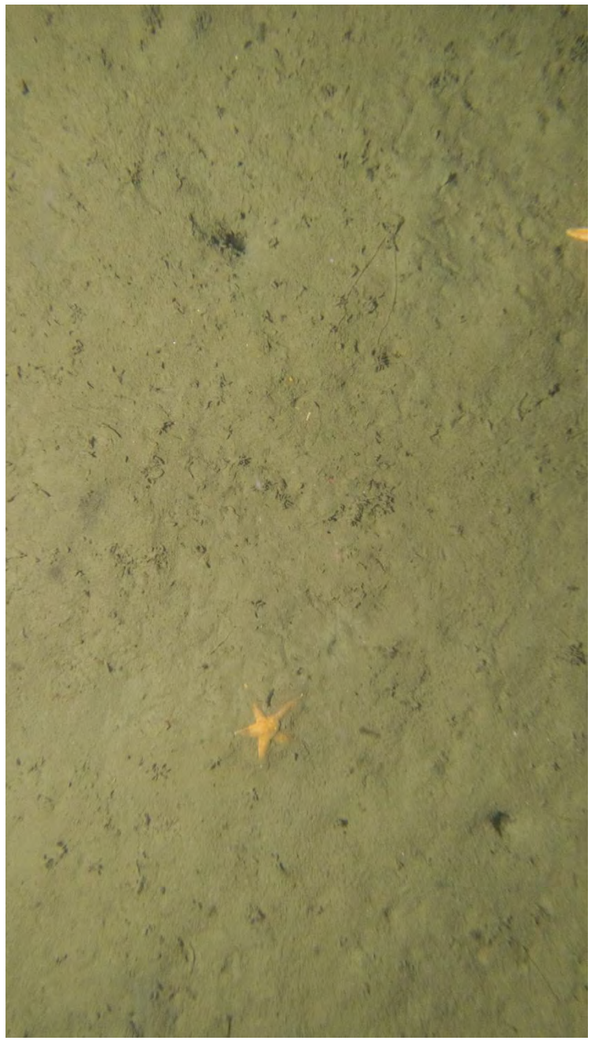


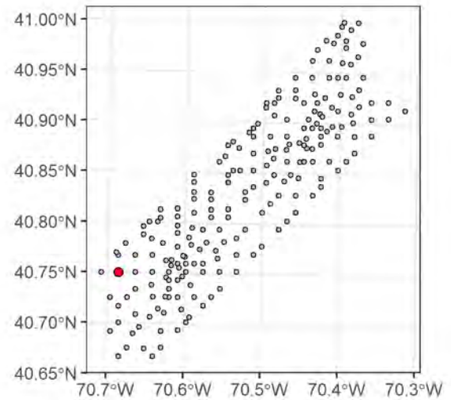
Figure F-41: IAC-011-B-PV

Sediment Profile Image



Figure F-42: IAC-011-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 04:26
Station (Replicate):	IAC-011 (1 of 2)
Depth (m):	-57.9
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, few larger burrows, abundant Ampeliscid burrows

Plan-View Image



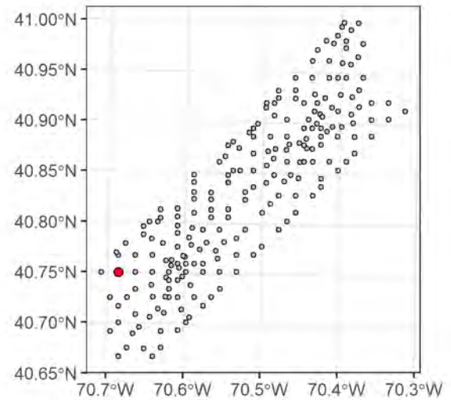
Figure F-43: IAC-011-A-PV

Sediment Profile Image



Figure F-44: IAC-011-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 04:30
Station (Replicate):	IAC-011 (2 of 2)
Depth (m):	-57.9
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroid
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, few larger burrows, abundant Ampeliscid burrows

Plan-View Image



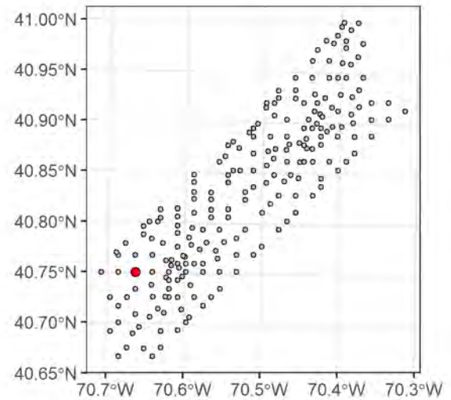
Figure F-45: IAC-012-B-PV

Sediment Profile Image



Figure F-46: IAC-012-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 05:16
Station (Replicate):	IAC-012 (1 of 2)
Depth (m):	-57.5
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, crab tracks

Plan-View Image



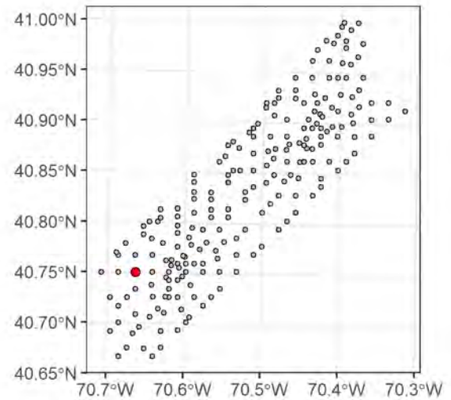
Figure F-47: IAC-012-C-PV

Sediment Profile Image



Figure F-48: IAC-012-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 05:19
Station (Replicate):	IAC-012 (2 of 2)
Depth (m):	-57.5
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	14 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



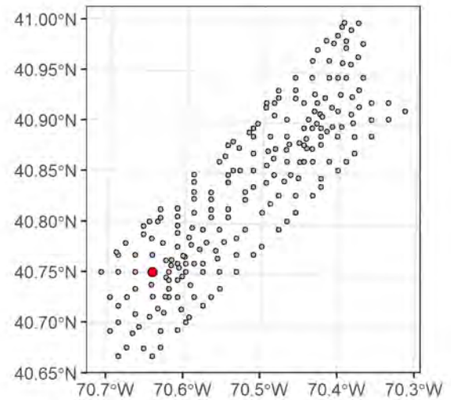
Figure F-49: IAC-013-B-PV

Sediment Profile Image



Figure F-50: IAC-013-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 06:26
Station (Replicate):	IAC-013 (1 of 2)
Depth (m):	-56.8
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



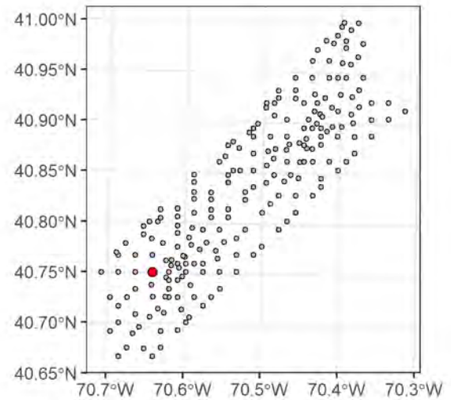
Figure F-51: IAC-013-A-PV

Sediment Profile Image



Figure F-52: IAC-013-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 06:30
Station (Replicate):	IAC-013 (2 of 2)
Depth (m):	-56.7
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Ceriantharia 1 shrimp 1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks, 1 gastropod egg case

Plan-View Image



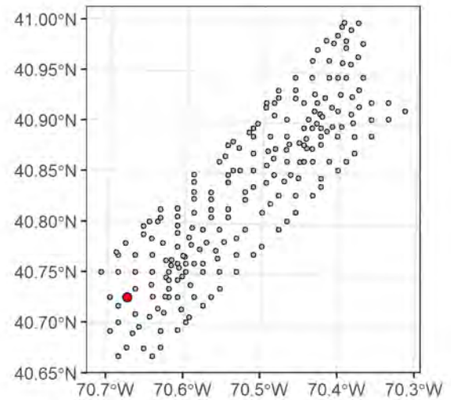
Figure F-53: IAC-014-A-PV

Sediment Profile Image



Figure F-54: IAC-014-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 10:15
Station (Replicate):	IAC-014 (1 of 2)
Depth (m):	-59.1
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	0.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 burrowing sea stars (Astropecten?), 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



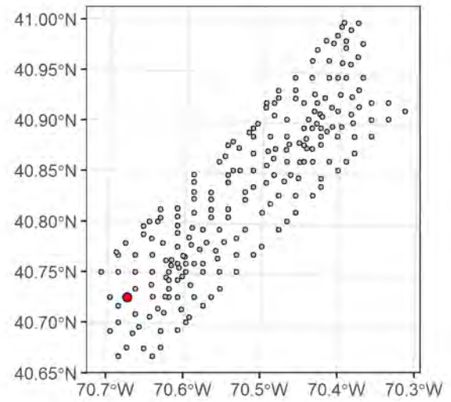
Figure F-55: IAC-014-C-PV

Sediment Profile Image



Figure F-56: IAC-014-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 10:27
Station (Replicate):	IAC-014 (2 of 2)
Depth (m):	-59.1
Prism Penetration (cm):	13.1
aRPD Mean Depth (cm):	0.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



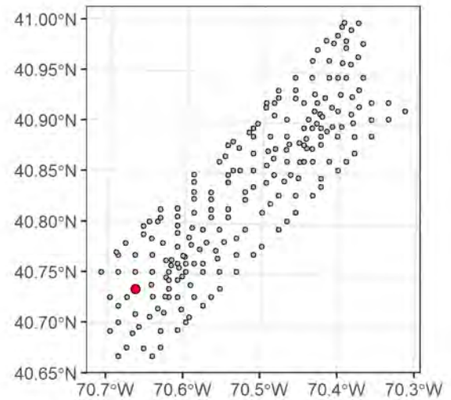
Figure F-57: IAC-015-A-PV

Sediment Profile Image



Figure F-58: IAC-015-D-SPI

Location



Attributes

Date Time (EST):	08/11/21 11:12
Station (Replicate):	IAC-015 (1 of 2)
Depth (m):	-58.7
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks, large patch of Ampeliscid burrows

Plan-View Image

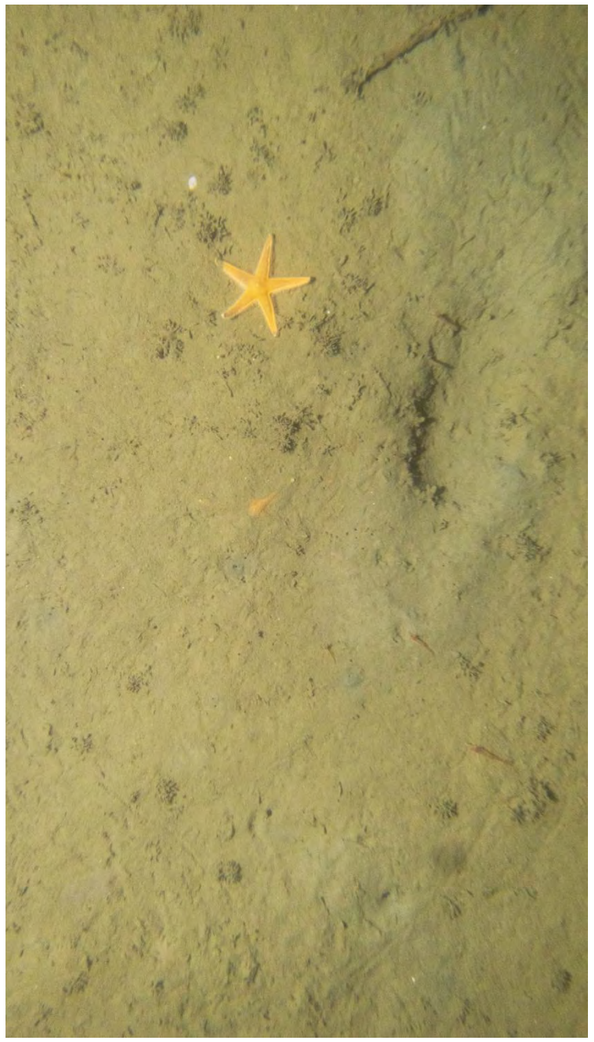


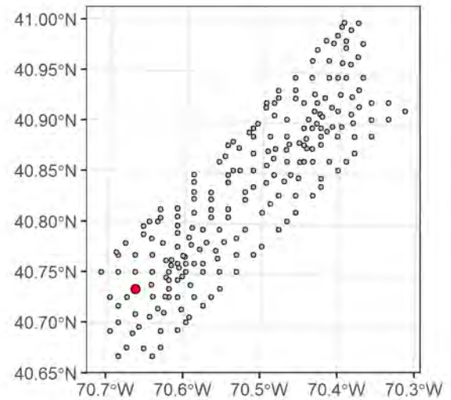
Figure F-59: IAC-015-C-PV

Sediment Profile Image



Figure F-60: IAC-015-E-SPI

Location



Attributes

Date Time (EST):	08/11/21 11:20
Station (Replicate):	IAC-015 (2 of 2)
Depth (m):	-58.6
Prism Penetration (cm):	17.2
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 burrowing sea stars (Astropecten?), 5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks, gastropod tracks

Plan-View Image

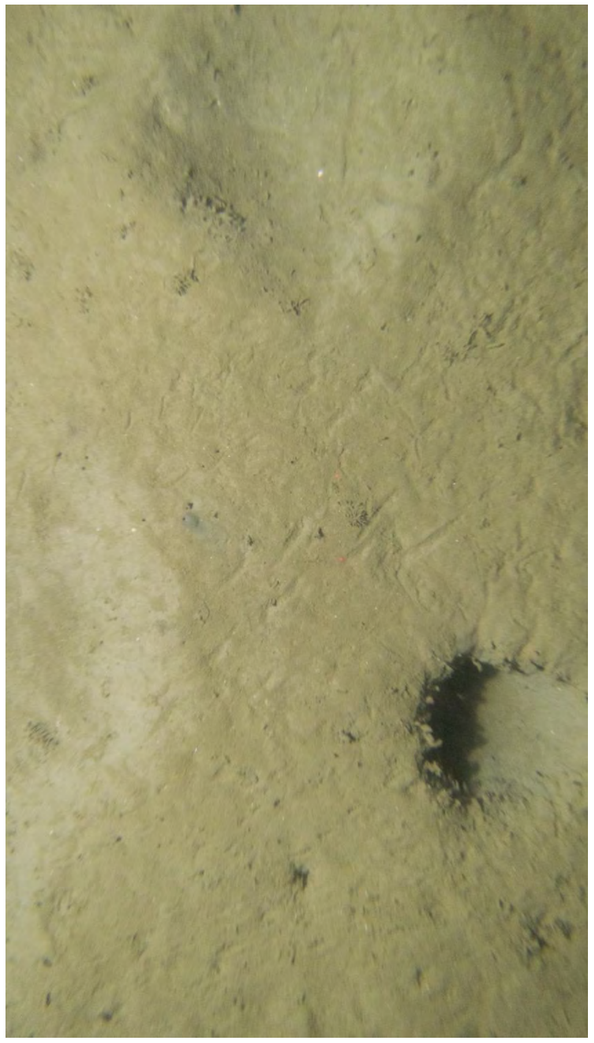


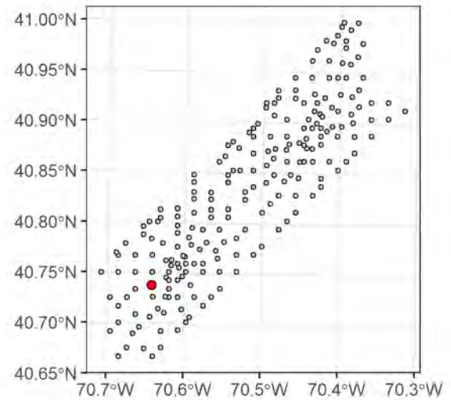
Figure F-61: IAC-016-C-PV

Sediment Profile Image



Figure F-62: IAC-016-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 07:05
Station (Replicate):	IAC-016 (1 of 2)
Depth (m):	-57
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows (at least one down to reduced sediment), crab tracks, large burrow/feeding void, dark photo

Plan-View Image

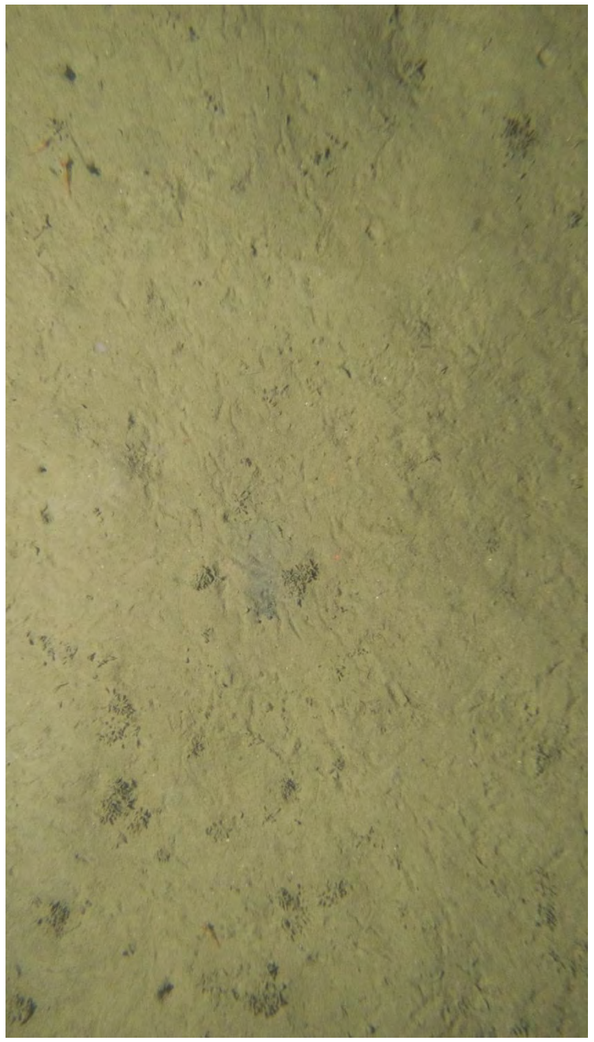


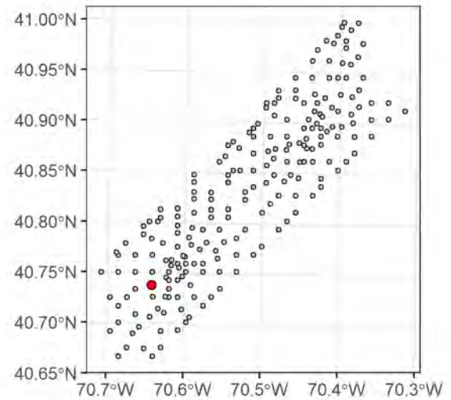
Figure F-63: IAC-016-B-PV

Sediment Profile Image



Figure F-64: IAC-016-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 07:10
Station (Replicate):	IAC-016 (2 of 2)
Depth (m):	-57.1
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	1.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks, dark photo

Plan-View Image

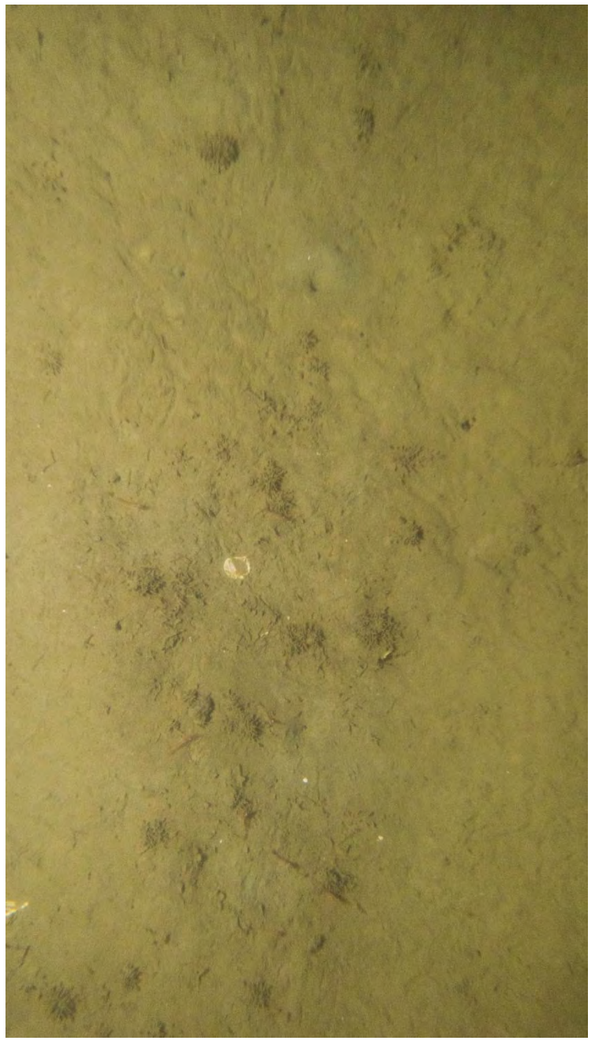


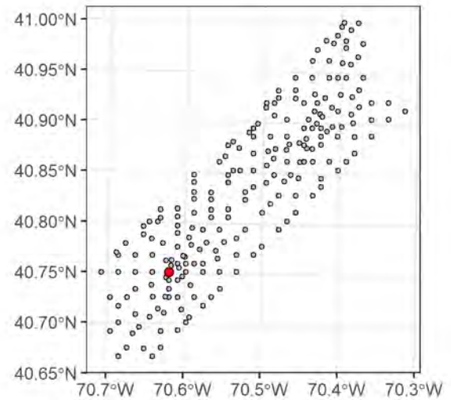
Figure F-65: IAC-017-B-PV

Sediment Profile Image



Figure F-66: IAC-017-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 20:00
Station (Replicate):	IAC-017 (1 of 2)
Depth (m):	-56.7
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



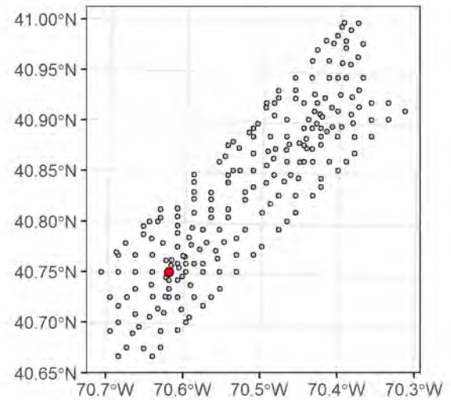
Figure F-67: IAC-017-C-PV

Sediment Profile Image



Figure F-68: IAC-017-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 20:09
Station (Replicate):	IAC-017 (2 of 2)
Depth (m):	-56.6
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	10 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image

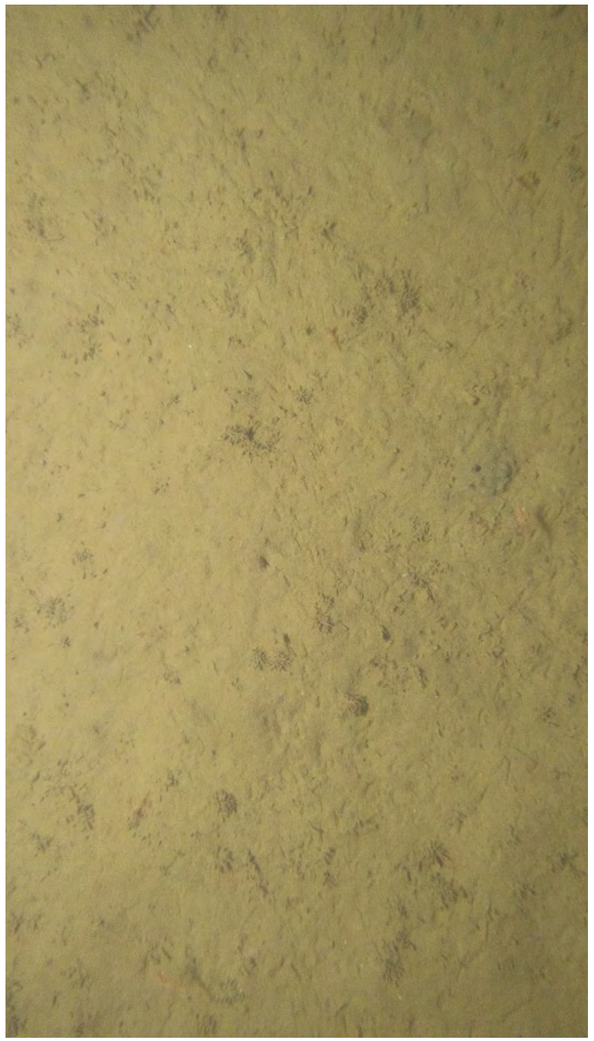


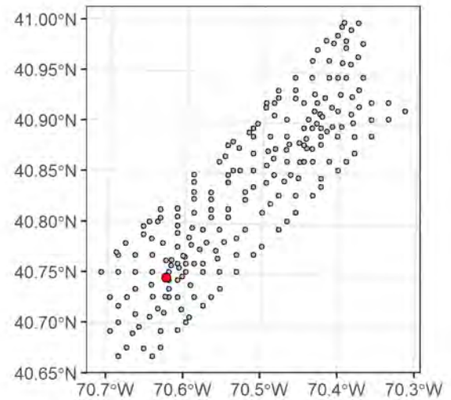
Figure F-69: IAC-018-A-PV

Sediment Profile Image



Figure F-70: IAC-018-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 19:21
Station (Replicate):	IAC-018 (1 of 2)
Depth (m):	-56.5
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	1.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows (at least one down to reduced sediment), crab tracks

Plan-View Image

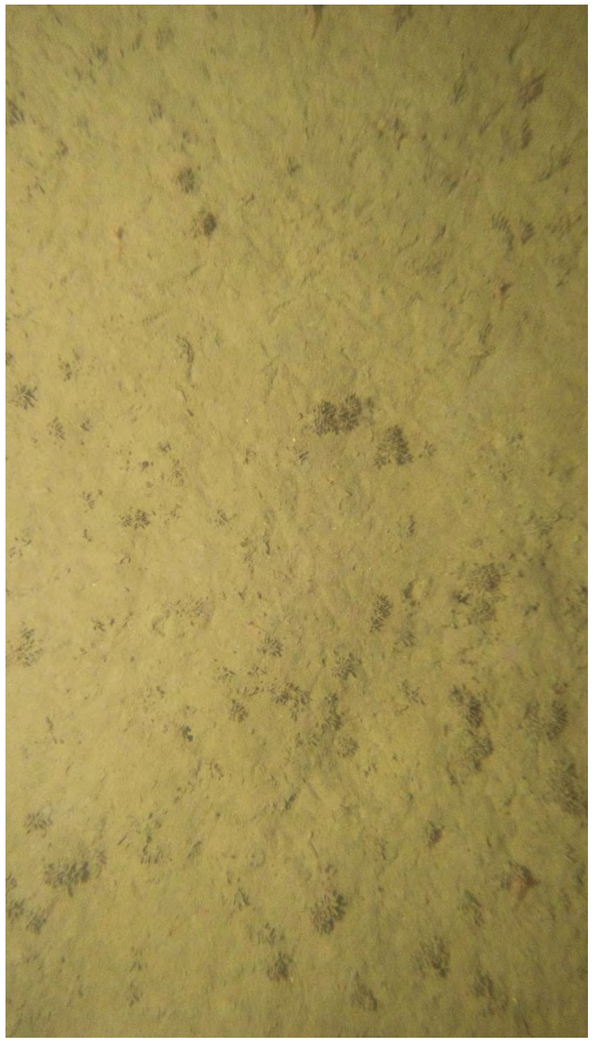


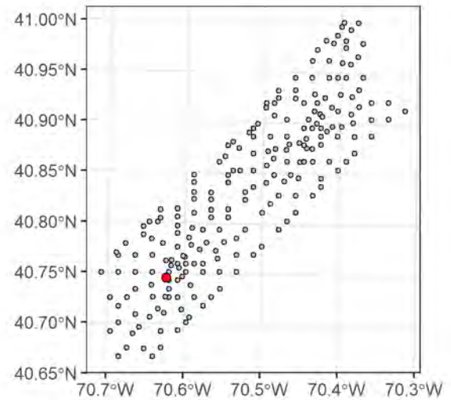
Figure F-71: IAC-018-B-PV

Sediment Profile Image



Figure F-72: IAC-018-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 19:26
Station (Replicate):	IAC-018 (2 of 2)
Depth (m):	-56.5
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	0.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows (at least one down to reduced sediment), crab tracks

Plan-View Image



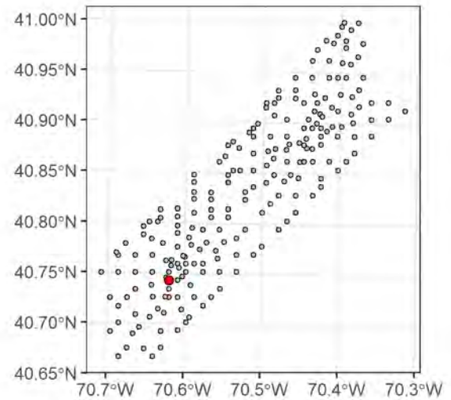
Figure F-73: IAC-019-C-PV

Sediment Profile Image



Figure F-74: IAC-019-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 18:41
Station (Replicate):	IAC-019 (1 of 2)
Depth (m):	-56.3
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia 1 shrimp 1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, 2 large burrows, faint crab tracks

Plan-View Image



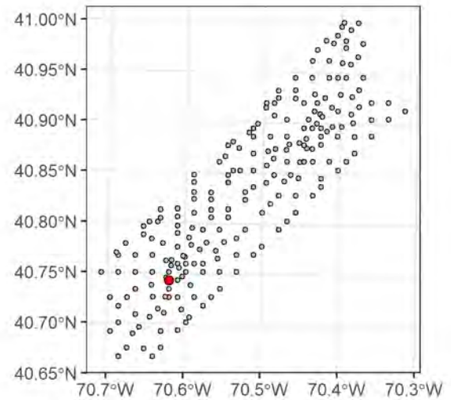
Figure F-75: IAC-019-B-PV

Sediment Profile Image



Figure F-76: IAC-019-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 18:46
Station (Replicate):	IAC-019 (2 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia 4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, crab tracks

Plan-View Image

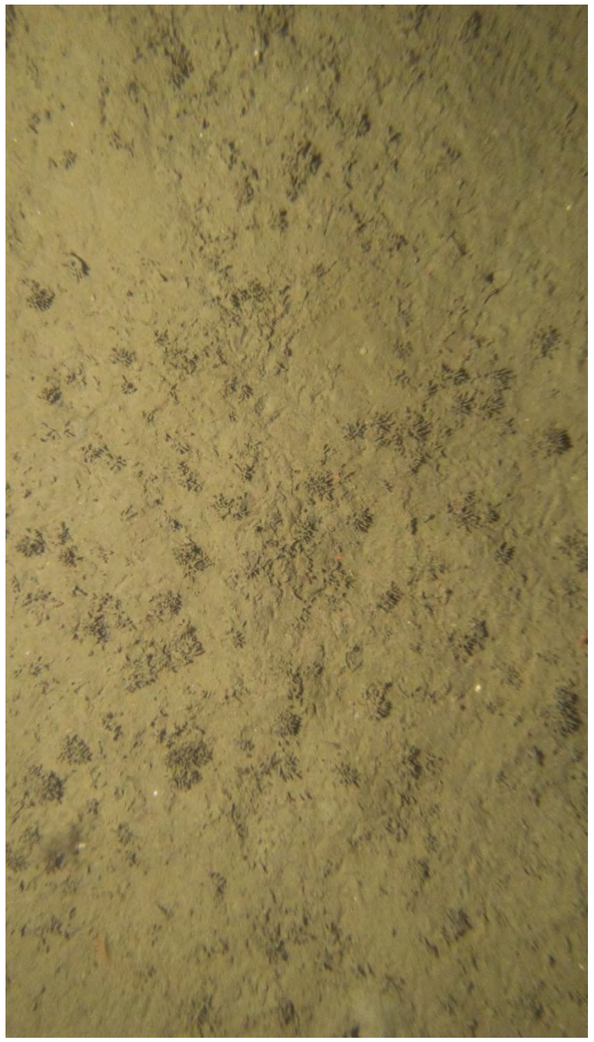


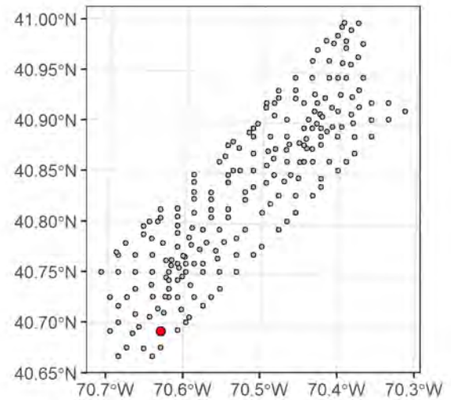
Figure F-77: IAC-020-A-PV

Sediment Profile Image



Figure F-78: IAC-020-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 18:12
Station (Replicate):	IAC-020 (1 of 2)
Depth (m):	-57.3
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint tracks

Plan-View Image



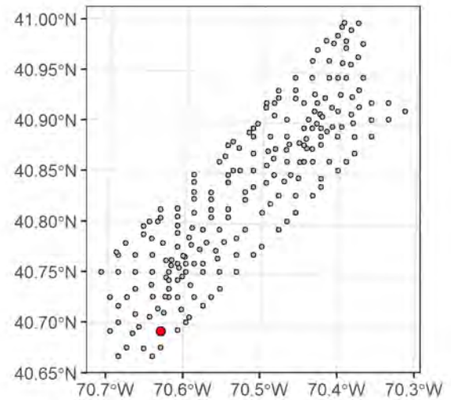
Figure F-79: IAC-020-C-PV

Sediment Profile Image



Figure F-80: IAC-020-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 18:26
Station (Replicate):	IAC-020 (2 of 2)
Depth (m):	-57.3
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint tracks

Plan-View Image



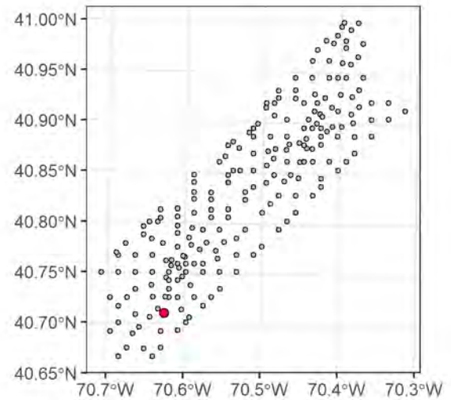
Figure F-81: IAC-021-B-PV

Sediment Profile Image



Figure F-82: IAC-021-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 19:45
Station (Replicate):	IAC-021 (1 of 2)
Depth (m):	-57.5
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image

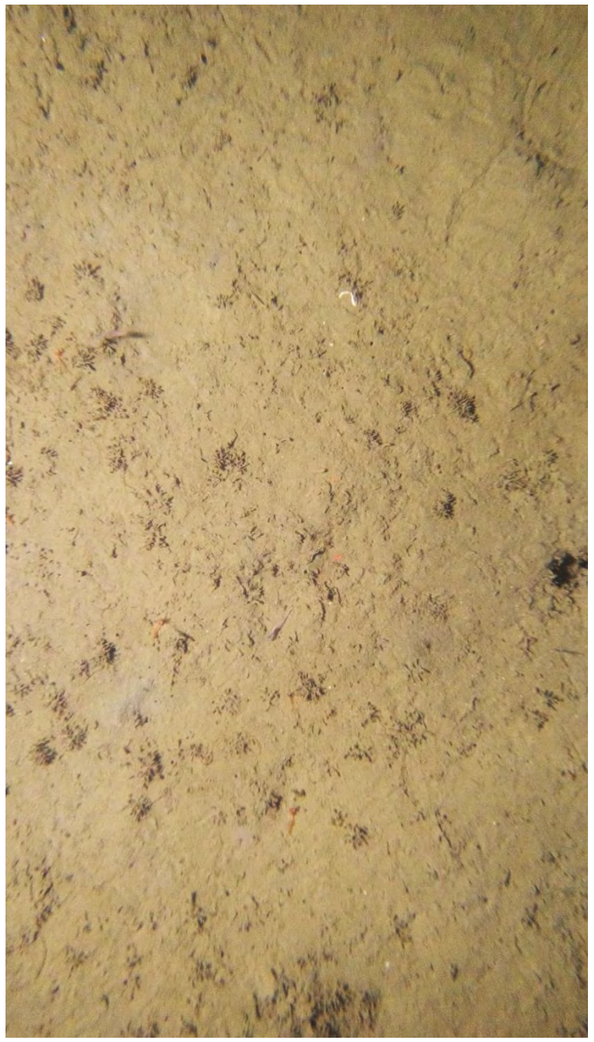


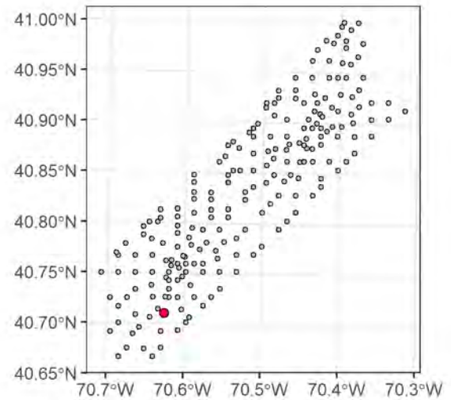
Figure F-83: IAC-021-C-PV

Sediment Profile Image



Figure F-84: IAC-021-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 19:50
Station (Replicate):	IAC-021 (2 of 2)
Depth (m):	-57.4
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows

Plan-View Image

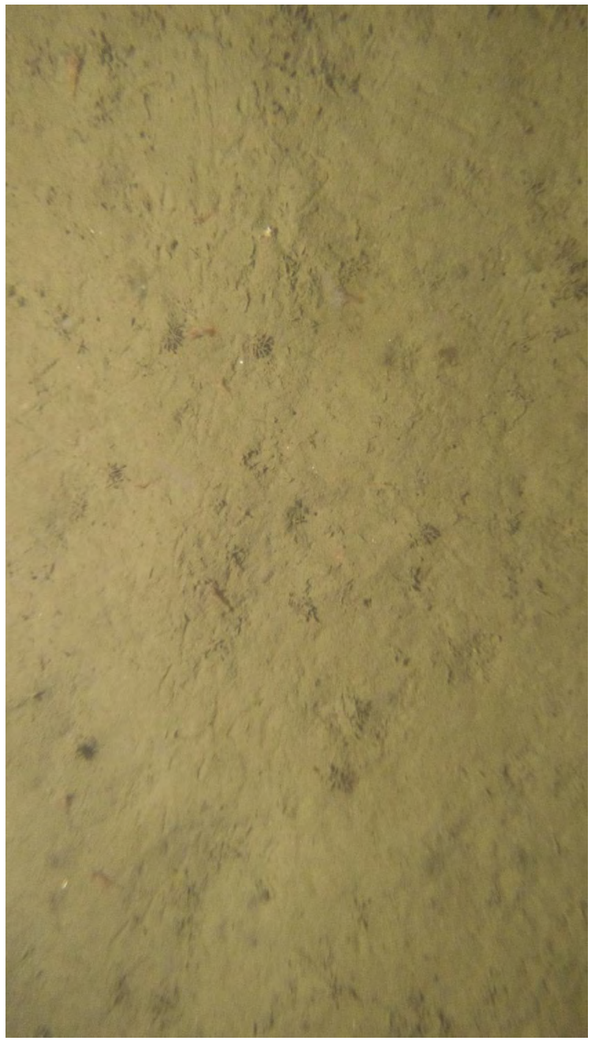


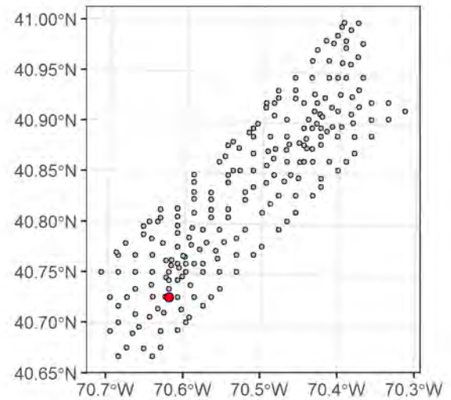
Figure F-85: IAC-022-B-PV

Sediment Profile Image



Figure F-86: IAC-022-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 07:08
Station (Replicate):	IAC-022 (1 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	7 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, faint tracks

Plan-View Image



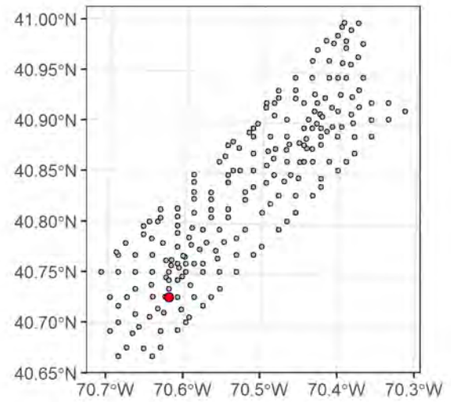
Figure F-87: IAC-022-A-PV

Sediment Profile Image



Figure F-88: IAC-022-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 07:14
Station (Replicate):	IAC-022 (2 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	9 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, faint tracks

Plan-View Image



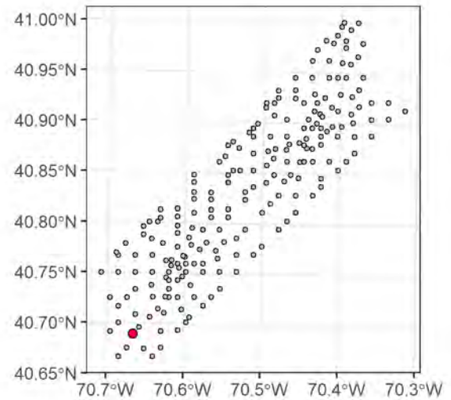
Figure F-89: IAC-023-A-PV

Sediment Profile Image



Figure F-90: IAC-023-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 16:12
Station (Replicate):	IAC-023 (1 of 2)
Depth (m):	-58.7
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing sea star (Astropecten?), 2 shrimp 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

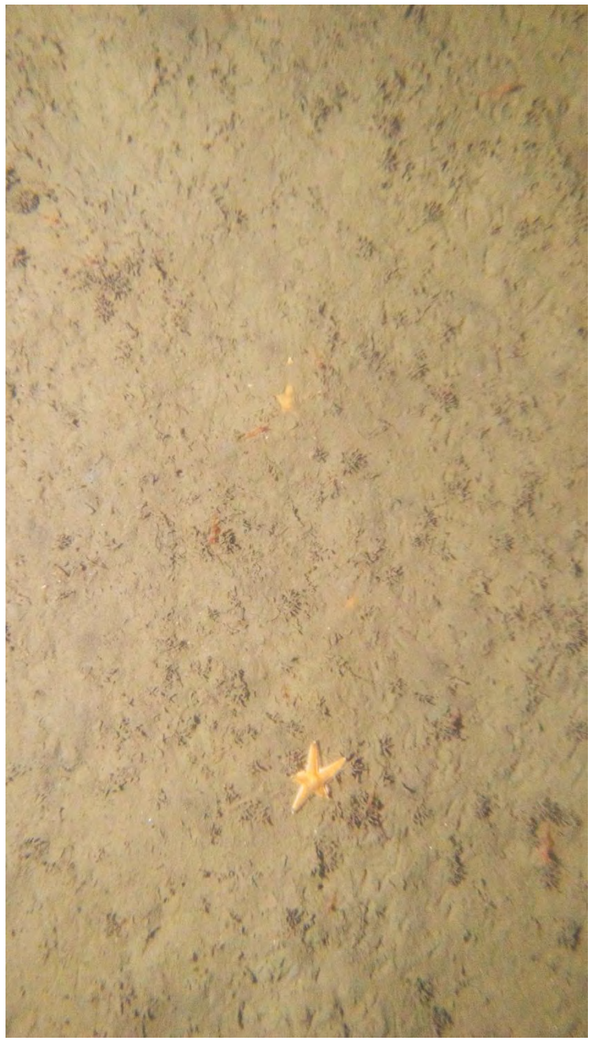


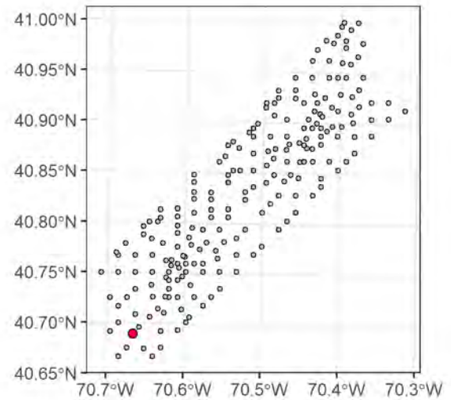
Figure F-91: IAC-023-B-PV

Sediment Profile Image



Figure F-92: IAC-023-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 16:17
Station (Replicate):	IAC-023 (2 of 2)
Depth (m):	-58.5
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 burrowing sea stars (Astropecten?), 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

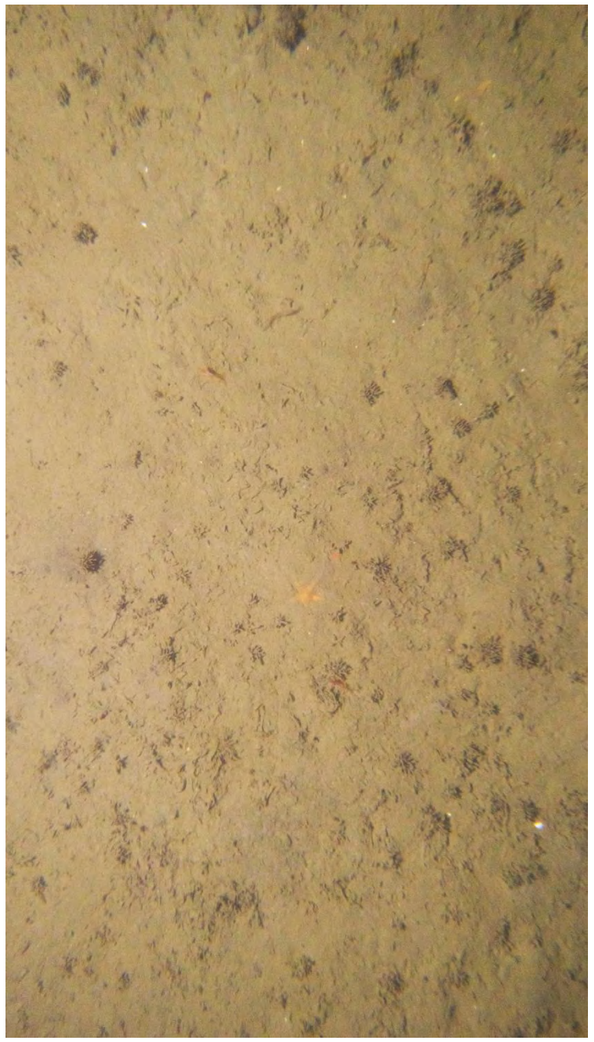


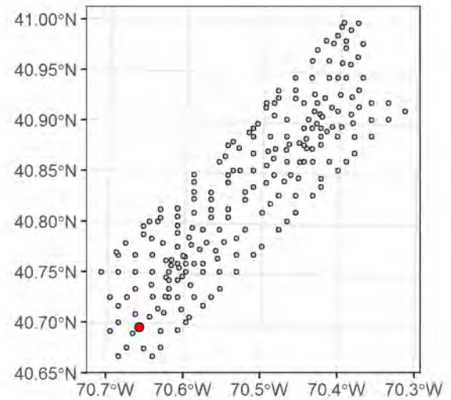
Figure F-93: IAC-024-B-PV

Sediment Profile Image



Figure F-94: IAC-024-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 17:04
Station (Replicate):	IAC-024 (1 of 2)
Depth (m):	-58.1
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 burrowing sea stars (Astropecten?), 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows,

Plan-View Image



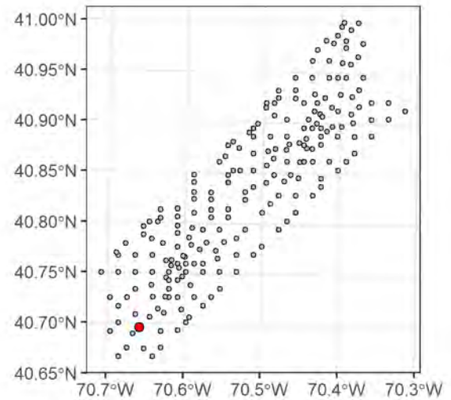
Figure F-95: IAC-024-A-PV

Sediment Profile Image



Figure F-96: IAC-024-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 17:08
Station (Replicate):	IAC-024 (2 of 2)
Depth (m):	-58.3
Prism Penetration (cm):	16.8
aRPD Mean Depth (cm):	0.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab tracks, burrowing sea star trace

Plan-View Image



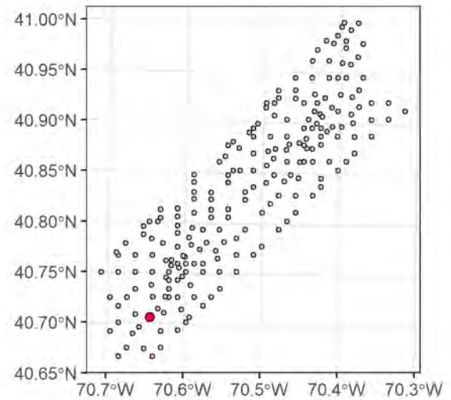
Figure F-97: IAC-025-A-PV

Sediment Profile Image



Figure F-98: IAC-025-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 18:51
Station (Replicate):	IAC-025 (1 of 2)
Depth (m):	-57.9
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows,

Plan-View Image



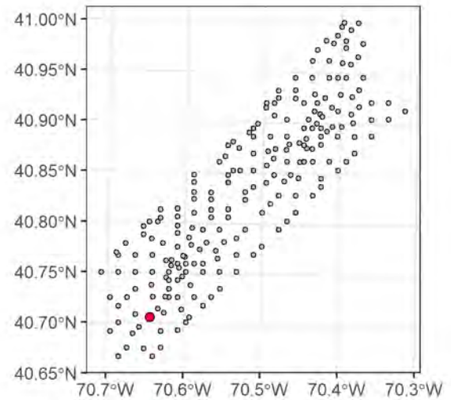
Figure F-99: IAC-025-C-PV

Sediment Profile Image



Figure F-100: IAC-025-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 19:02
Station (Replicate):	IAC-025 (2 of 2)
Depth (m):	-58
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	11 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, one very large burrow/feeding void

Plan-View Image



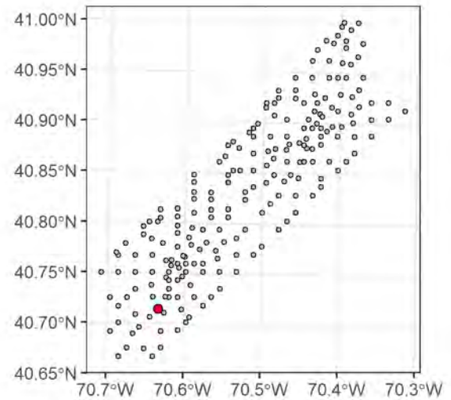
Figure F-101: IAC-026-B-PV

Sediment Profile Image



Figure F-102: IAC-026-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 22:46
Station (Replicate):	IAC-026 (1 of 2)
Depth (m):	-58.1
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp (Crangon septemspinosa?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab and gastropod tracks

Plan-View Image



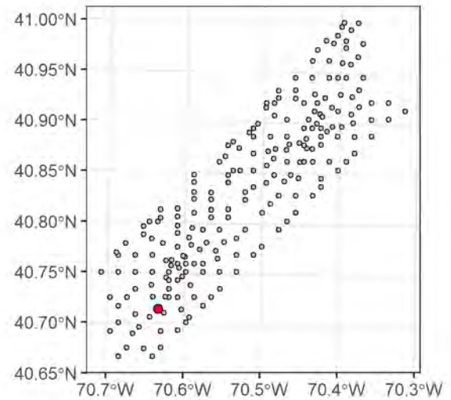
Figure F-103: IAC-026-C-PV

Sediment Profile Image



Figure F-104: IAC-026-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 22:51
Station (Replicate):	IAC-026 (2 of 2)
Depth (m):	-58
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, one very large hole/feeding void?, crab tracks

Plan-View Image



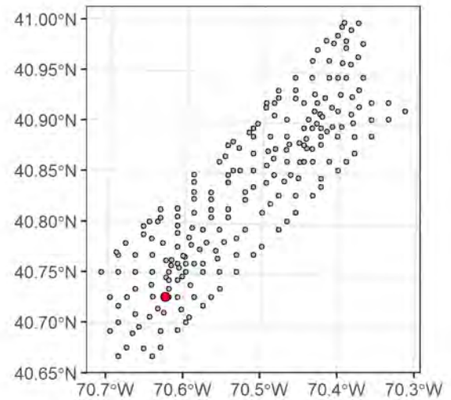
Figure F-105: IAC-027-A-PV

Sediment Profile Image



Figure F-106: IAC-027-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 06:16
Station (Replicate):	IAC-027 (1 of 2)
Depth (m):	-56.4
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

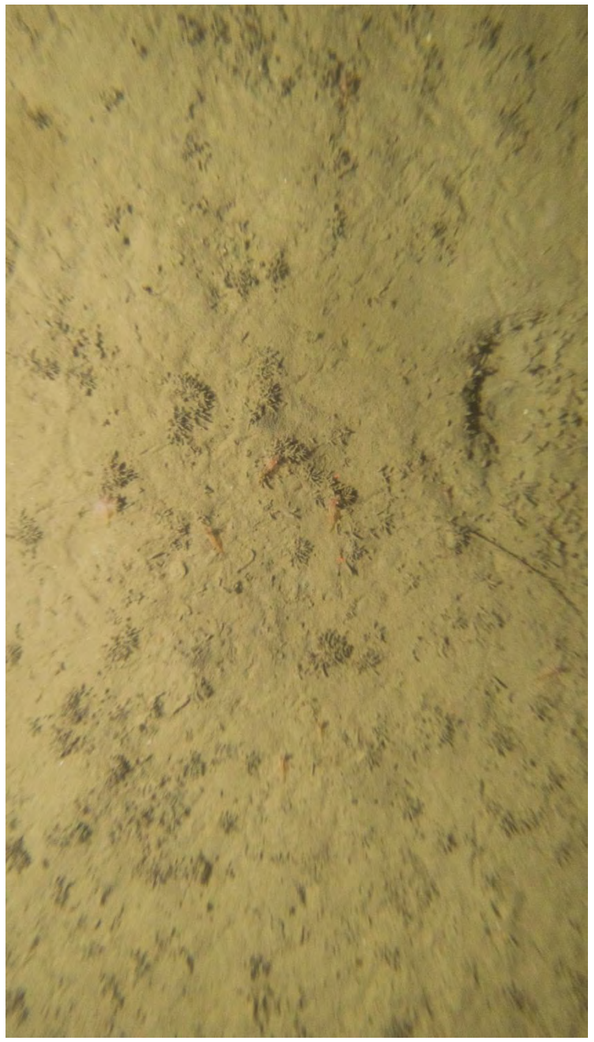


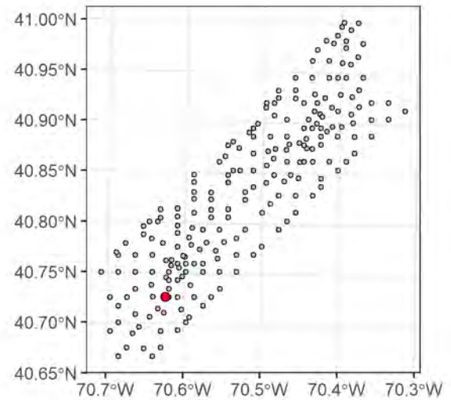
Figure F-107: IAC-027-C-PV

Sediment Profile Image



Figure F-108: IAC-027-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 06:23
Station (Replicate):	IAC-027 (2 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint tracks

Plan-View Image



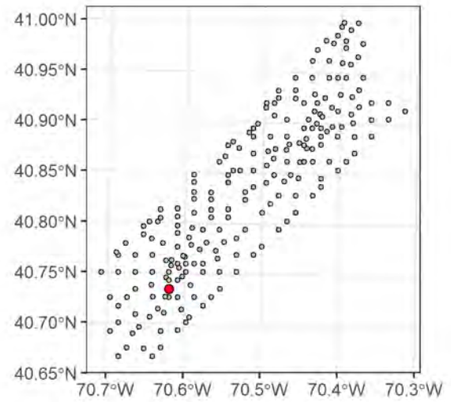
Figure F-109: IAC-028-C-PV

Sediment Profile Image



Figure F-110: IAC-028-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 17:34
Station (Replicate):	IAC-028 (1 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	5.9
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image

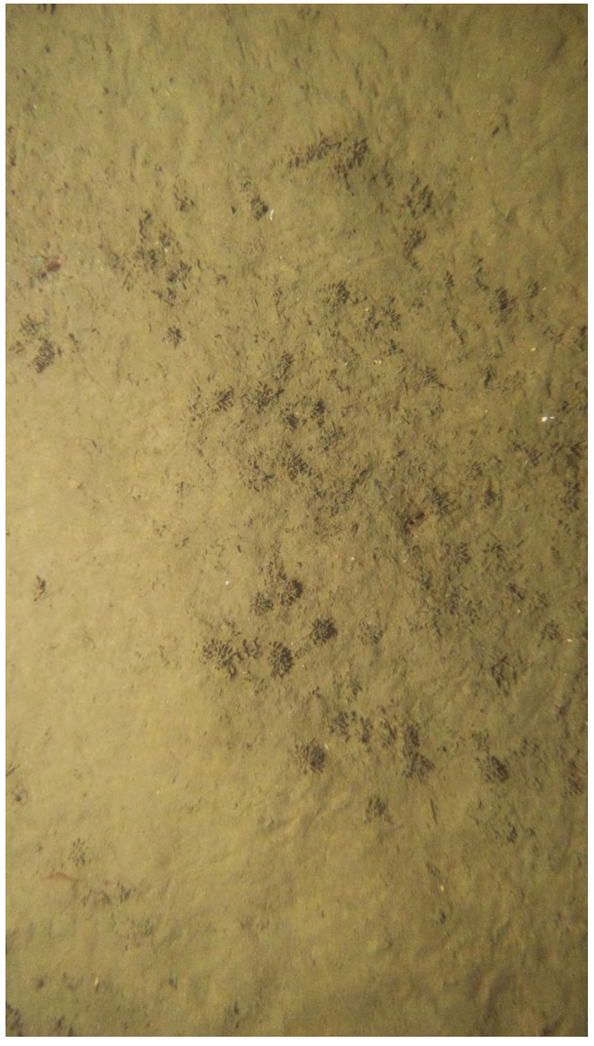


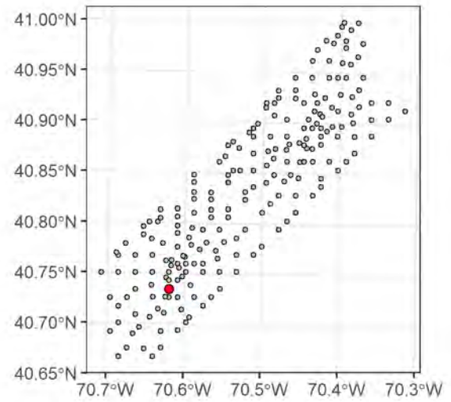
Figure F-111: IAC-028-B-PV

Sediment Profile Image



Figure F-112: IAC-028-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 17:38
Station (Replicate):	IAC-028 (2 of 2)
Depth (m):	-56
Prism Penetration (cm):	5.6
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 large bivalves, 1 smaller bivalve 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



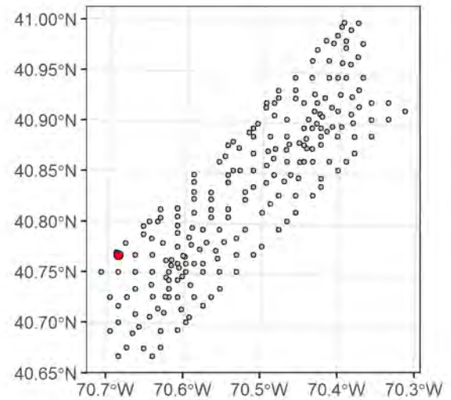
Figure F-113: IAC-029-B-PV

Sediment Profile Image



Figure F-114: IAC-029-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 02:20
Station (Replicate):	IAC-029 (1 of 2)
Depth (m):	-57.3
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, numerous crab tracks

Plan-View Image



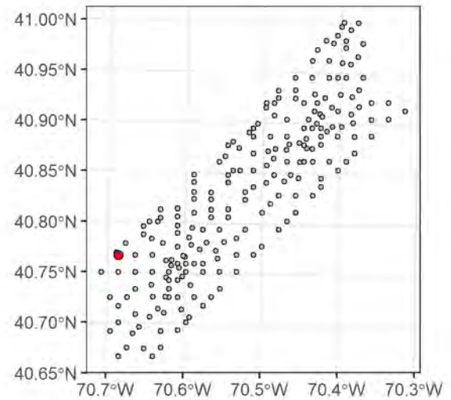
Figure F-115: IAC-029-A-PV

Sediment Profile Image



Figure F-116: IAC-029-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 02:23
Station (Replicate):	IAC-029 (2 of 2)
Depth (m):	-57.4
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	one amphipod tube cluster, numerous crab tracks

Plan-View Image

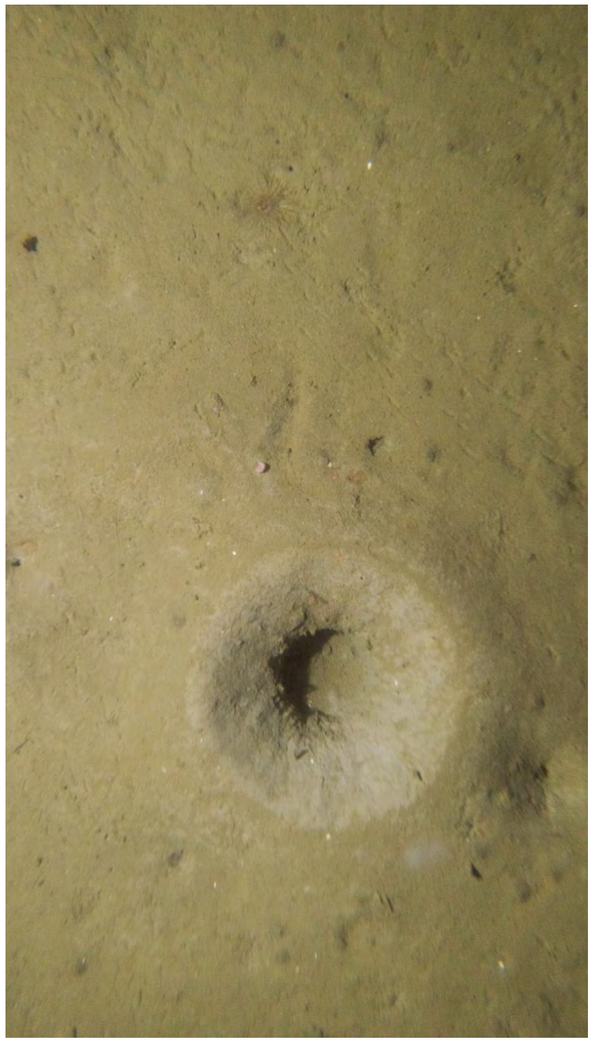


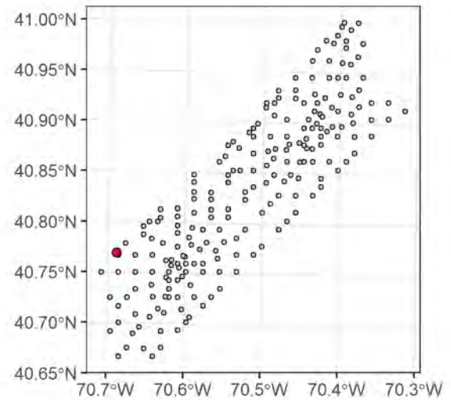
Figure F-117: IAC-030-A-PV

Sediment Profile Image



Figure F-118: IAC-030-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 01:36
Station (Replicate):	IAC-030 (1 of 2)
Depth (m):	-57.4
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few large burrows, one very large hole/feeding void, crab tracks

Plan-View Image

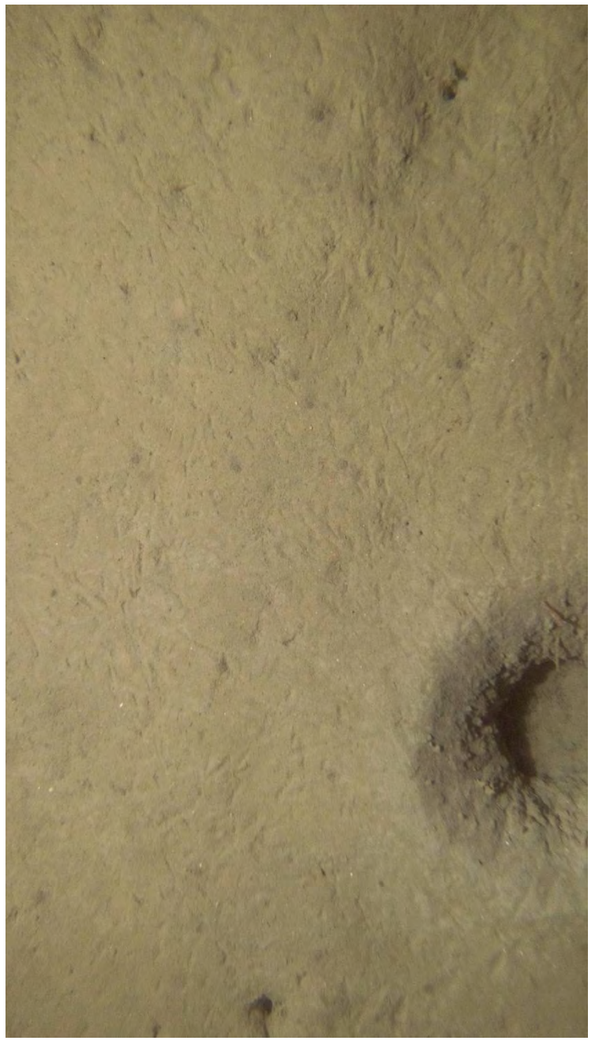


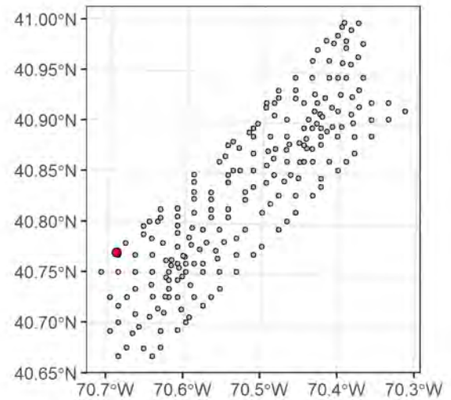
Figure F-119: IAC-030-C-PV

Sediment Profile Image



Figure F-120: IAC-030-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 01:44
Station (Replicate):	IAC-030 (2 of 2)
Depth (m):	-57.3
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few large burrows, small burrows, one very large hole/feeding void, crab tracks

Plan-View Image



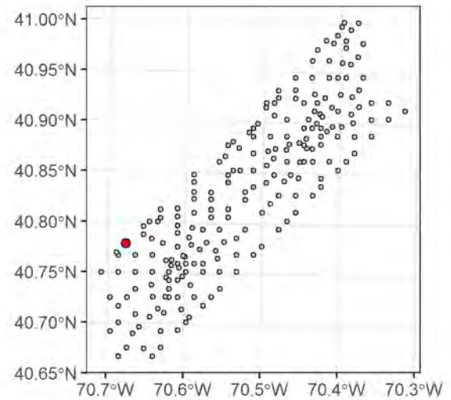
Figure F-121: IAC-031-A-PV

Sediment Profile Image



Figure F-122: IAC-031-B-SPI

Location



Attributes

Date Time (EST):	08/11/21 00:52
Station (Replicate):	IAC-031 (1 of 2)
Depth (m):	-57
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 amphipod tube clusters, few large burrows, numerous crab tracks

Plan-View Image



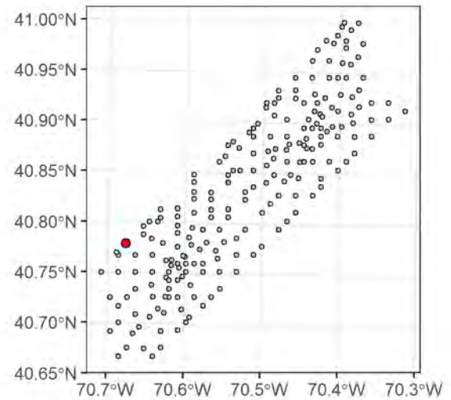
Figure F-123: IAC-031-C-PV

Sediment Profile Image



Figure F-124: IAC-031-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 00:56
Station (Replicate):	IAC-031 (2 of 2)
Depth (m):	-57
Prism Penetration (cm):	13.6
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few large burrows, numerous crab tracks

Plan-View Image

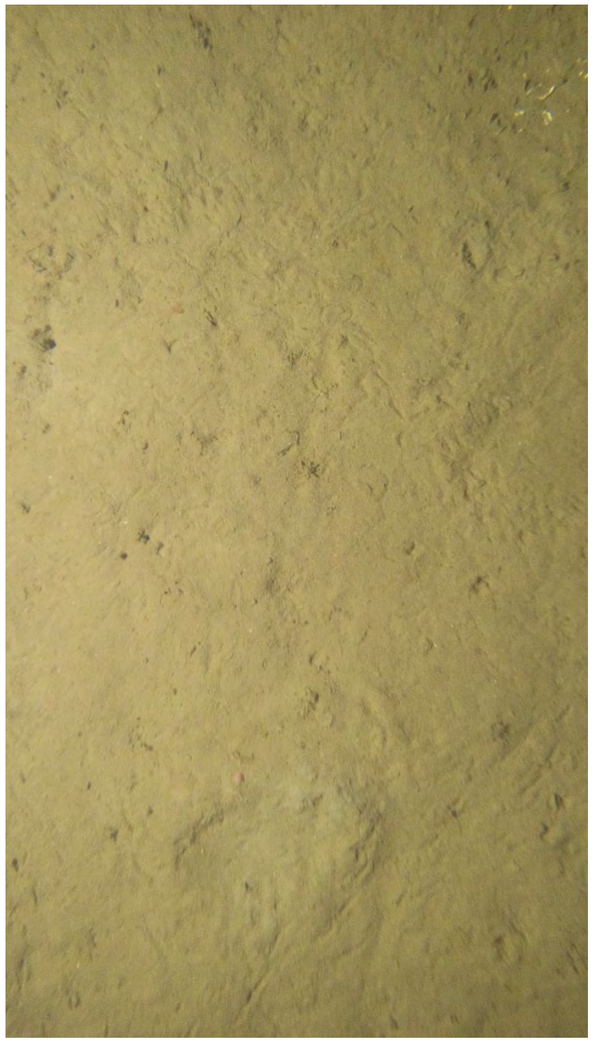


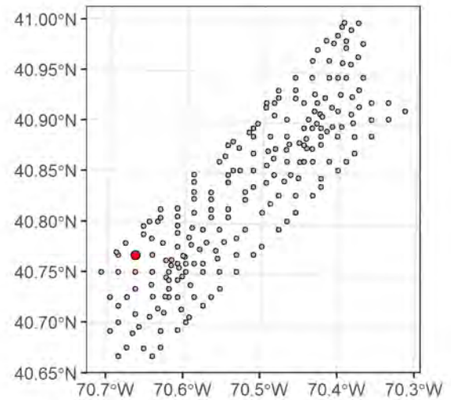
Figure F-125: IAC-032-B-PV

Sediment Profile Image



Figure F-126: IAC-032-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 23:45
Station (Replicate):	IAC-032 (1 of 2)
Depth (m):	-56.9
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, few large burrows, numerous crab tracks

Plan-View Image



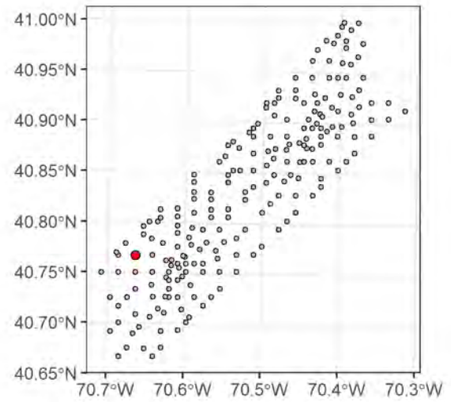
Figure F-127: IAC-032-C-PV

Sediment Profile Image



Figure F-128: IAC-032-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 23:53
Station (Replicate):	IAC-032 (2 of 2)
Depth (m):	-56.6
Prism Penetration (cm):	12.4
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp 1 Lophius americanus
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, faint crab tracks, 1 tellinid trace

Plan-View Image



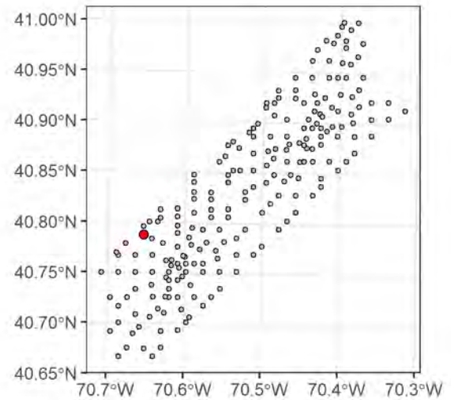
Figure F-129: IAC-033-A-PV

Sediment Profile Image



Figure F-130: IAC-033-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 16:19
Station (Replicate):	IAC-033 (1 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Ceriantharia 12 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few large burrows, abundant faint crab tracks, 1 gastropod egg case

Plan-View Image



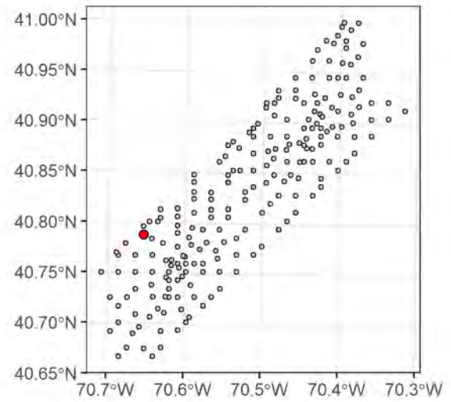
Figure F-131: IAC-033-B-PV

Sediment Profile Image



Figure F-132: IAC-033-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 16:24
Station (Replicate):	IAC-033 (2 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Ceriantharia 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, abundant crab tracks

Plan-View Image



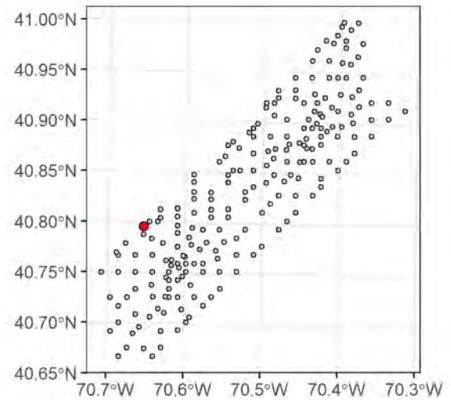
Figure F-133: IAC-034-A-PV

Sediment Profile Image



Figure F-134: IAC-034-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 15:37
Station (Replicate):	IAC-034 (1 of 2)
Depth (m):	-54.5
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp 2 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, abundant crab tracks

Plan-View Image

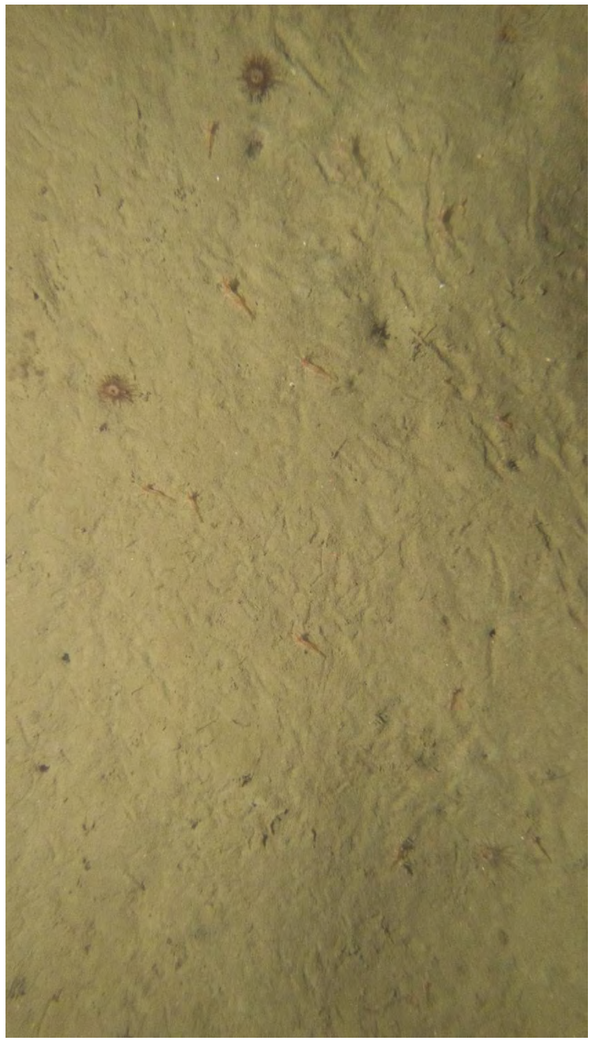


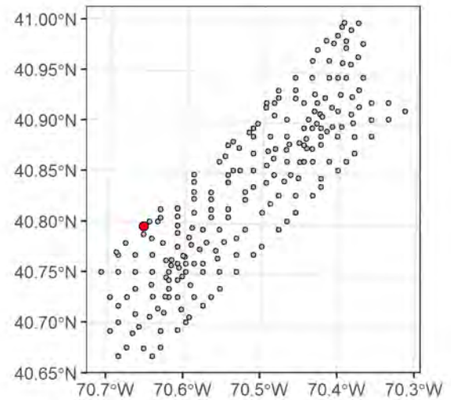
Figure F-135: IAC-034-C-PV

Sediment Profile Image



Figure F-136: IAC-034-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 15:46
Station (Replicate):	IAC-034 (2 of 2)
Depth (m):	-54.6
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 Ceriantharia 12 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, abundant crab tracks

Plan-View Image

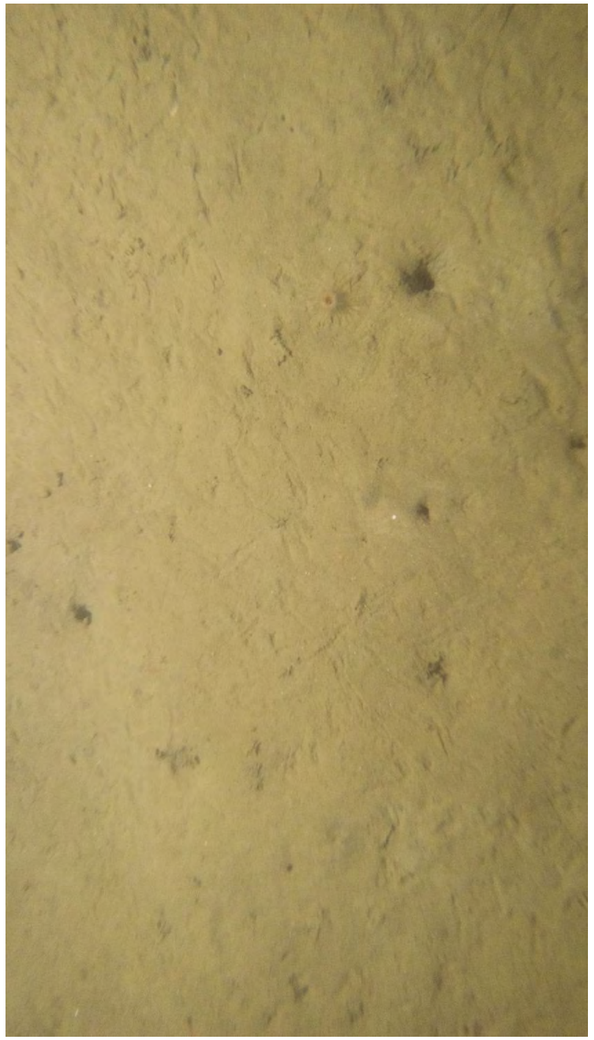


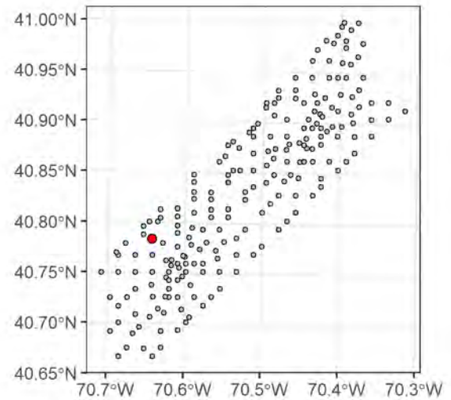
Figure F-137: IAC-035-A-PV

Sediment Profile Image



Figure F-138: IAC-035-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 17:06
Station (Replicate):	IAC-035 (1 of 2)
Depth (m):	-55
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Ceriantharia
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, crab tracks

Plan-View Image

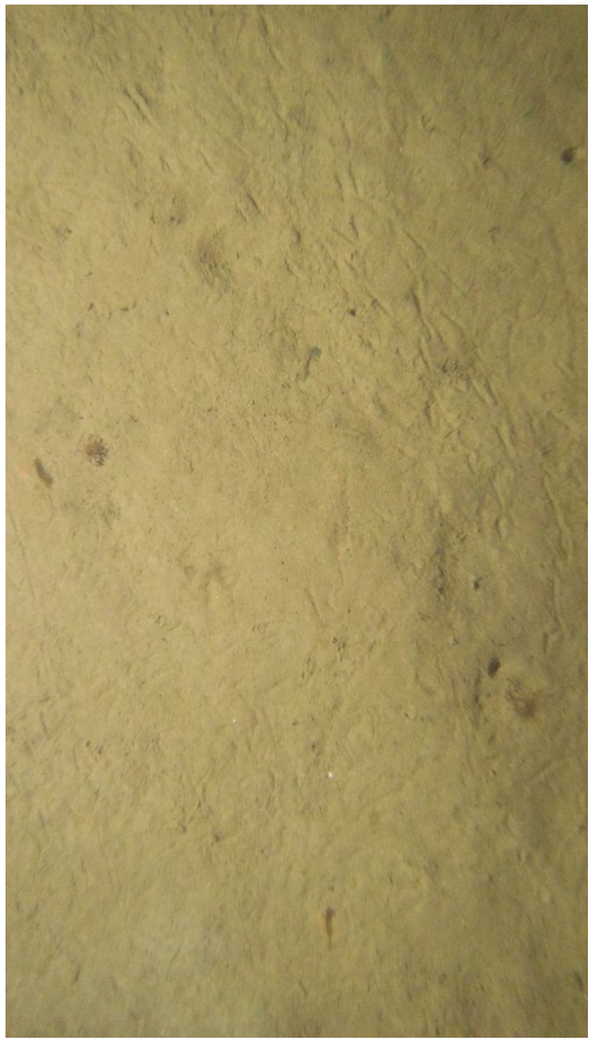


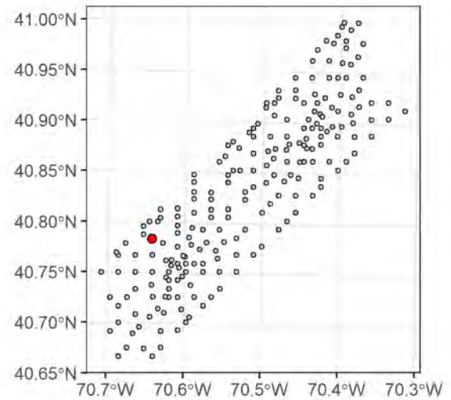
Figure F-139: IAC-035-C-PV

Sediment Profile Image



Figure F-140: IAC-035-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 17:10
Station (Replicate):	IAC-035 (2 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, crab tracks

Plan-View Image



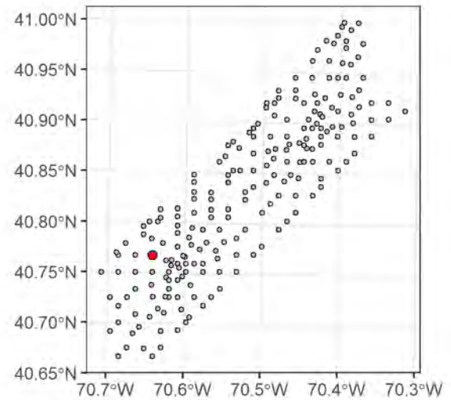
Figure F-141: IAC-036-B-PV

Sediment Profile Image



Figure F-142: IAC-036-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 23:00
Station (Replicate):	IAC-036 (1 of 2)
Depth (m):	-56.6
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	0.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, crab tracks

Plan-View Image



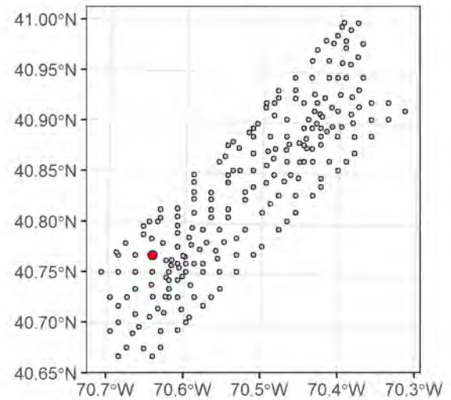
Figure F-143: IAC-036-A-PV

Sediment Profile Image



Figure F-144: IAC-036-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 23:05
Station (Replicate):	IAC-036 (2 of 2)
Depth (m):	-56.6
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	0.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, crab tracks, 1 large hole/feeding void

Plan-View Image



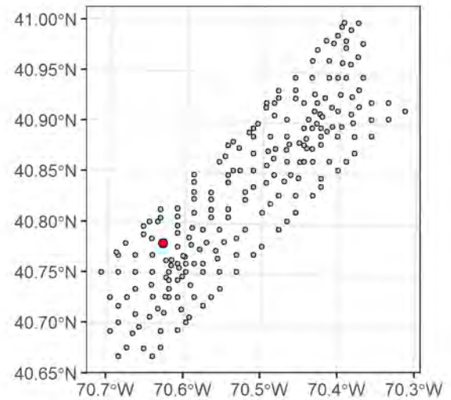
Figure F-145: IAC-037-A-PV

Sediment Profile Image



Figure F-146: IAC-037-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 17:45
Station (Replicate):	IAC-037 (1 of 2)
Depth (m):	-54.9
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, crab tracks

Plan-View Image



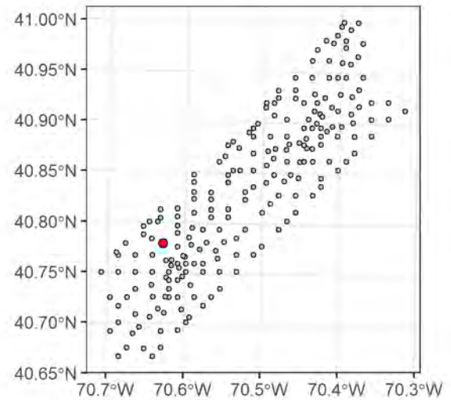
Figure F-147: IAC-037-C-PV

Sediment Profile Image



Figure F-148: IAC-037-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 17:53
Station (Replicate):	IAC-037 (2 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	9 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few large burrows, crab tracks

Plan-View Image

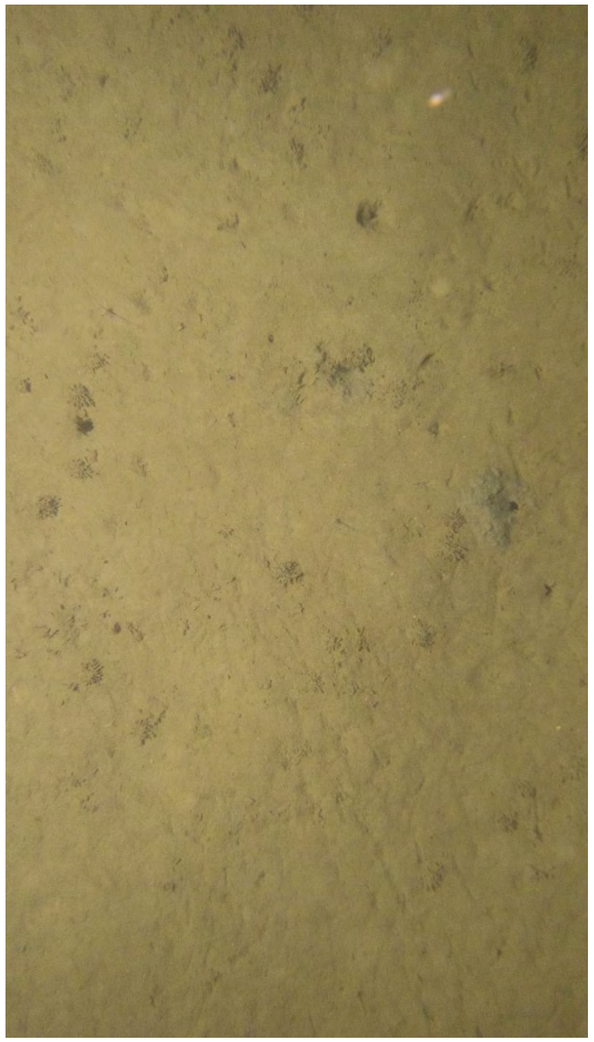


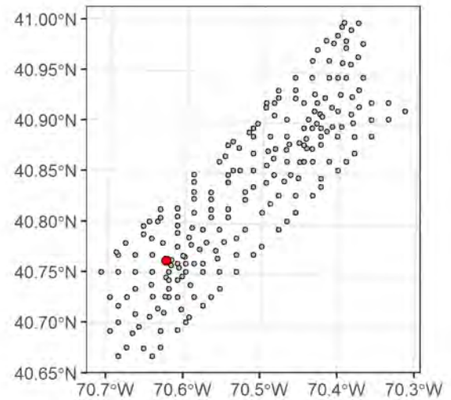
Figure F-149: IAC-038-A-PV

Sediment Profile Image



Figure F-150: IAC-038-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 22:07
Station (Replicate):	IAC-038 (1 of 2)
Depth (m):	-56.7
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows (1 down to reduced sediment), crab tracks

Plan-View Image



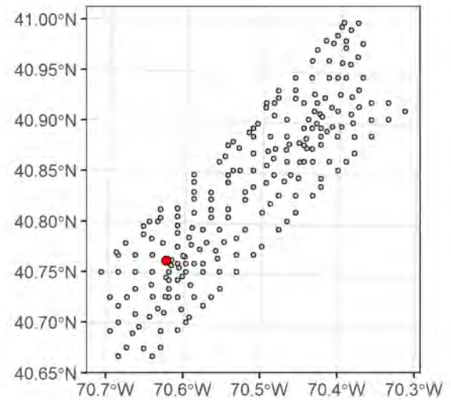
Figure F-151: IAC-038-B-PV

Sediment Profile Image



Figure F-152: IAC-038-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 22:17
Station (Replicate):	IAC-038 (2 of 2)
Depth (m):	-56.7
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	0.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few large burrows, crab tracks

Plan-View Image



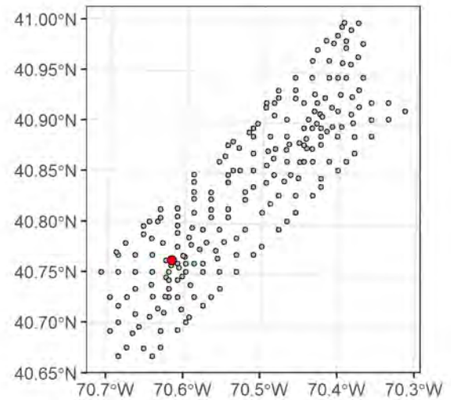
Figure F-153: IAC-039-B-PV

Sediment Profile Image



Figure F-154: IAC-039-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 21:26
Station (Replicate):	IAC-039 (1 of 2)
Depth (m):	-56.5
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, crab tracks

Plan-View Image



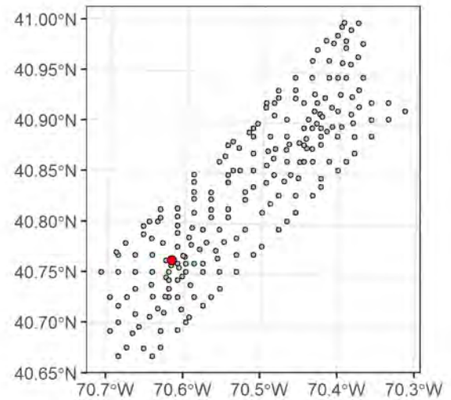
Figure F-155: IAC-039-C-PV

Sediment Profile Image



Figure F-156: IAC-039-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 21:35
Station (Replicate):	IAC-039 (2 of 2)
Depth (m):	-56.6
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, few large burrows, crab tracks

Plan-View Image



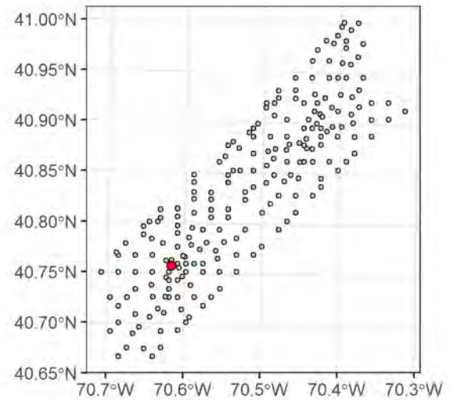
Figure F-157: IAC-040-A-PV

Sediment Profile Image



Figure F-158: IAC-040-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 20:43
Station (Replicate):	IAC-040 (1 of 2)
Depth (m):	-56.5
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, few large burrows, faint crab tracks

Plan-View Image



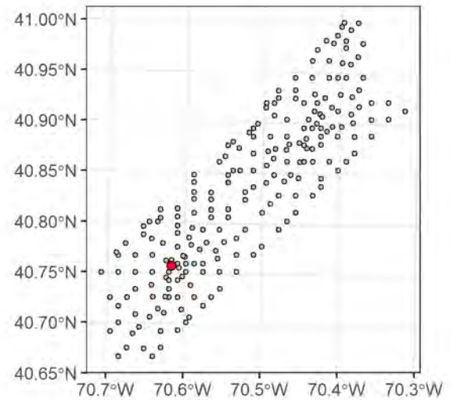
Figure F-159: IAC-040-B-PV

Sediment Profile Image



Figure F-160: IAC-040-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 20:53
Station (Replicate):	IAC-040 (2 of 2)
Depth (m):	-56.5
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids 5 shrimp, 1 small crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few large burrows, crab tracks, 5 gastropod egg cases

Plan-View Image



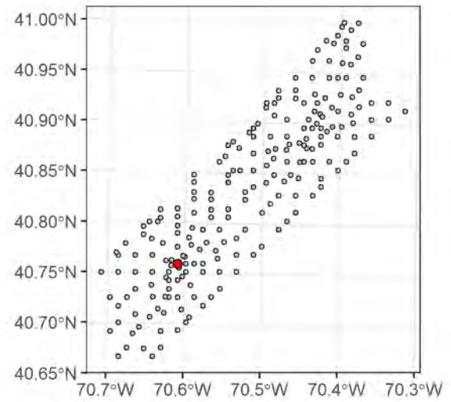
Figure F-161: IAC-041-A-PV

Sediment Profile Image



Figure F-162: IAC-041-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 14:24
Station (Replicate):	IAC-041 (1 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	12.1
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, faint crab tracks

Plan-View Image



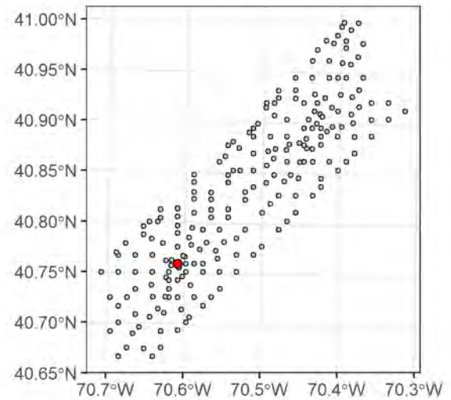
Figure F-163: IAC-041-C-PV

Sediment Profile Image



Figure F-164: IAC-041-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 14:33
Station (Replicate):	IAC-041 (2 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few large and small burrows, faint crab tracks

Plan-View Image



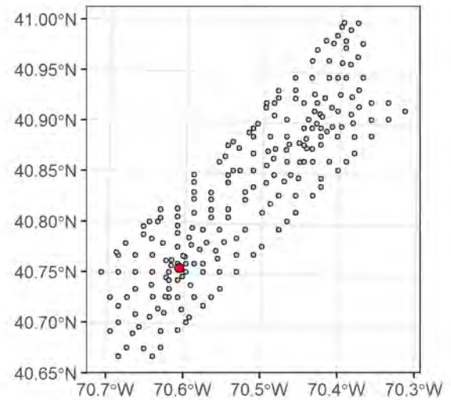
Figure F-165: IAC-042-A-PV

Sediment Profile Image



Figure F-166: IAC-042-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 15:02
Station (Replicate):	IAC-042 (1 of 2)
Depth (m):	-55.2
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, 1 gastropod (?) egg case

Plan-View Image



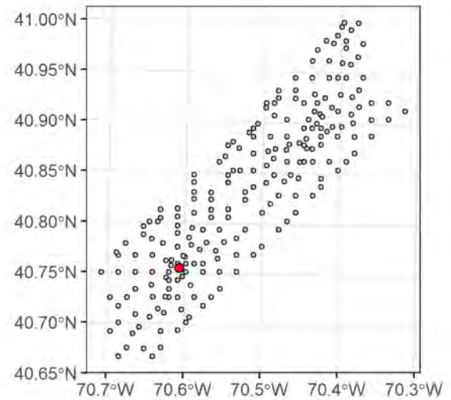
Figure F-167: IAC-042-B-PV

Sediment Profile Image



Figure F-168: IAC-042-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 15:06
Station (Replicate):	IAC-042 (2 of 2)
Depth (m):	-55.4
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	1.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



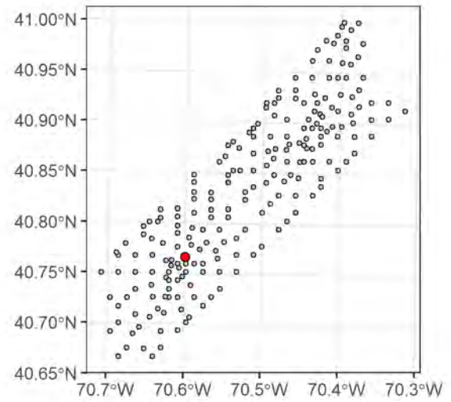
Figure F-169: IAC-043-A-PV

Sediment Profile Image



Figure F-170: IAC-043-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 19:25
Station (Replicate):	IAC-043 (1 of 2)
Depth (m):	-54.7
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



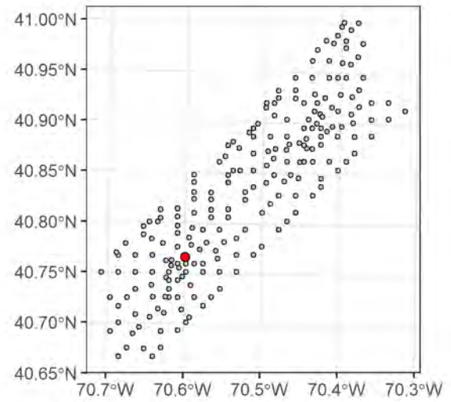
Figure F-171: IAC-043-B-PV

Sediment Profile Image



Figure F-172: IAC-043-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 19:33
Station (Replicate):	IAC-043 (2 of 2)
Depth (m):	-54.7
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



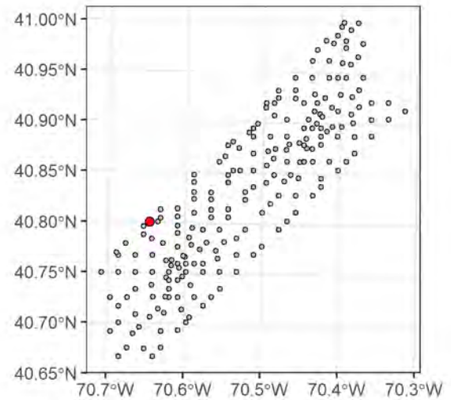
Figure F-173: IAC-044-A-PV

Sediment Profile Image



Figure F-174: IAC-044-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 14:56
Station (Replicate):	IAC-044 (1 of 2)
Depth (m):	-53.3
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing anemone 8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks

Plan-View Image

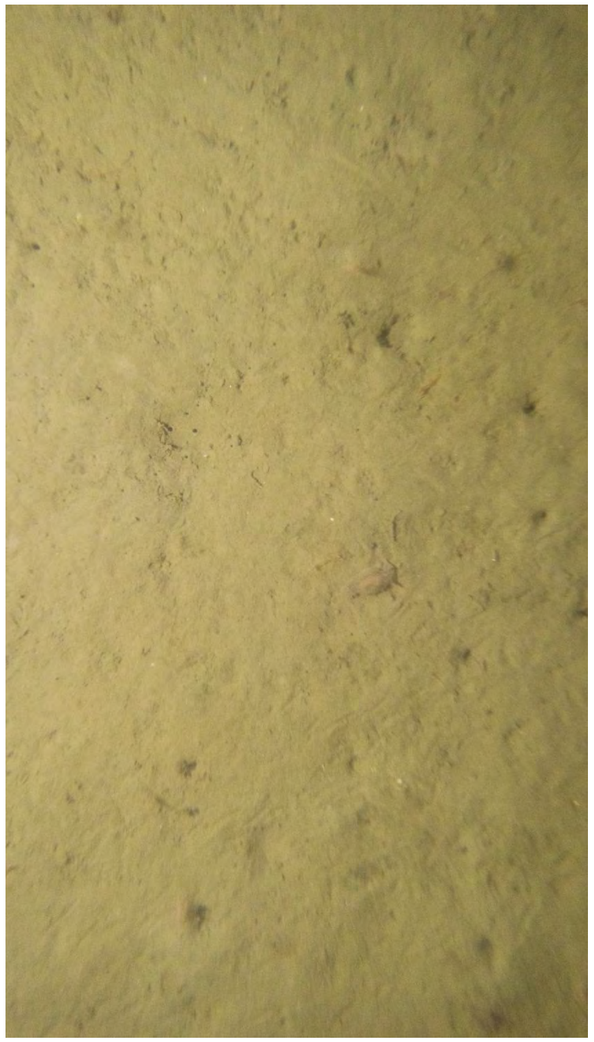


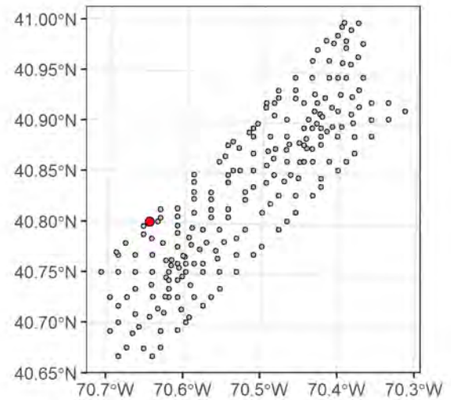
Figure F-175: IAC-044-B-PV

Sediment Profile Image



Figure F-176: IAC-044-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 15:00
Station (Replicate):	IAC-044 (2 of 2)
Depth (m):	-53.4
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab tracks

Plan-View Image



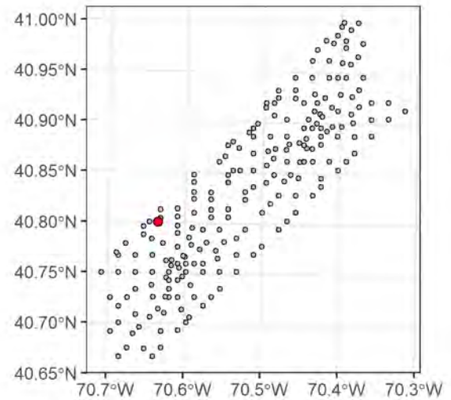
Figure F-177: IAC-045-A-PV

Sediment Profile Image



Figure F-178: IAC-045-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 14:11
Station (Replicate):	IAC-045 (1 of 2)
Depth (m):	-53.5
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab tracks

Plan-View Image



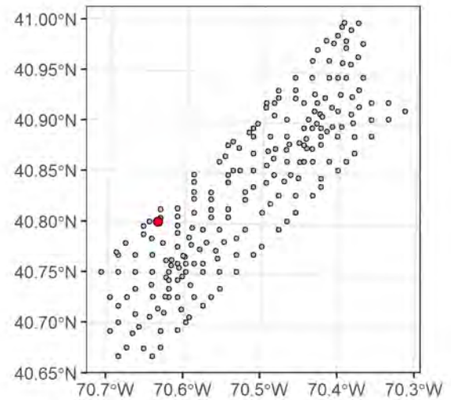
Figure F-179: IAC-045-C-PV

Sediment Profile Image



Figure F-180: IAC-045-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 14:15
Station (Replicate):	IAC-045 (2 of 2)
Depth (m):	-53.5
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks

Plan-View Image



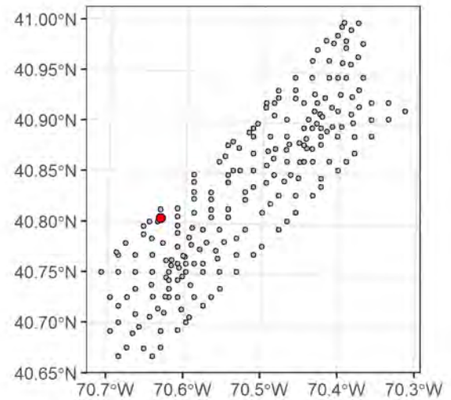
Figure F-181: IAC-046-B-PV

Sediment Profile Image



Figure F-182: IAC-046-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 13:24
Station (Replicate):	IAC-046 (1 of 2)
Depth (m):	-53
Prism Penetration (cm):	13
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



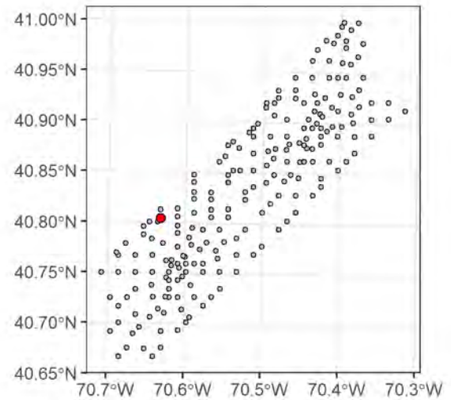
Figure F-183: IAC-046-A-PV

Sediment Profile Image



Figure F-184: IAC-046-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 13:28
Station (Replicate):	IAC-046 (2 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab tracks

Plan-View Image



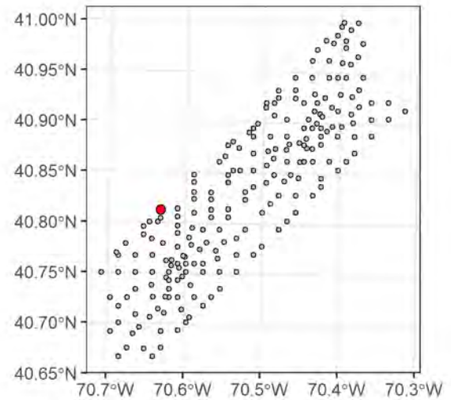
Figure F-185: IAC-047-A-PV

Sediment Profile Image



Figure F-186: IAC-047-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 12:32
Station (Replicate):	IAC-047 (1 of 2)
Depth (m):	-53.2
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 Ceriantharia 7 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab tracks, one large hole/feeding void

Plan-View Image



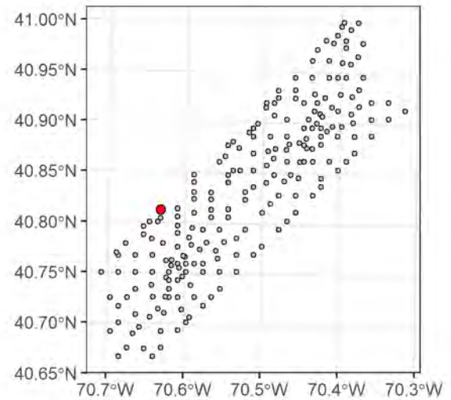
Figure F-187: IAC-047-B-PV

Sediment Profile Image



Figure F-188: IAC-047-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 12:37
Station (Replicate):	IAC-047 (2 of 2)
Depth (m):	-53.3
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab tracks

Plan-View Image

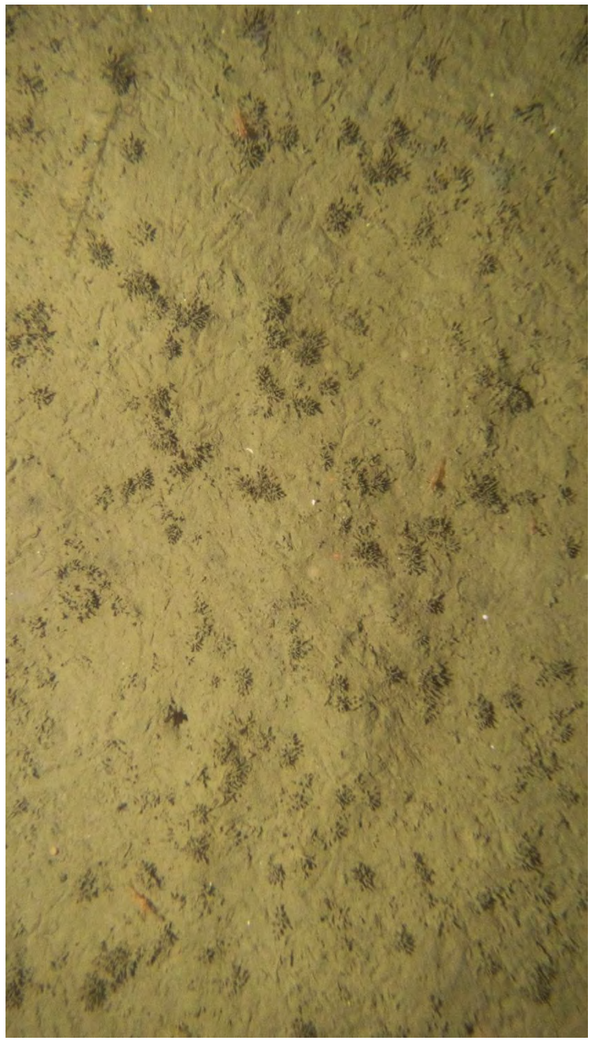


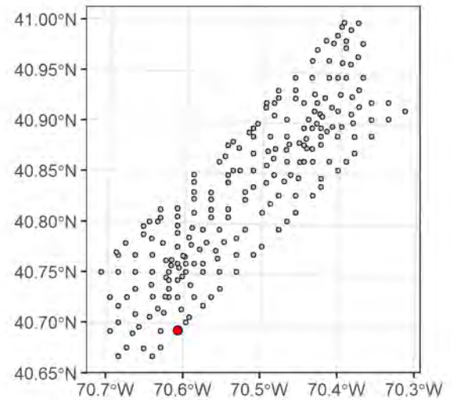
Figure F-189: IAC-048-A-PV

Sediment Profile Image



Figure F-190: IAC-048-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 17:02
Station (Replicate):	IAC-048 (1 of 2)
Depth (m):	-56.9
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroid 3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

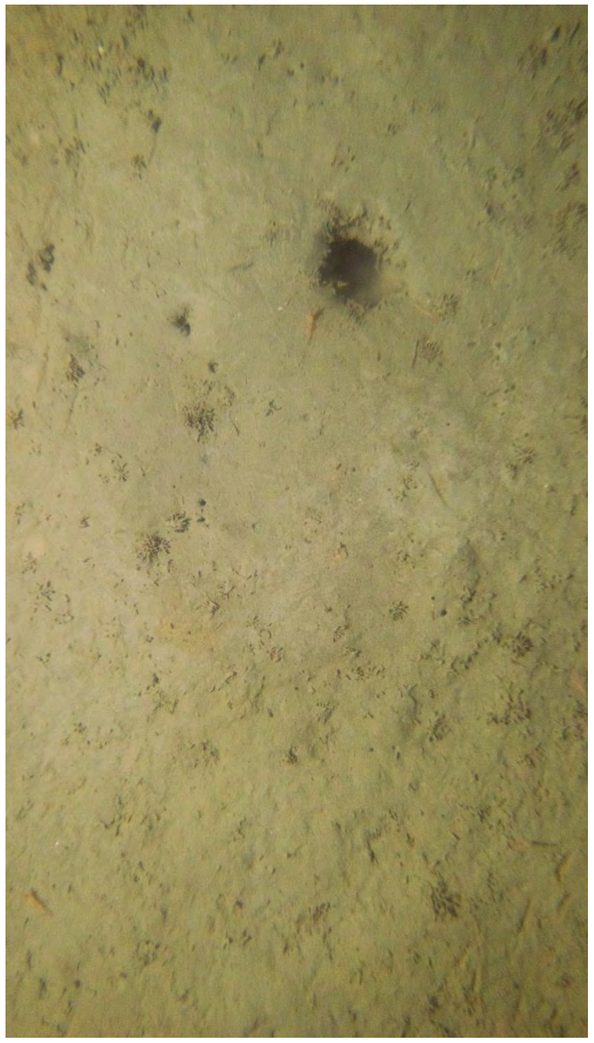


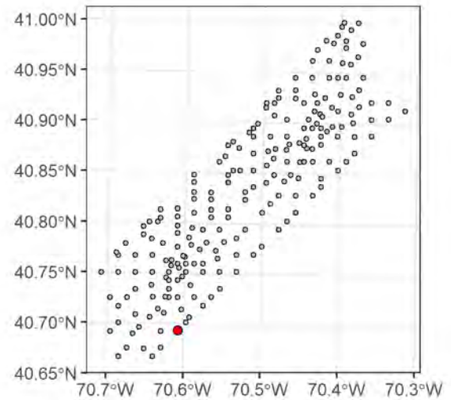
Figure F-191: IAC-048-C-PV

Sediment Profile Image



Figure F-192: IAC-048-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 17:14
Station (Replicate):	IAC-048 (2 of 2)
Depth (m):	-56.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks, one very large burrow

Plan-View Image

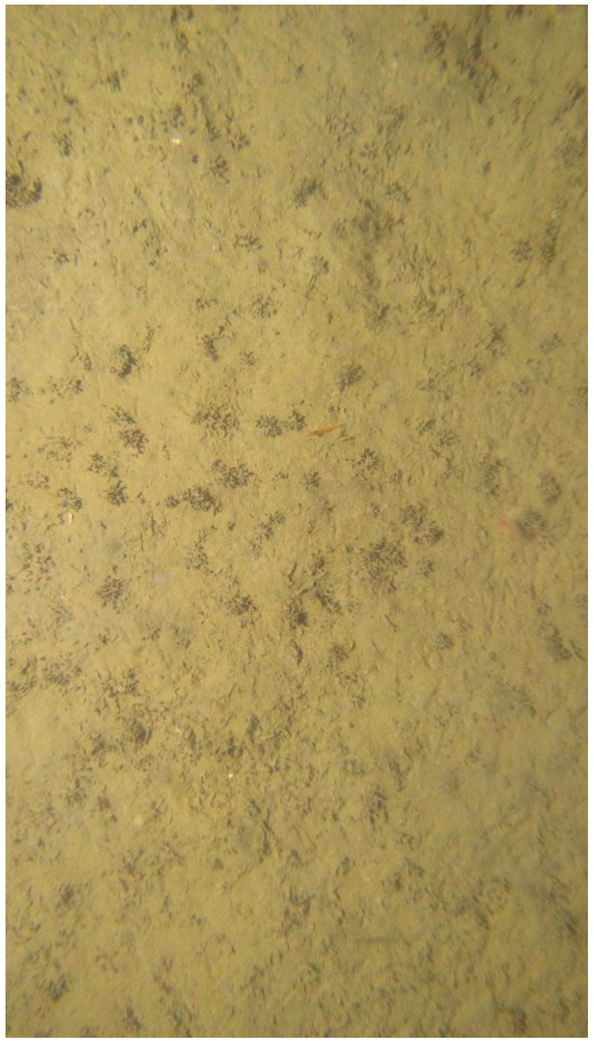


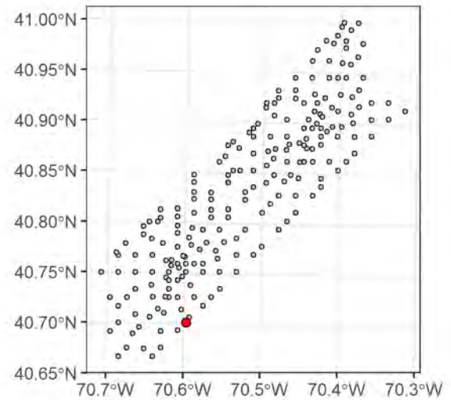
Figure F-193: IAC-049-C-PV

Sediment Profile Image



Figure F-194: IAC-049-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 16:18
Station (Replicate):	IAC-049 (1 of 2)
Depth (m):	-56.2
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

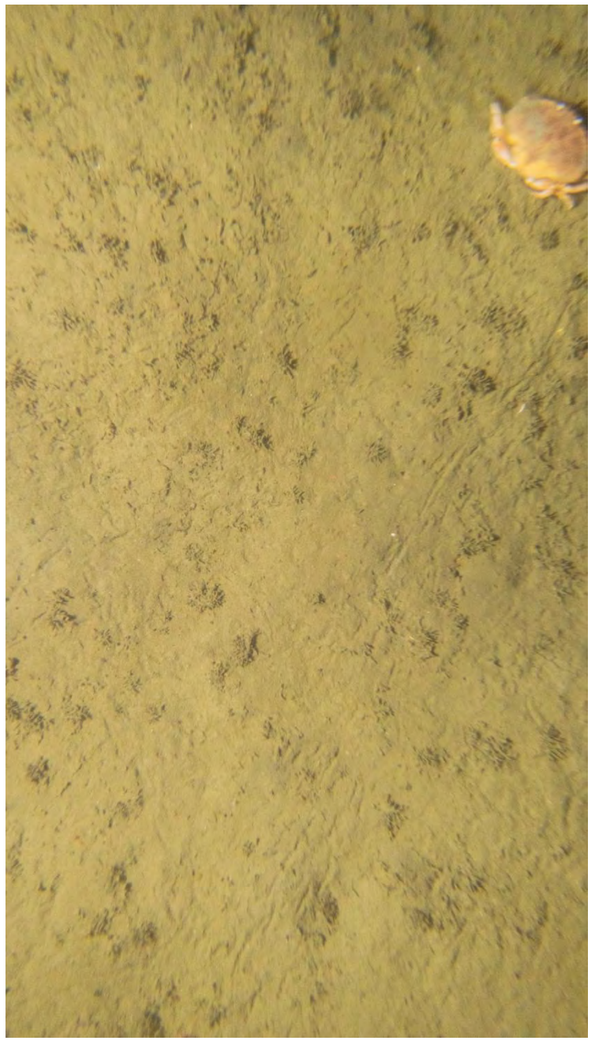


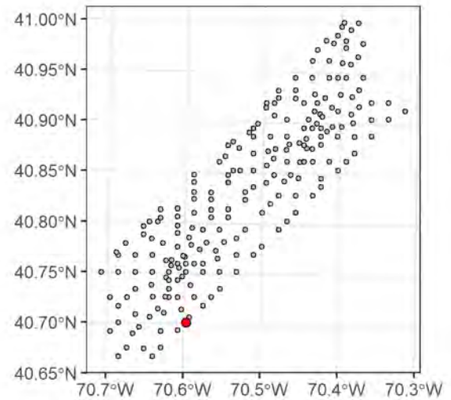
Figure F-195: IAC-049-B-PV

Sediment Profile Image



Figure F-196: IAC-049-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 16:24
Station (Replicate):	IAC-049 (2 of 2)
Depth (m):	-56.3
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer irroratus
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



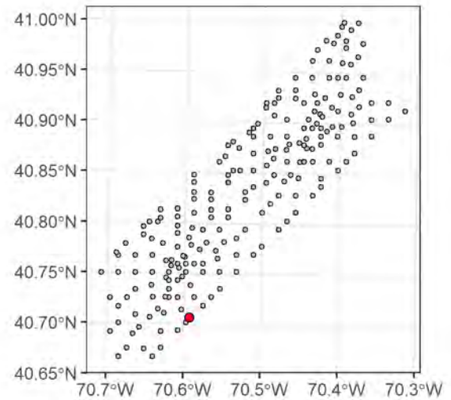
Figure F-197: IAC-050-A-PV

Sediment Profile Image



Figure F-198: IAC-050-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 15:23
Station (Replicate):	IAC-050 (1 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

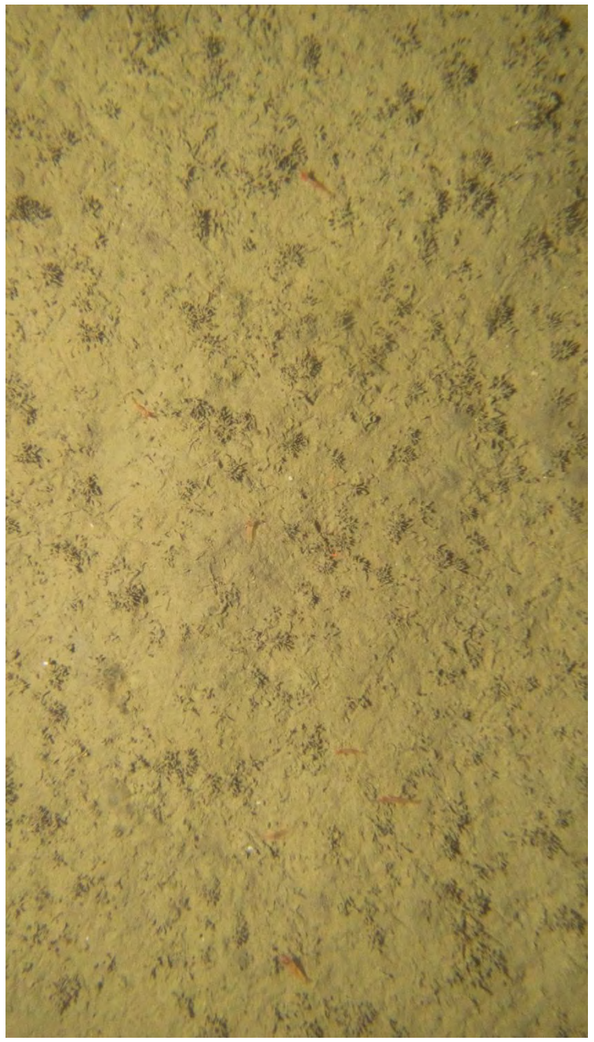


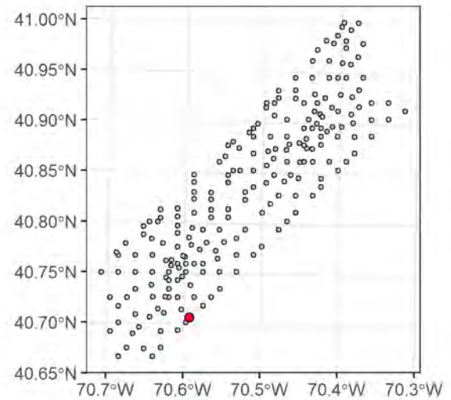
Figure F-199: IAC-050-B-PV

Sediment Profile Image



Figure F-200: IAC-050-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 15:34
Station (Replicate):	IAC-050 (2 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	7 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

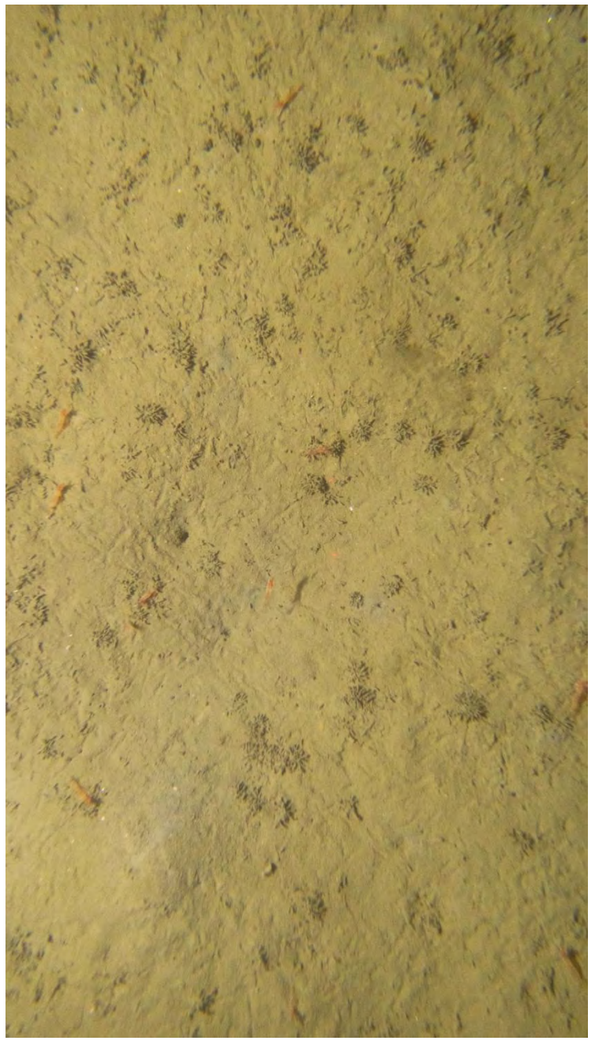


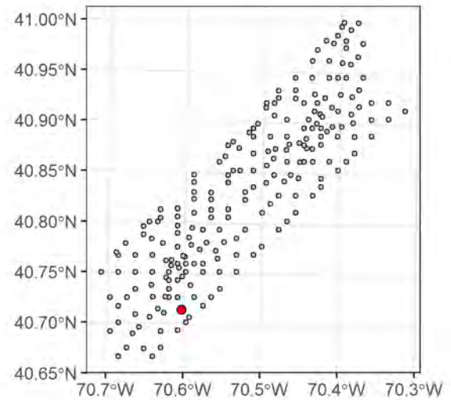
Figure F-201: IAC-051-A-PV

Sediment Profile Image



Figure F-202: IAC-051-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 14:36
Station (Replicate):	IAC-051 (1 of 2)
Depth (m):	-56.4
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	10 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

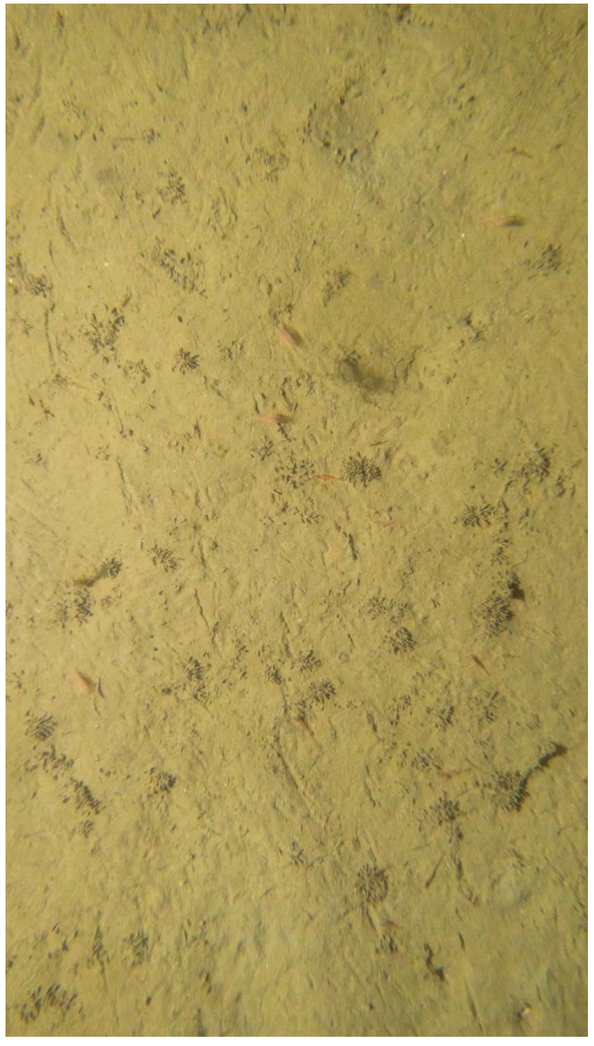


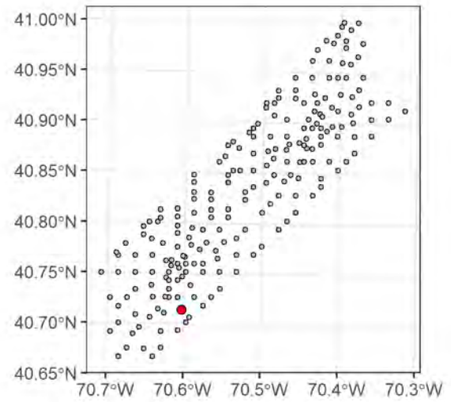
Figure F-203: IAC-051-C-PV

Sediment Profile Image



Figure F-204: IAC-051-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 14:42
Station (Replicate):	IAC-051 (2 of 2)
Depth (m):	-56.4
Prism Penetration (cm):	10.3
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	9 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

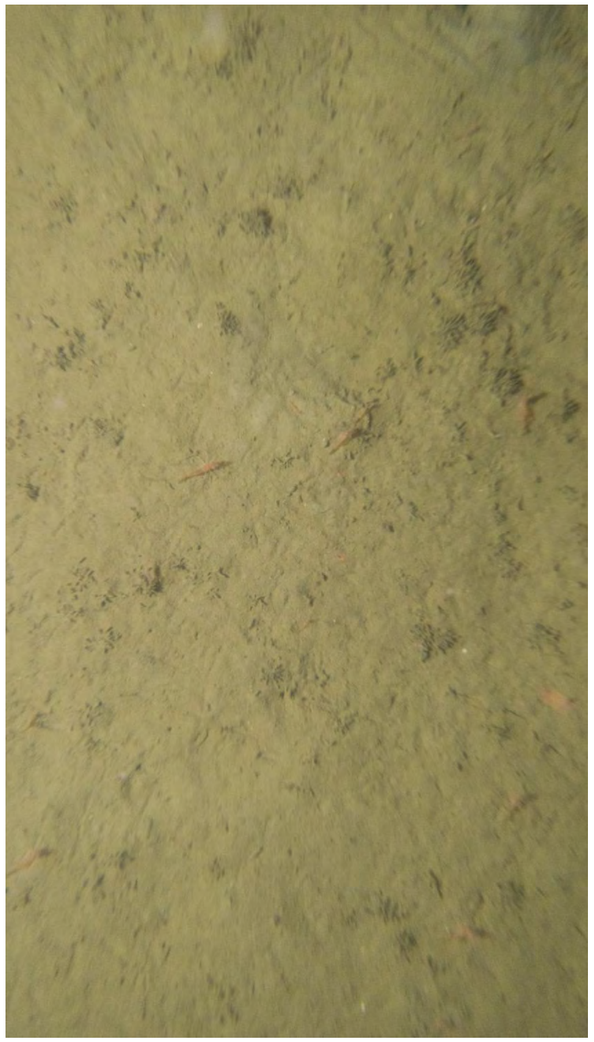


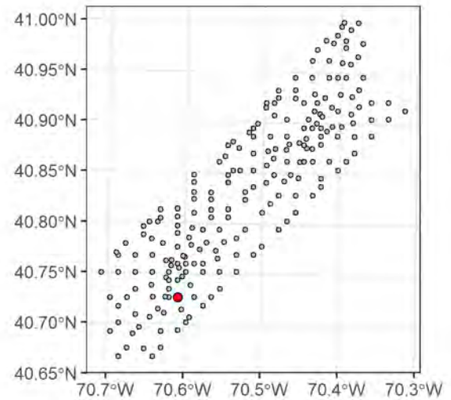
Figure F-205: IAC-052-A-PV

Sediment Profile Image



Figure F-206: IAC-052-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 07:57
Station (Replicate):	IAC-052 (1 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

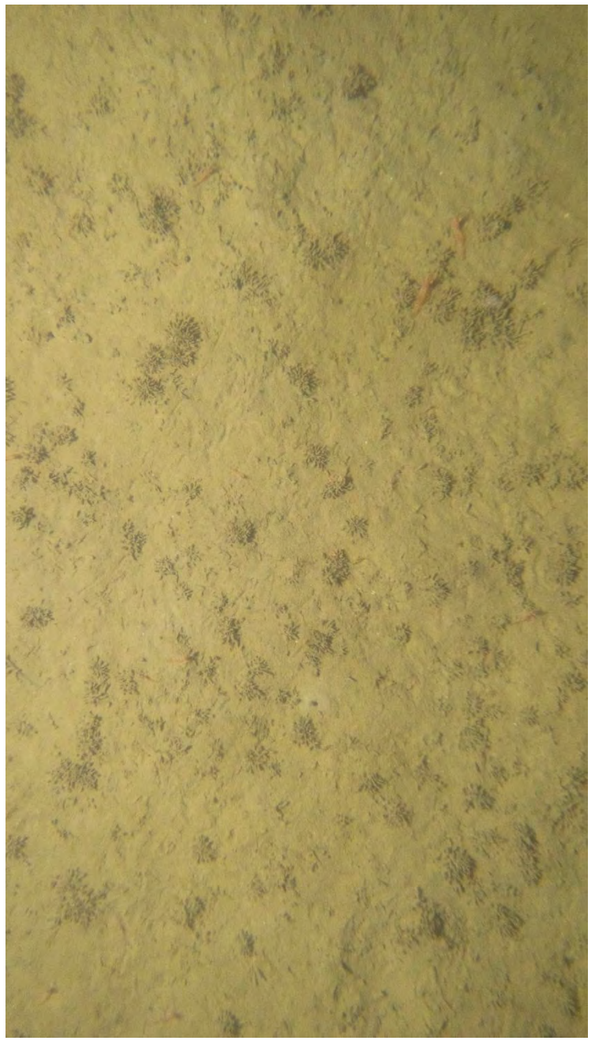


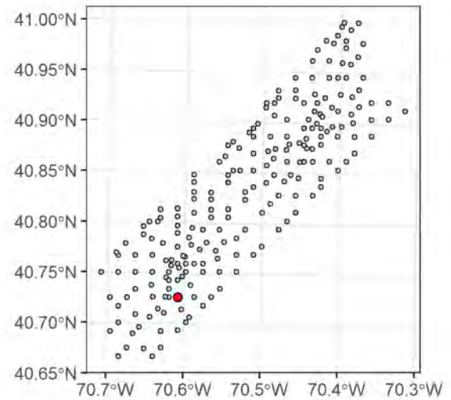
Figure F-207: IAC-052-B-PV

Sediment Profile Image



Figure F-208: IAC-052-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 08:16
Station (Replicate):	IAC-052 (2 of 2)
Depth (m):	-53.2
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	7 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

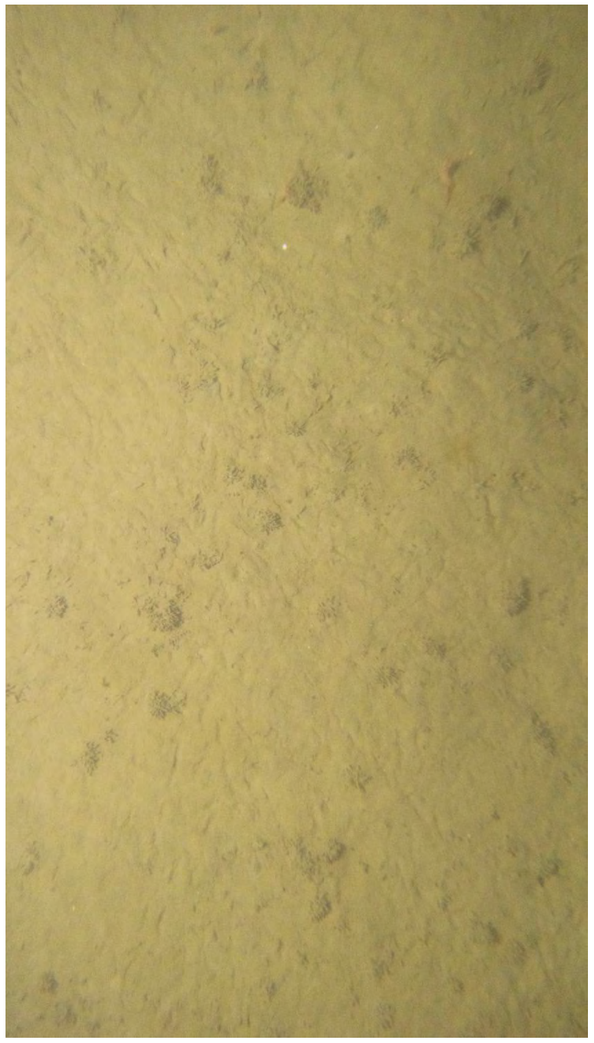


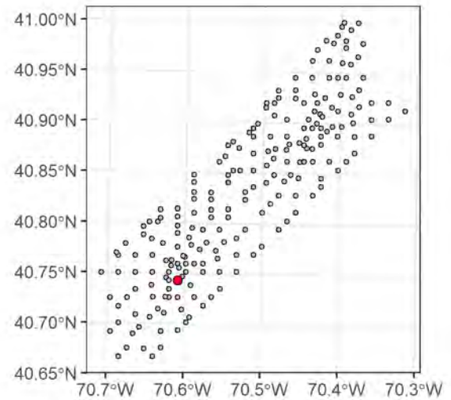
Figure F-209: IAC-053-B-PV

Sediment Profile Image



Figure F-210: IAC-053-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 16:59
Station (Replicate):	IAC-053 (1 of 2)
Depth (m):	-55.8
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



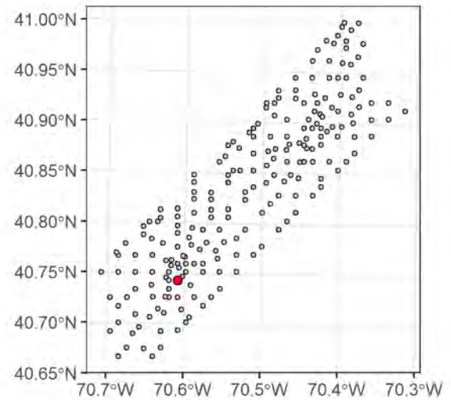
Figure F-211: IAC-053-A-PV

Sediment Profile Image



Figure F-212: IAC-053-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 17:04
Station (Replicate):	IAC-053 (2 of 2)
Depth (m):	-55.7
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



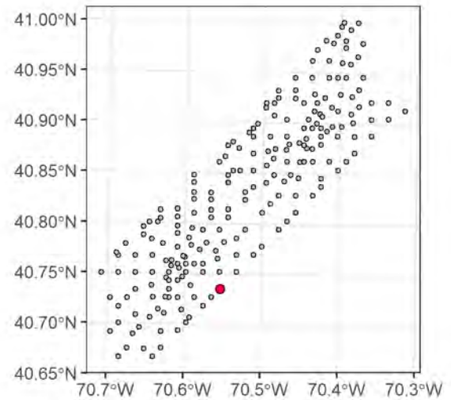
Figure F-213: IAC-054-B-PV

Sediment Profile Image



Figure F-214: IAC-054-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 10:25
Station (Replicate):	IAC-054 (1 of 2)
Depth (m):	-55.2
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	5.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 hydroid 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, numerous crab tracks

Plan-View Image



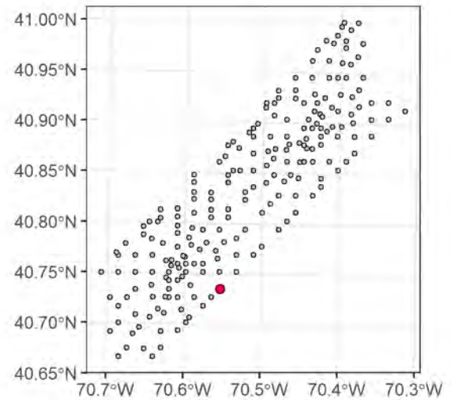
Figure F-215: IAC-054-A-PV

Sediment Profile Image



Figure F-216: IAC-054-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 10:32
Station (Replicate):	IAC-054 (2 of 2)
Depth (m):	-55.1
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, numerous crab tracks

Plan-View Image



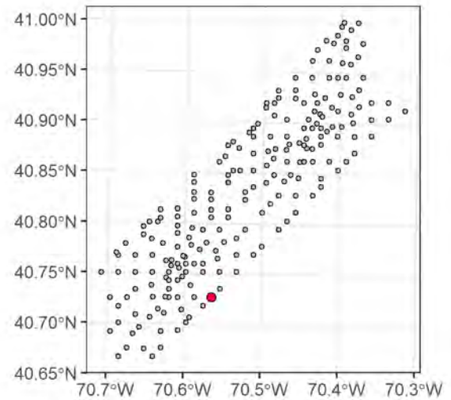
Figure F-217: IAC-055-B-PV

Sediment Profile Image



Figure F-218: IAC-055-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 11:23
Station (Replicate):	IAC-055 (1 of 2)
Depth (m):	-55.8
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, numerous crab tracks

Plan-View Image

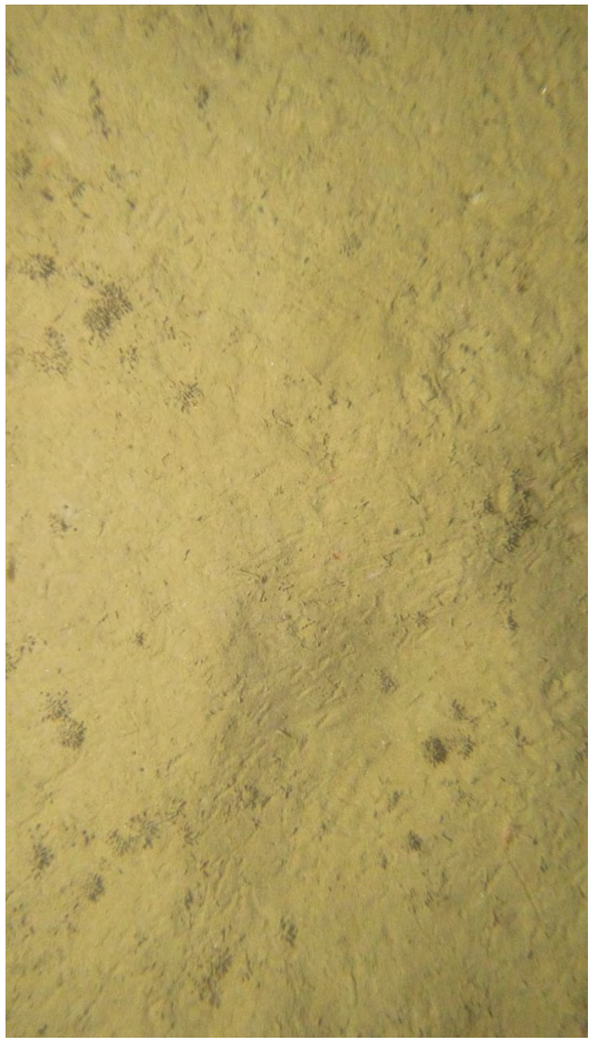


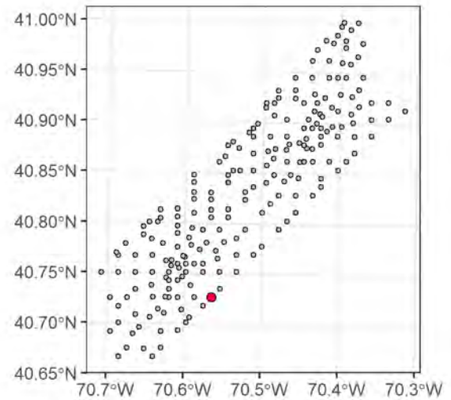
Figure F-219: IAC-055-A-PV

Sediment Profile Image



Figure F-220: IAC-055-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 11:28
Station (Replicate):	IAC-055 (2 of 2)
Depth (m):	-55.9
Prism Penetration (cm):	13.6
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, numerous crab tracks

Plan-View Image



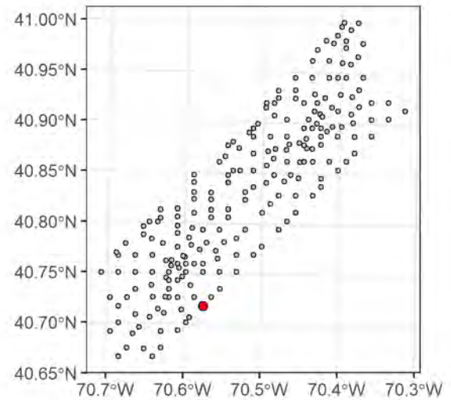
Figure F-221: IAC-056-B-PV

Sediment Profile Image



Figure F-222: IAC-056-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 12:41
Station (Replicate):	IAC-056 (1 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

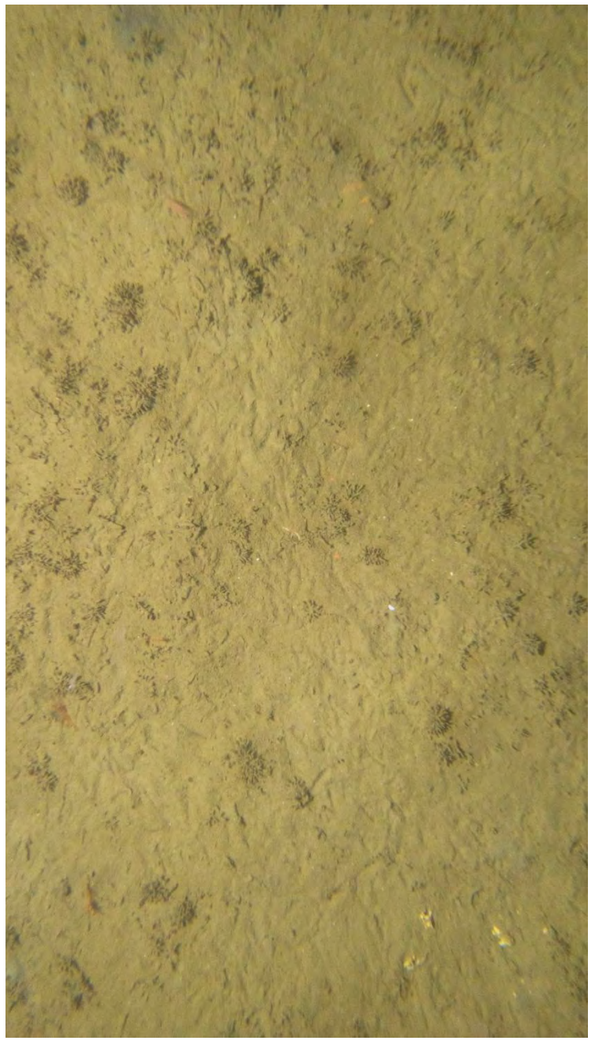


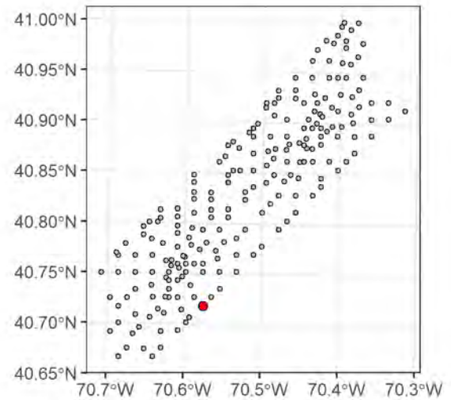
Figure F-223: IAC-056-A-PV

Sediment Profile Image



Figure F-224: IAC-056-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 12:46
Station (Replicate):	IAC-056 (2 of 2)
Depth (m):	-56.1
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, numerous crab tracks

Plan-View Image

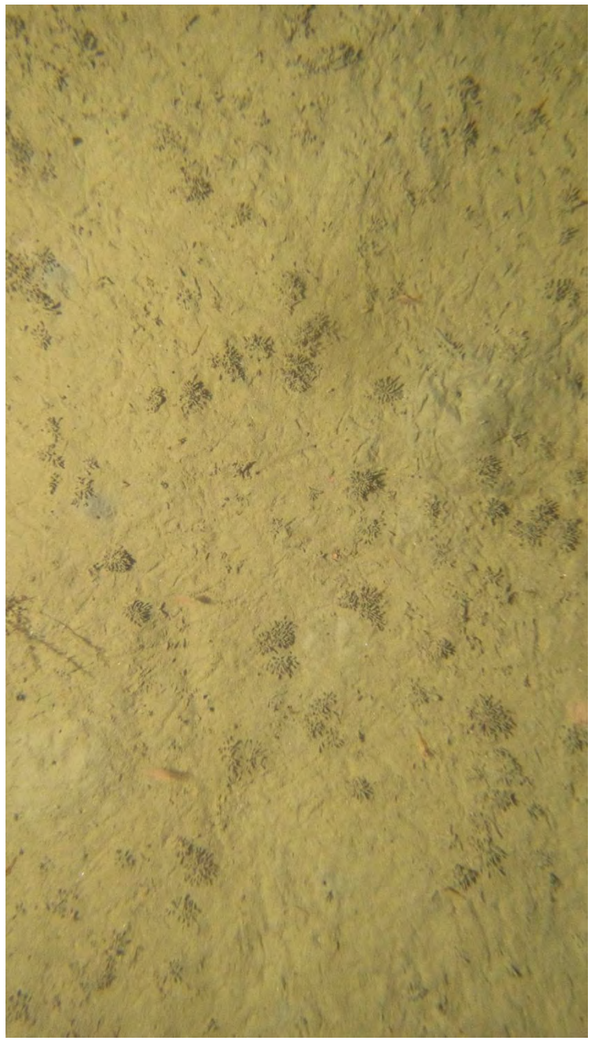


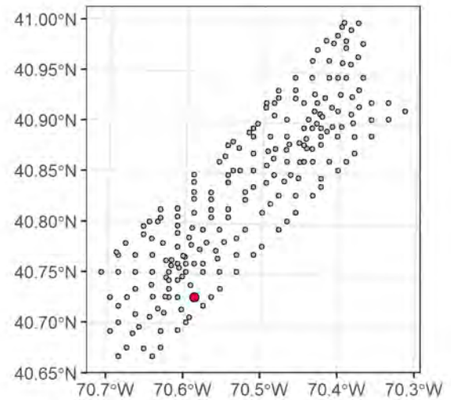
Figure F-225: IAC-057-A-PV

Sediment Profile Image



Figure F-226: IAC-057-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 13:43
Station (Replicate):	IAC-057 (1 of 2)
Depth (m):	-56
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image

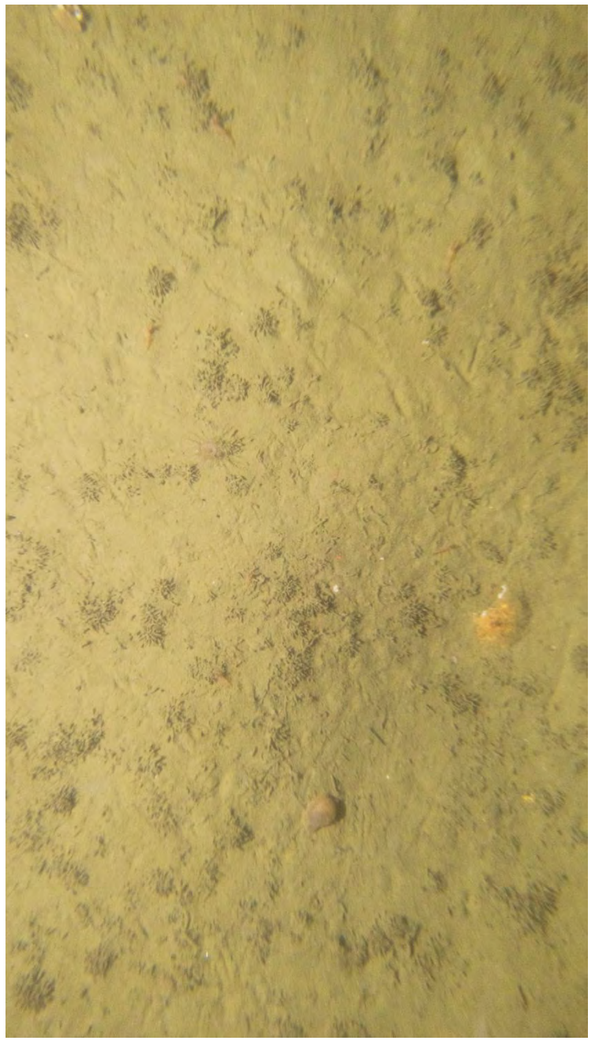


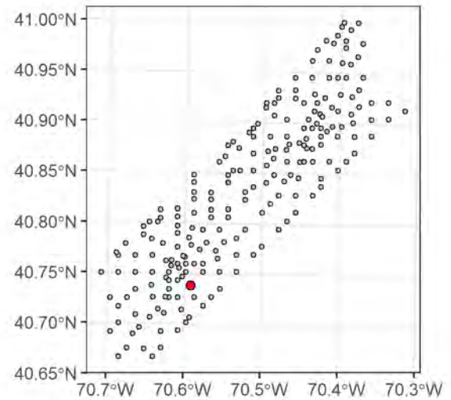
Figure F-227: IAC-058-A-PV

Sediment Profile Image



Figure F-228: IAC-058-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 09:03
Station (Replicate):	IAC-058 (2 of 2)
Depth (m):	-55.7
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	5.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 burrowing anemone 4 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint tracks

Plan-View Image

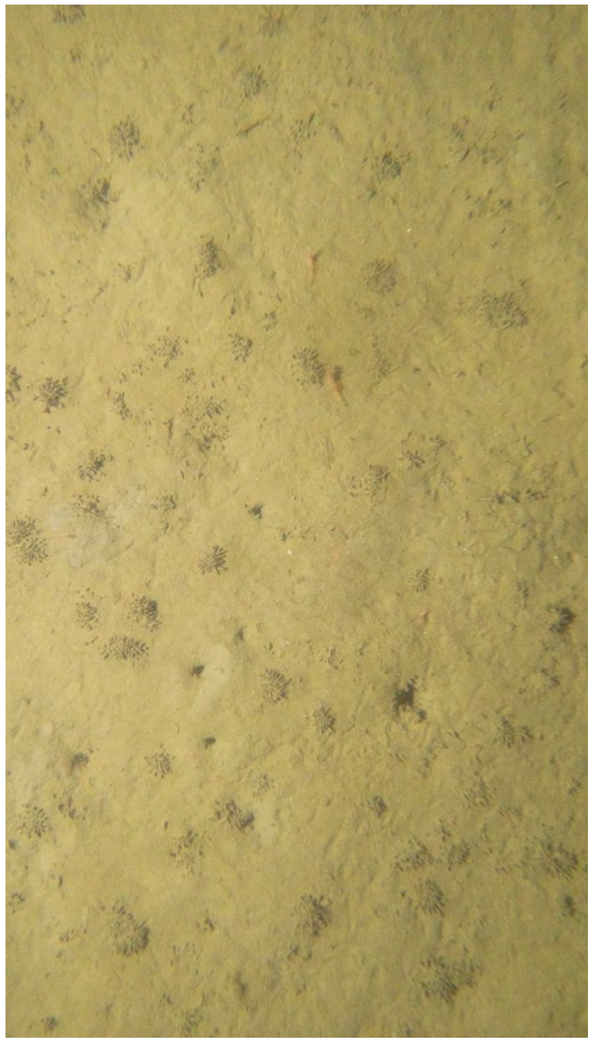


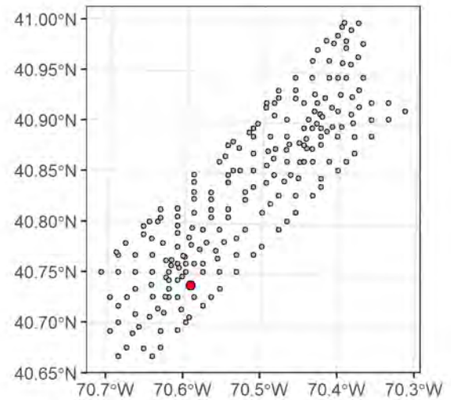
Figure F-229: IAC-058-C-PV

Sediment Profile Image



Figure F-230: IAC-058-B-SPI

Location



Attributes

Date Time (EST):	08/13/21 09:09
Station (Replicate):	IAC-058 (1 of 2)
Depth (m):	-55.7
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



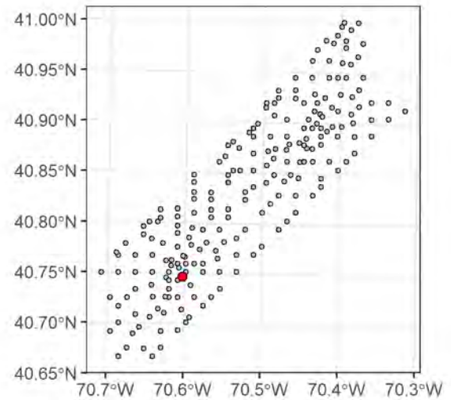
Figure F-231: IAC-059-A-PV

Sediment Profile Image



Figure F-232: IAC-059-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 16:18
Station (Replicate):	IAC-059 (2 of 2)
Depth (m):	-55.4
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



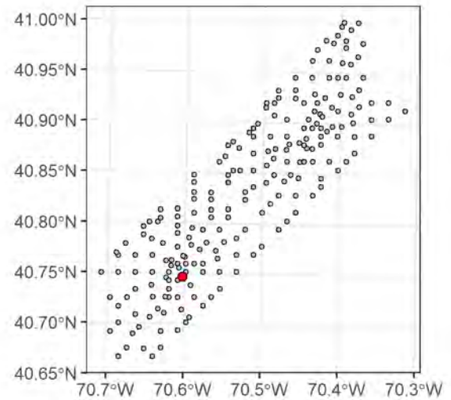
Figure F-233: IAC-059-C-PV

Sediment Profile Image



Figure F-234: IAC-059-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 16:22
Station (Replicate):	IAC-059 (1 of 2)
Depth (m):	-55.5
Prism Penetration (cm):	13.4
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



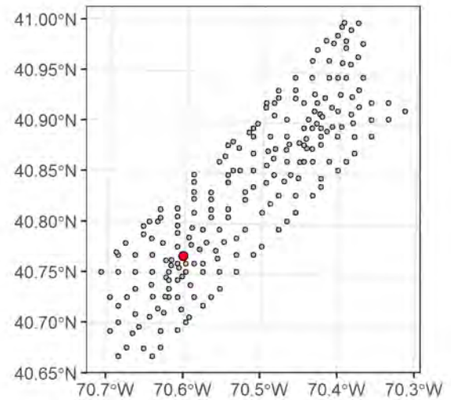
Figure F-235: IAC-060-B-PV

Sediment Profile Image



Figure F-236: IAC-060-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 18:51
Station (Replicate):	IAC-060 (2 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



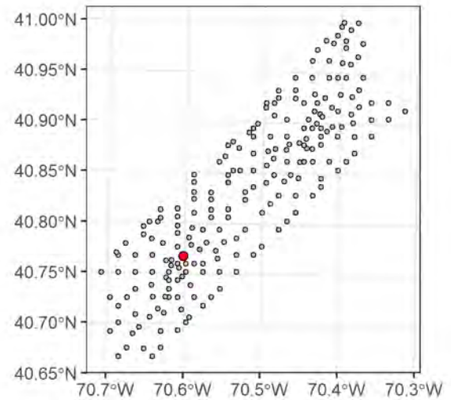
Figure F-237: IAC-060-A-PV

Sediment Profile Image



Figure F-238: IAC-060-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 18:55
Station (Replicate):	IAC-060 (1 of 2)
Depth (m):	-54.7
Prism Penetration (cm):	13.4
aRPD Mean Depth (cm):	1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



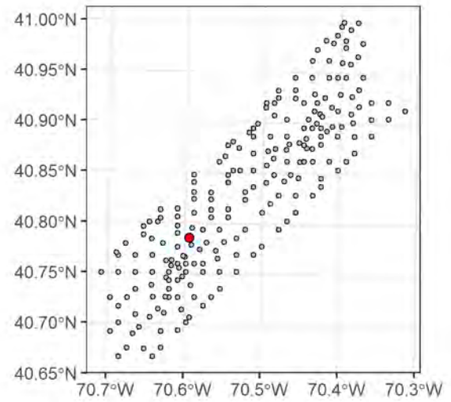
Figure F-239: IAC-061-B-PV

Sediment Profile Image



Figure F-240: IAC-061-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 02:20
Station (Replicate):	IAC-061 (2 of 2)
Depth (m):	-53
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp, 1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, crab and gastropod tracks

Plan-View Image



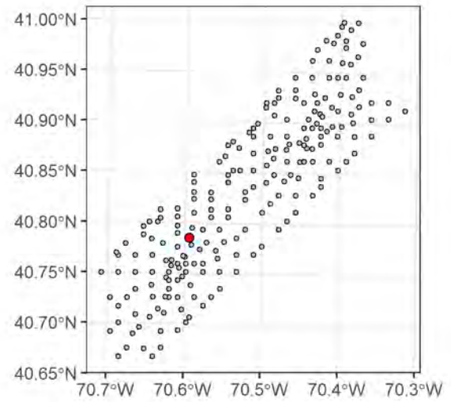
Figure F-241: IAC-061-C-PV

Sediment Profile Image



Figure F-242: IAC-061-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 02:24
Station (Replicate):	IAC-061 (1 of 2)
Depth (m):	-53
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab and gastropod tracks

Plan-View Image



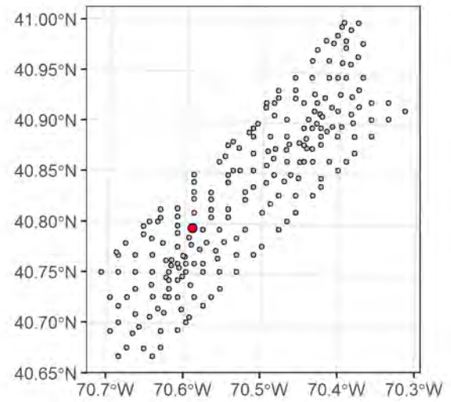
Figure F-243: IAC-062-A-PV

Sediment Profile Image



Figure F-244: IAC-062-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 20:45
Station (Replicate):	IAC-062 (2 of 2)
Depth (m):	-53.4
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab and gastropod tracks

Plan-View Image

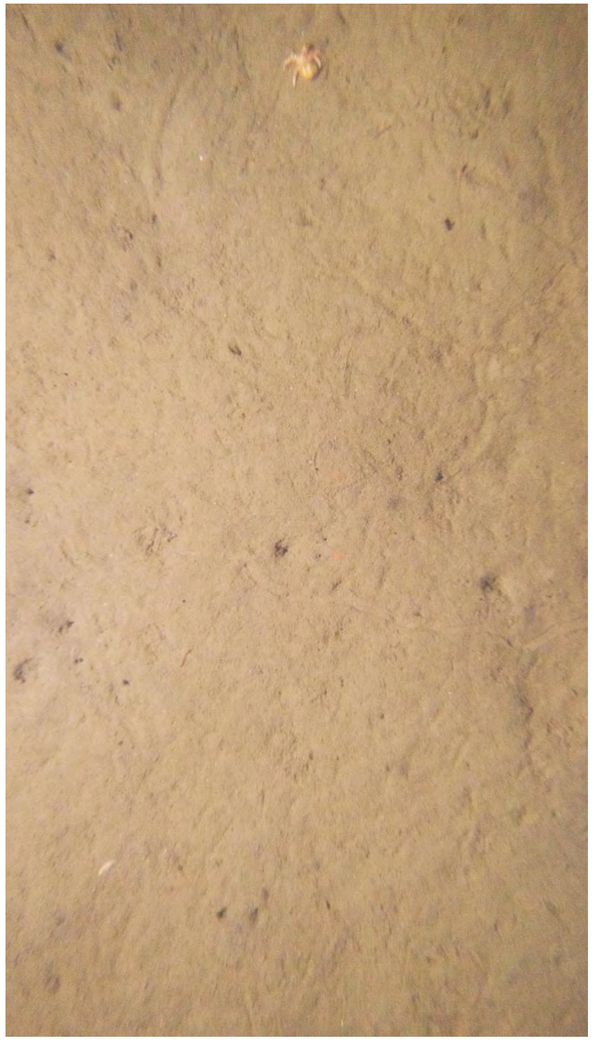


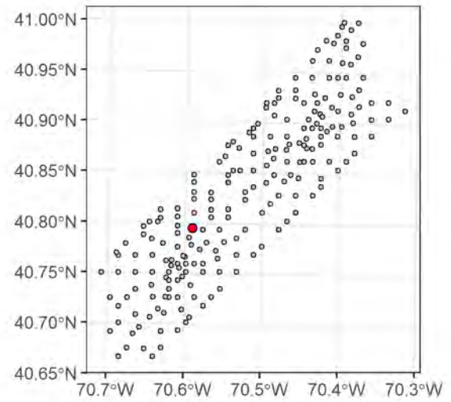
Figure F-245: IAC-062-B-PV

Sediment Profile Image



Figure F-246: IAC-062-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 20:54
Station (Replicate):	IAC-062 (1 of 2)
Depth (m):	-53.3
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	0.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint crab and gastropod tracks

Plan-View Image



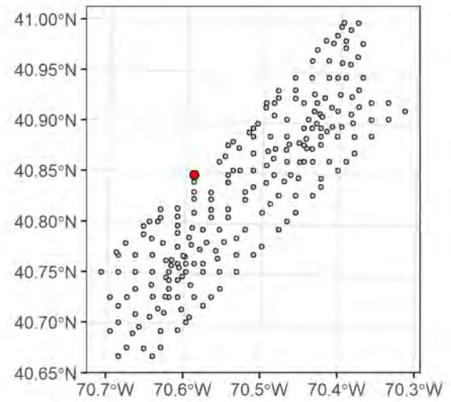
Figure F-247: IAC-063-A-PV

Sediment Profile Image



Figure F-248: IAC-063-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 20:04
Station (Replicate):	IAC-063 (2 of 2)
Depth (m):	-50.3
Prism Penetration (cm):	8.4
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



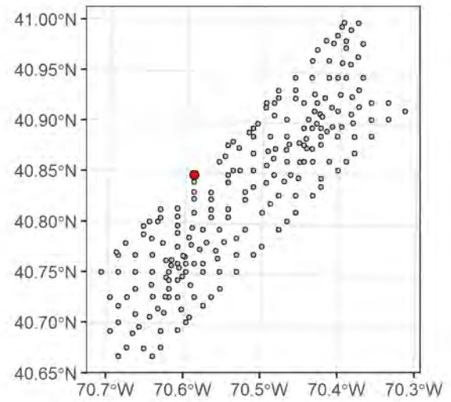
Figure F-249: IAC-063-B-PV

Sediment Profile Image



Figure F-250: IAC-063-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 20:14
Station (Replicate):	IAC-063 (1 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	6.4
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



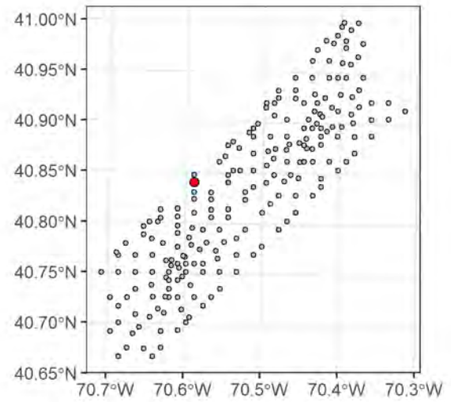
Figure F-251: IAC-064-B-PV

Sediment Profile Image



Figure F-252: IAC-064-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 20:50
Station (Replicate):	IAC-064 (2 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

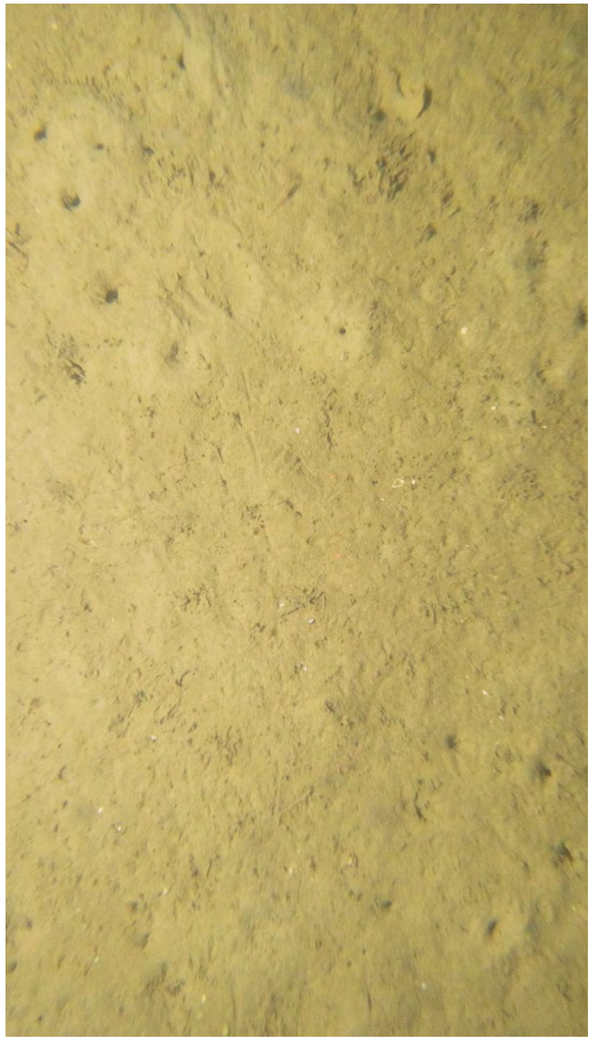


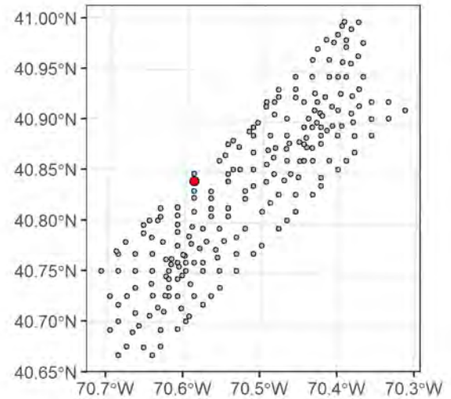
Figure F-253: IAC-064-A-PV

Sediment Profile Image



Figure F-254: IAC-064-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 20:54
Station (Replicate):	IAC-064 (1 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks, one Naticid egg case

Plan-View Image



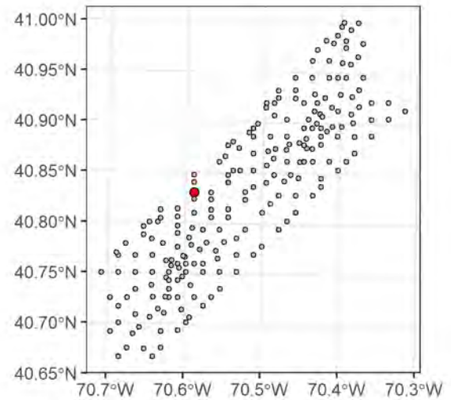
Figure F-255: IAC-065-B-PV

Sediment Profile Image



Figure F-256: IAC-065-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 21:31
Station (Replicate):	IAC-065 (2 of 2)
Depth (m):	-50.7
Prism Penetration (cm):	6.2
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, microbial mat, small burrows, faint crab tracks

Plan-View Image



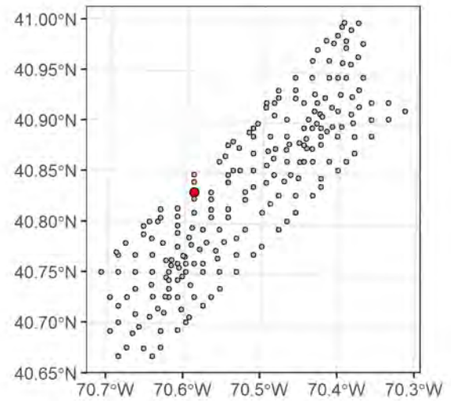
Figure F-257: IAC-065-A-PV

Sediment Profile Image



Figure F-258: IAC-065-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 21:35
Station (Replicate):	IAC-065 (1 of 2)
Depth (m):	-50.7
Prism Penetration (cm):	5.6
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, microbial mat, small burrows, 2 gastropod egg cases

Plan-View Image

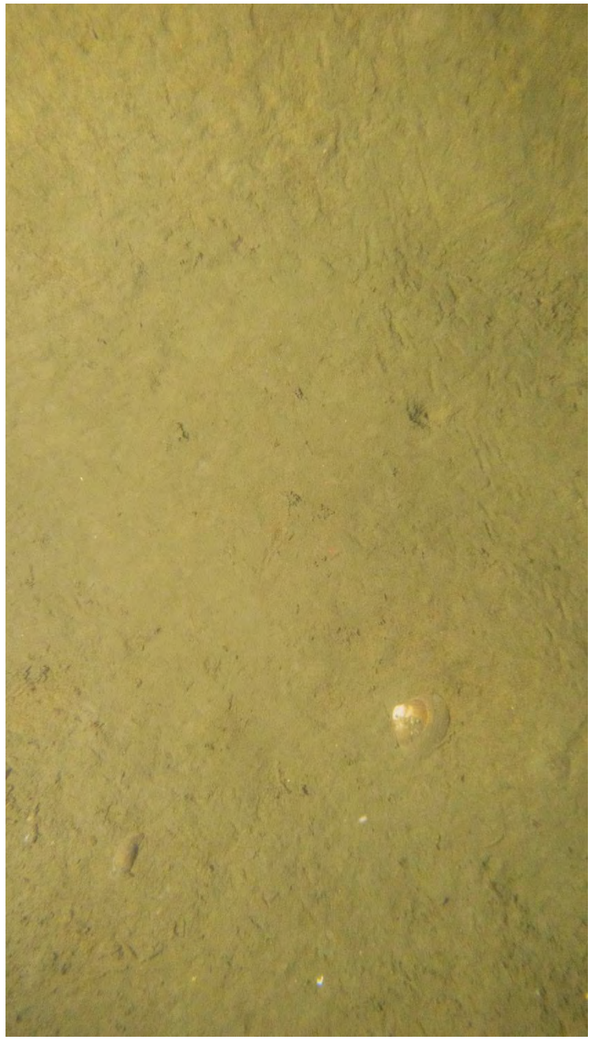


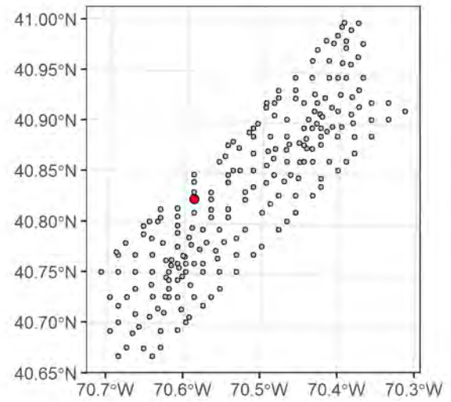
Figure F-259: IAC-066-A-PV

Sediment Profile Image



Figure F-260: IAC-066-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 22:13
Station (Replicate):	IAC-066 (2 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	4.8
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	1 to 0
Infaunal Successional Stage:	I
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, microbial mat, small burrows, crab tracks

Plan-View Image

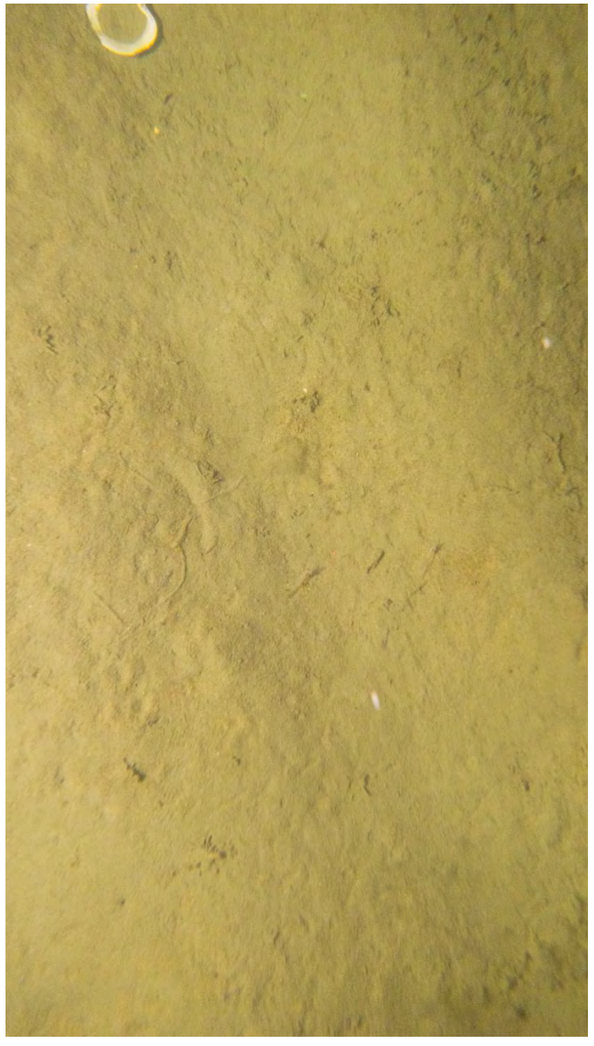


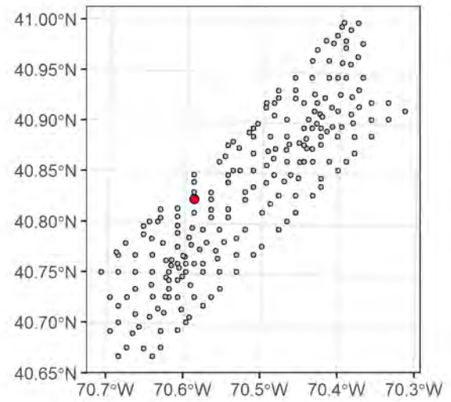
Figure F-261: IAC-066-B-PV

Sediment Profile Image



Figure F-262: IAC-066-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 22:22
Station (Replicate):	IAC-066 (1 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	3.8
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	1 to 0
Infaunal Successional Stage:	I
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image

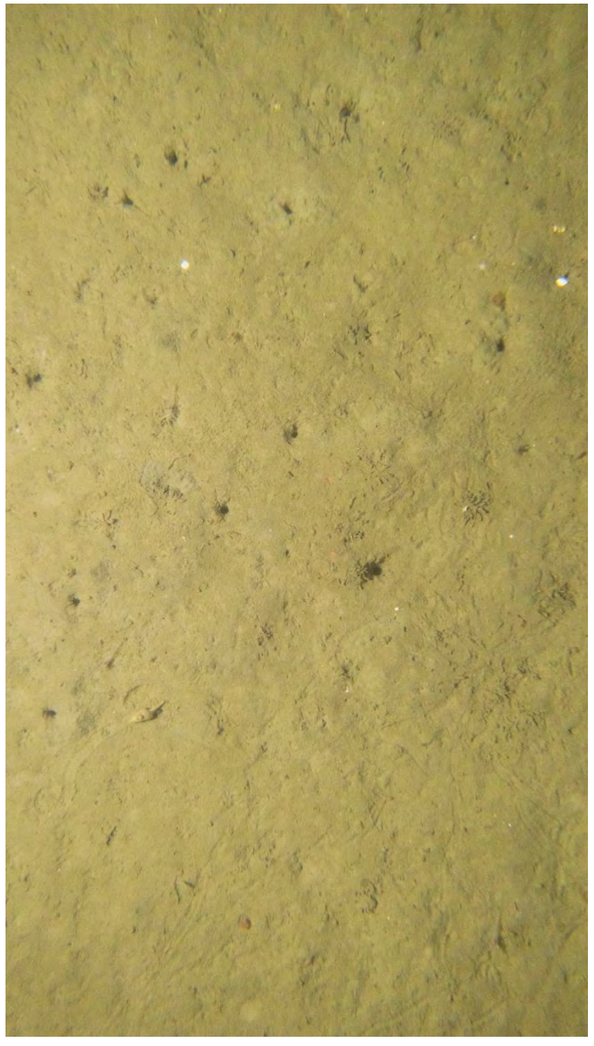


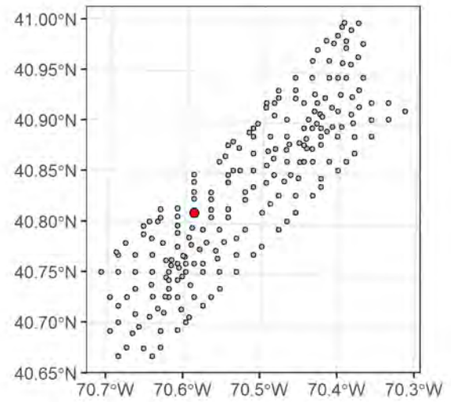
Figure F-263: IAC-067-A-PV

Sediment Profile Image



Figure F-264: IAC-067-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 23:10
Station (Replicate):	IAC-067 (2 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Tritia trivittata, 4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab and gastropod tracks

Plan-View Image

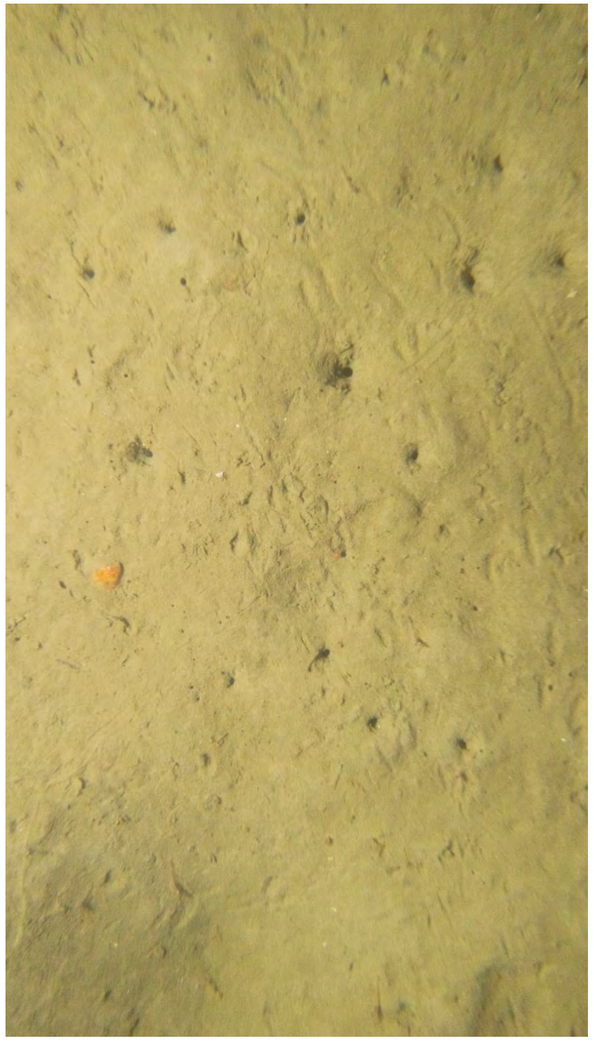


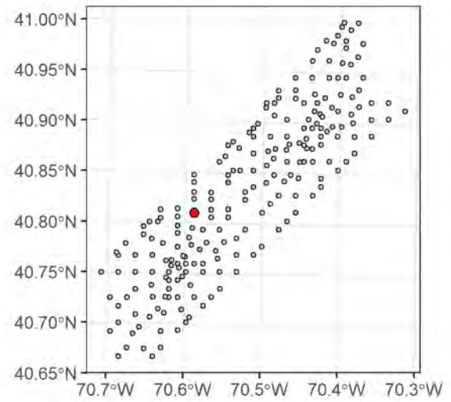
Figure F-265: IAC-067-C-PV

Sediment Profile Image



Figure F-266: IAC-067-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 23:14
Station (Replicate):	IAC-067 (1 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab and gastropod tracks

Plan-View Image



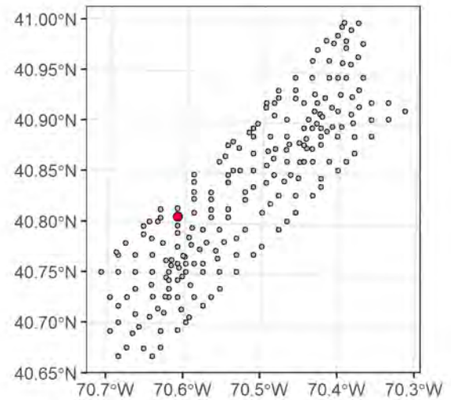
Figure F-267: IAC-068-B-PV

Sediment Profile Image



Figure F-268: IAC-068-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 10:50
Station (Replicate):	IAC-068 (2 of 2)
Depth (m):	-52.7
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	large and small burrows

Plan-View Image



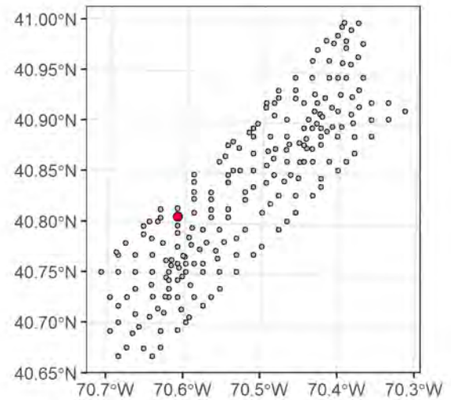
Figure F-269: IAC-068-A-PV

Sediment Profile Image



Figure F-270: IAC-068-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 10:55
Station (Replicate):	IAC-068 (1 of 2)
Depth (m):	-52.6
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab and gastropod tracks

Plan-View Image

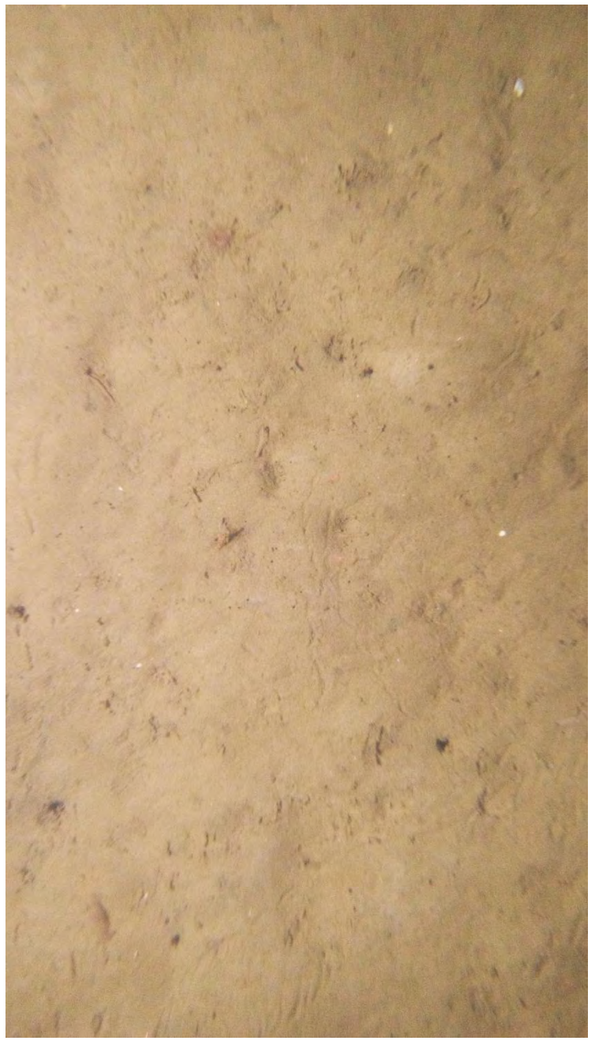


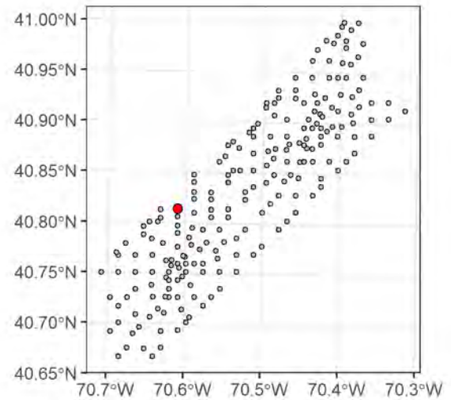
Figure F-271: IAC-069-A-PV

Sediment Profile Image



Figure F-272: IAC-069-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 11:25
Station (Replicate):	IAC-069 (2 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Ceriantharia
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks, castings

Plan-View Image



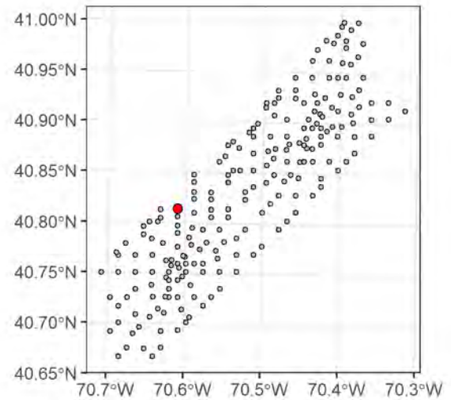
Figure F-273: IAC-069-C-PV

Sediment Profile Image



Figure F-274: IAC-069-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 11:29
Station (Replicate):	IAC-069 (1 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



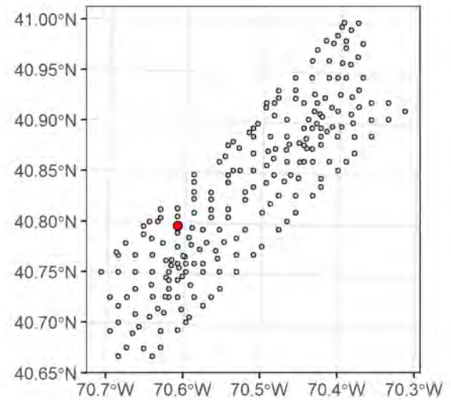
Figure F-275: IAC-070-A-PV

Sediment Profile Image



Figure F-276: IAC-070-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 10:03
Station (Replicate):	IAC-070 (2 of 2)
Depth (m):	-53.8
Prism Penetration (cm):	13.6
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, some light/focus issues

Plan-View Image



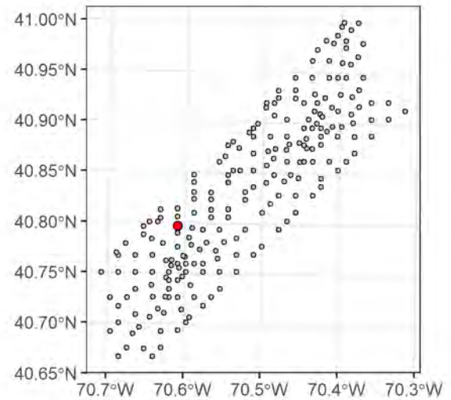
Figure F-277: IAC-070-B-PV

Sediment Profile Image



Figure F-278: IAC-070-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 10:07
Station (Replicate):	IAC-070 (1 of 2)
Depth (m):	-53.8
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



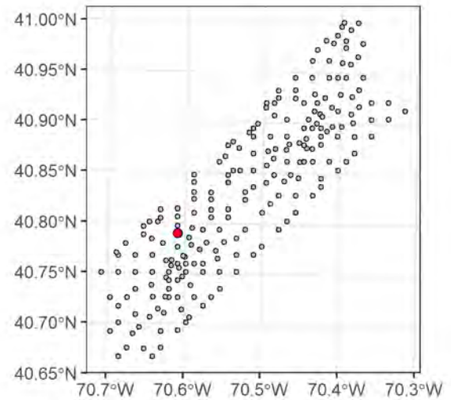
Figure F-279: IAC-071-A-PV

Sediment Profile Image



Figure F-280: IAC-071-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 09:14
Station (Replicate):	IAC-071 (2 of 2)
Depth (m):	-54.6
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	9 Shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Large Burrows, crab and gastropod tracks

Plan-View Image



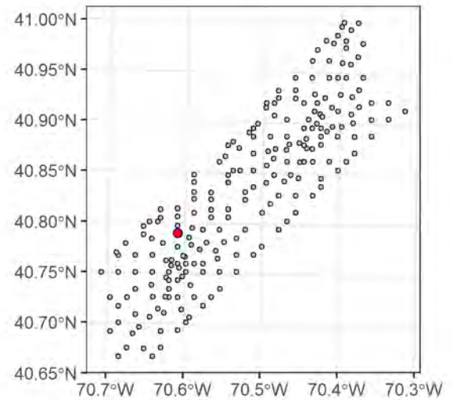
Figure F-281: IAC-071-B-PV

Sediment Profile Image



Figure F-282: IAC-071-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 09:23
Station (Replicate):	IAC-071 (1 of 2)
Depth (m):	-54.6
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Large and small burrows, crab and gastropod tracks

Plan-View Image



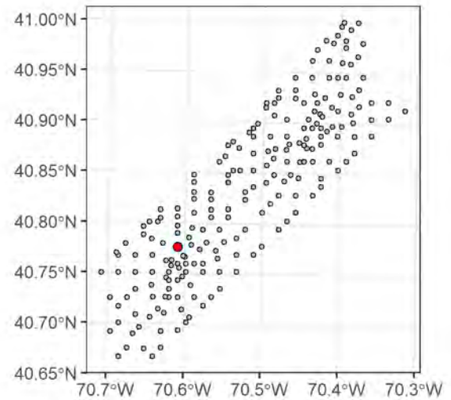
Figure F-283: IAC-072-A-PV

Sediment Profile Image



Figure F-284: IAC-072-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 05:24
Station (Replicate):	IAC-072 (2 of 2)
Depth (m):	-54.2
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Large and small burrows, crab tracks

Plan-View Image



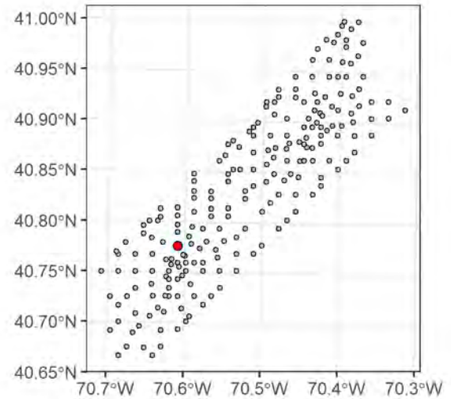
Figure F-285: IAC-072-C-PV

Sediment Profile Image



Figure F-286: IAC-072-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 05:28
Station (Replicate):	IAC-072 (1 of 2)
Depth (m):	-54.2
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Large and small burrows (one large burrow with reduced sediment), crab tracks

Plan-View Image



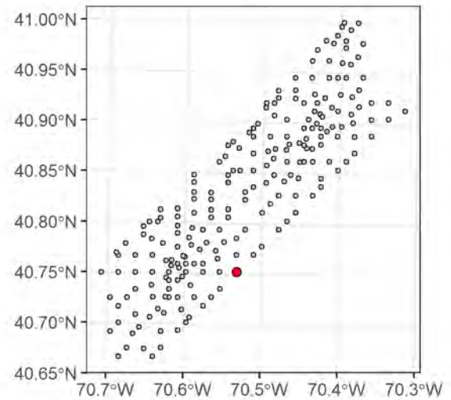
Figure F-287: IAC-073-A-PV

Sediment Profile Image



Figure F-288: IAC-073-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 03:47
Station (Replicate):	IAC-073 (2 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, numerous small burrows, faint crab and gastropod tracks

Plan-View Image



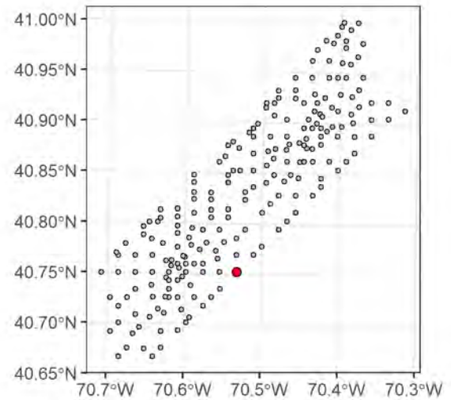
Figure F-289: IAC-073-B-PV

Sediment Profile Image



Figure F-290: IAC-073-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 03:58
Station (Replicate):	IAC-073 (1 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	numerous amphipod tube clusters, large and small burrows

Plan-View Image



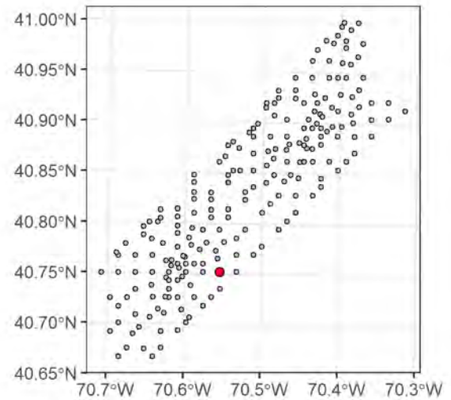
Figure F-291: IAC-074-A-PV

Sediment Profile Image



Figure F-292: IAC-074-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 10:00
Station (Replicate):	IAC-074 (2 of 2)
Depth (m):	-54.9
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



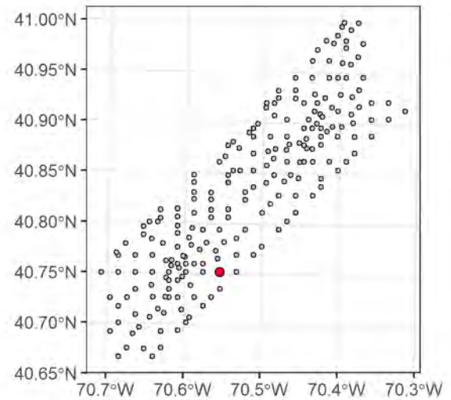
Figure F-293: IAC-074-C-PV

Sediment Profile Image



Figure F-294: IAC-074-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 10:05
Station (Replicate):	IAC-074 (1 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



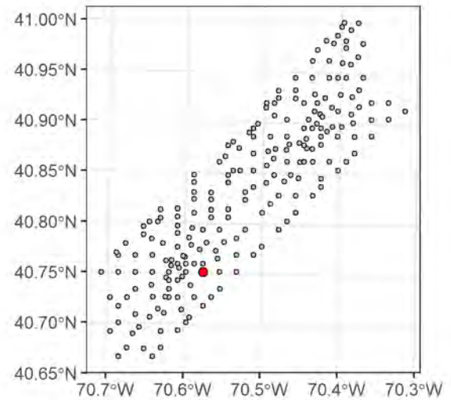
Figure F-295: IAC-075-C-PV

Sediment Profile Image



Figure F-296: IAC-075-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 12:27
Station (Replicate):	IAC-075 (2 of 2)
Depth (m):	-54.9
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, faint crab tracks, light/focus issues

Plan-View Image



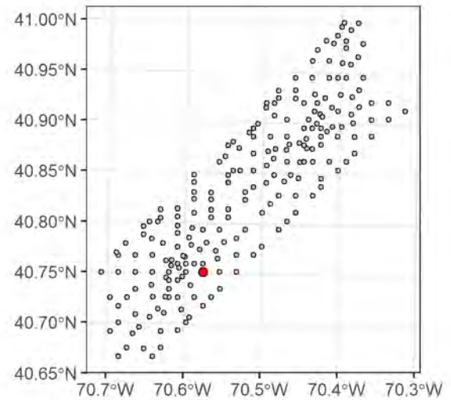
Figure F-297: IAC-075-B-PV

Sediment Profile Image



Figure F-298: IAC-075-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 12:31
Station (Replicate):	IAC-075 (1 of 2)
Depth (m):	-55
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



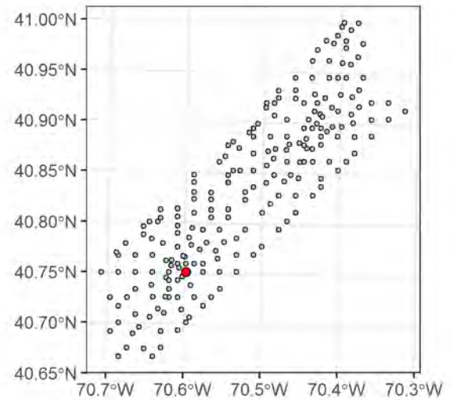
Figure F-299: IAC-076-B-PV

Sediment Profile Image



Figure F-300: IAC-076-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 15:42
Station (Replicate):	IAC-076 (2 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, faint crab tracks

Plan-View Image



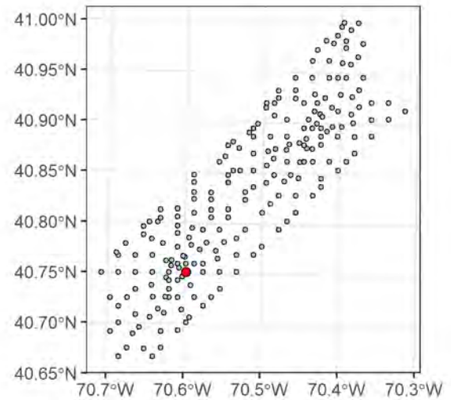
Figure F-301: IAC-076-C-PV

Sediment Profile Image



Figure F-302: IAC-076-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 15:51
Station (Replicate):	IAC-076 (1 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp, 1 Cancer borealis 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



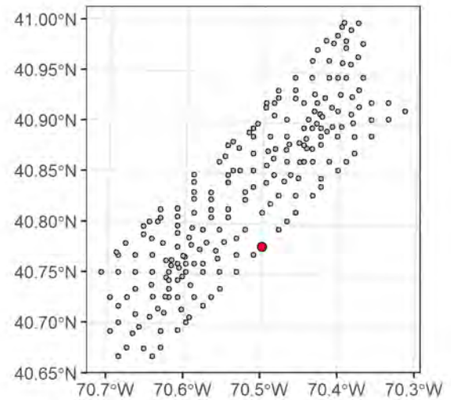
Figure F-303: IAC-077-A-PV

Sediment Profile Image



Figure F-304: IAC-077-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 01:13
Station (Replicate):	IAC-077 (2 of 2)
Depth (m):	-50.8
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, gastropod tracks

Plan-View Image



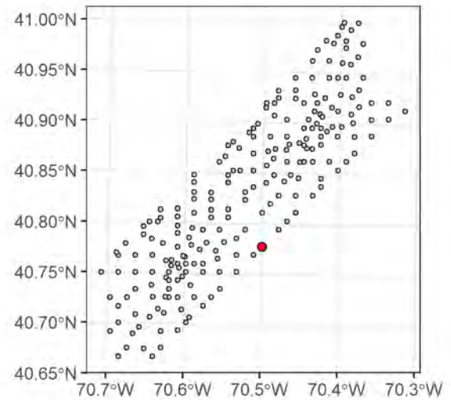
Figure F-305: IAC-077-B-PV

Sediment Profile Image



Figure F-306: IAC-077-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 01:22
Station (Replicate):	IAC-077 (1 of 2)
Depth (m):	-50.7
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows (one large burrow with reduced sediment), crab tracks

Plan-View Image

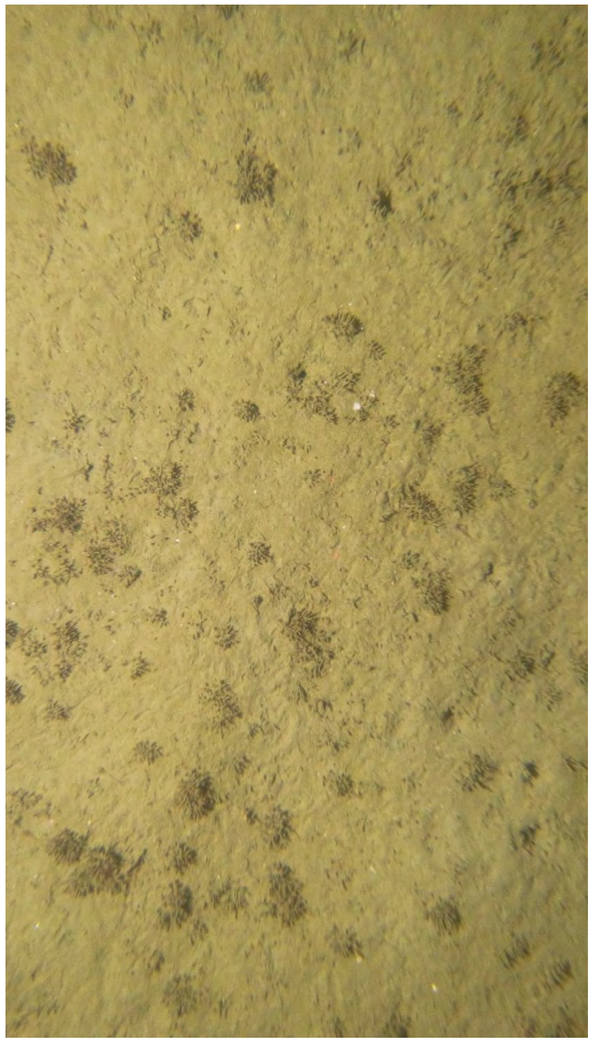


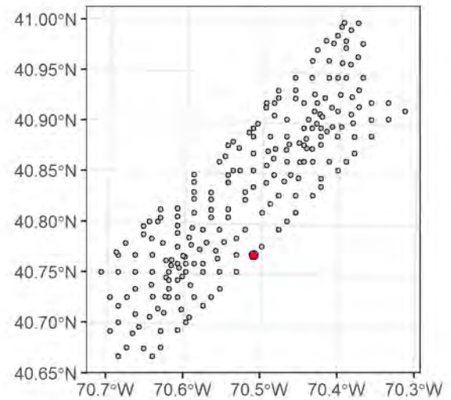
Figure F-307: IAC-078-A-PV

Sediment Profile Image



Figure F-308: IAC-078-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 01:56
Station (Replicate):	IAC-078 (2 of 2)
Depth (m):	-51.3
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



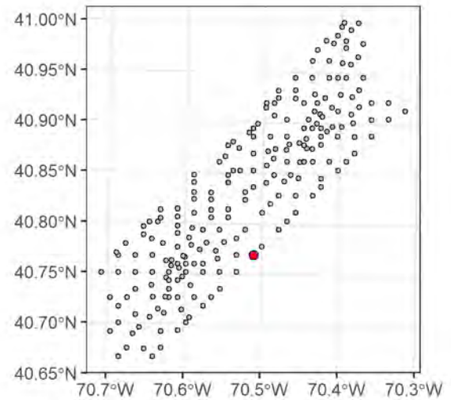
Figure F-309: IAC-078-B-PV

Sediment Profile Image



Figure F-310: IAC-078-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 02:05
Station (Replicate):	IAC-078 (1 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows

Plan-View Image



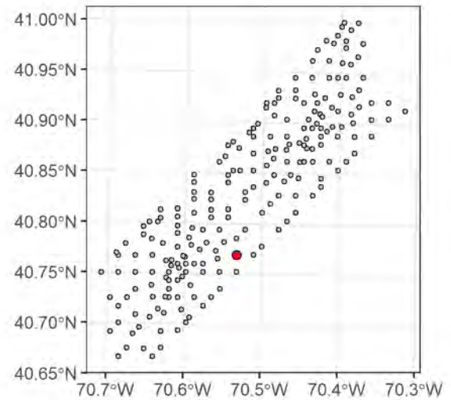
Figure F-311: IAC-079-A-PV

Sediment Profile Image



Figure F-312: IAC-079-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 02:56
Station (Replicate):	IAC-079 (2 of 2)
Depth (m):	-52.2
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



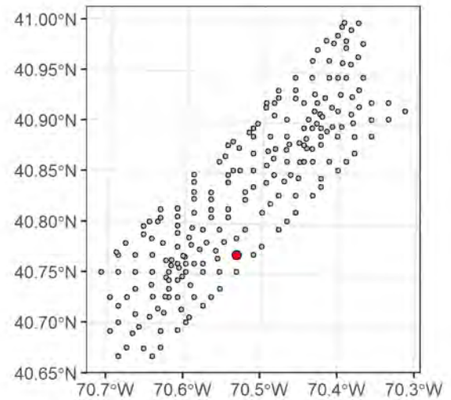
Figure F-313: IAC-079-B-PV

Sediment Profile Image



Figure F-314: IAC-079-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 03:02
Station (Replicate):	IAC-079 (1 of 2)
Depth (m):	-52.2
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids 1 shrimp, 1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint tracks

Plan-View Image



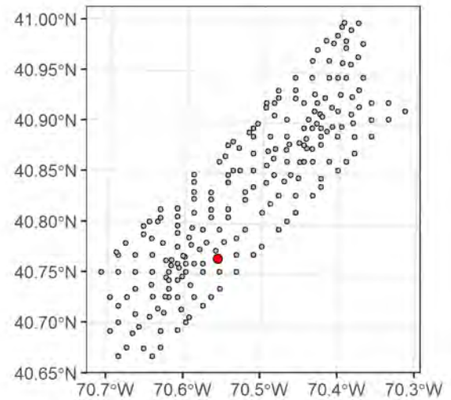
Figure F-315: IAC-080-B-PV

Sediment Profile Image



Figure F-316: IAC-080-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 10:46
Station (Replicate):	IAC-080 (2 of 2)
Depth (m):	-54.1
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



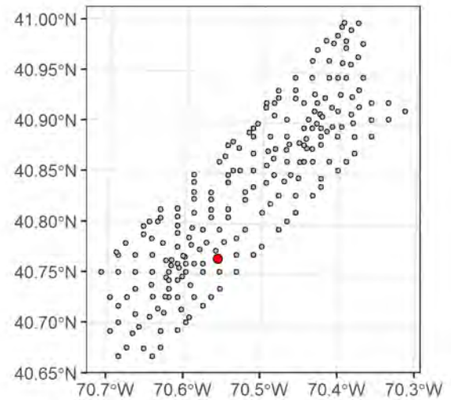
Figure F-317: IAC-080-A-PV

Sediment Profile Image



Figure F-318: IAC-080-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 10:50
Station (Replicate):	IAC-080 (1 of 2)
Depth (m):	-54.2
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows, faint tracks

Plan-View Image



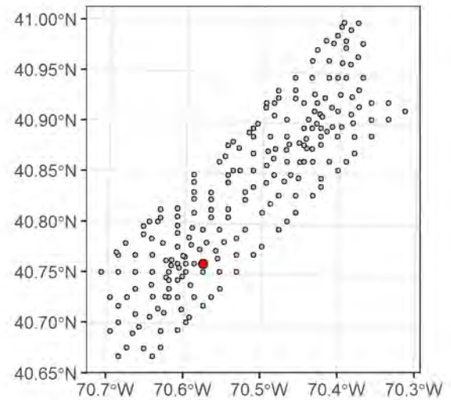
Figure F-319: IAC-081-C-PV

Sediment Profile Image



Figure F-320: IAC-081-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 11:32
Station (Replicate):	IAC-081 (2 of 2)
Depth (m):	-54.9
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer sp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks, focus issues

Plan-View Image



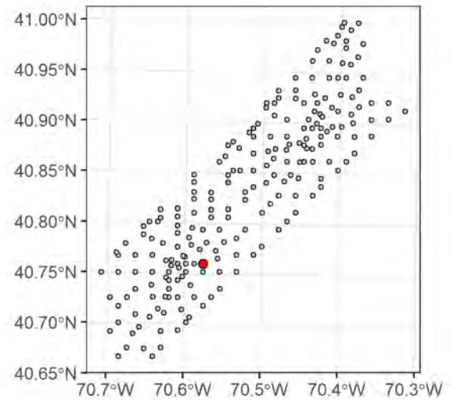
Figure F-321: IAC-081-B-PV

Sediment Profile Image



Figure F-322: IAC-081-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 11:37
Station (Replicate):	IAC-081 (1 of 2)
Depth (m):	-54.9
Prism Penetration (cm):	12.7
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



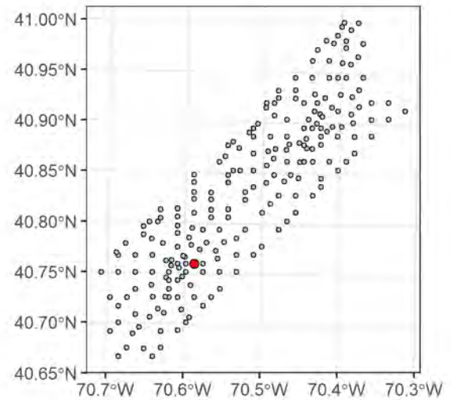
Figure F-323: IAC-082-A-PV

Sediment Profile Image



Figure F-324: IAC-082-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 13:09
Station (Replicate):	IAC-082 (2 of 2)
Depth (m):	-54.5
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks, focus issues

Plan-View Image



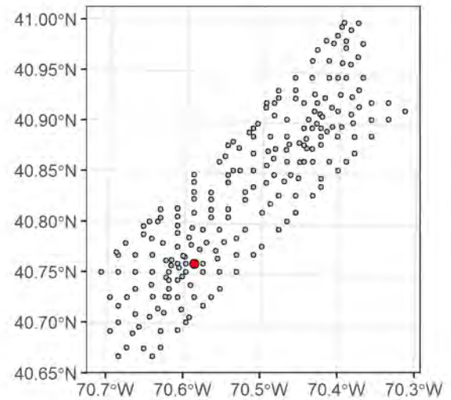
Figure F-325: IAC-082-C-PV

Sediment Profile Image



Figure F-326: IAC-082-C-SPI

Location



Attributes

Date Time (EST):	08/10/21 13:17
Station (Replicate):	IAC-082 (1 of 2)
Depth (m):	-54.6
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



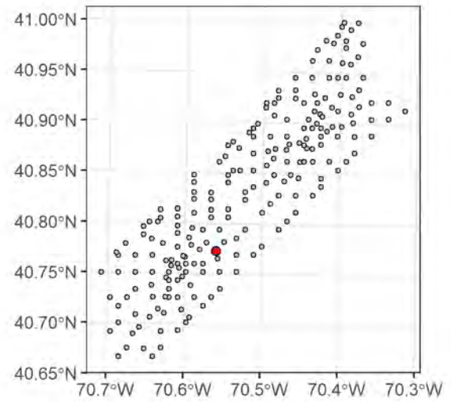
Figure F-327: IAC-083-A-PV

Sediment Profile Image



Figure F-328: IAC-083-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 21:38
Station (Replicate):	IAC-083 (2 of 2)
Depth (m):	-53.7
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



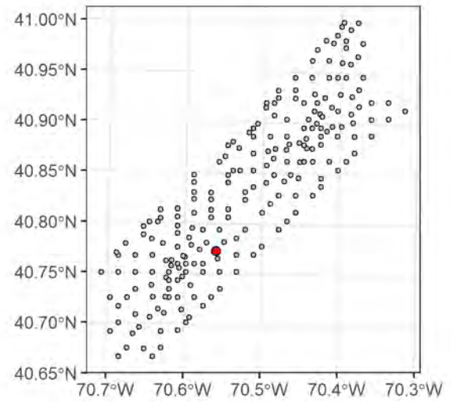
Figure F-329: IAC-083-B-PV

Sediment Profile Image



Figure F-330: IAC-083-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 21:43
Station (Replicate):	IAC-083 (1 of 2)
Depth (m):	-53.7
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



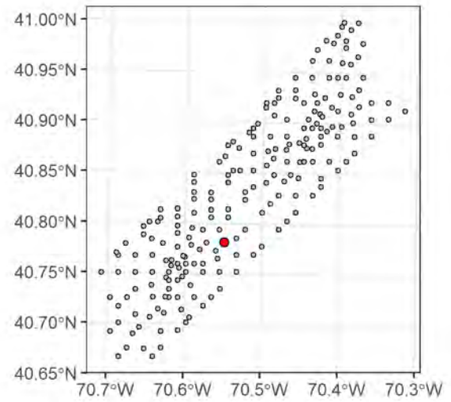
Figure F-331: IAC-084-A-PV

Sediment Profile Image



Figure F-332: IAC-084-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 22:32
Station (Replicate):	IAC-084 (2 of 2)
Depth (m):	-52.6
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp, 2 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, gastropod and crab tracks

Plan-View Image



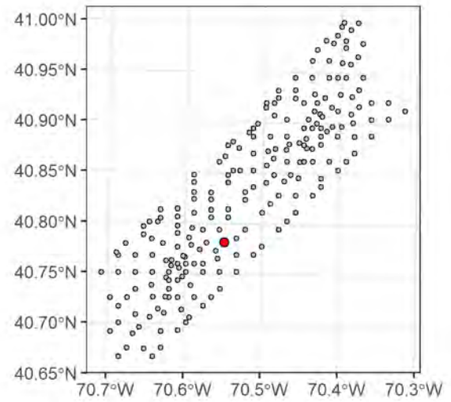
Figure F-333: IAC-084-B-PV

Sediment Profile Image



Figure F-334: IAC-084-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 22:42
Station (Replicate):	IAC-084 (1 of 2)
Depth (m):	-52.7
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, gastropod tracks

Plan-View Image



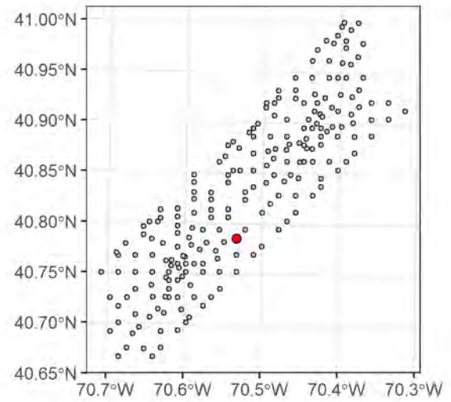
Figure F-335: IAC-085-A-PV

Sediment Profile Image



Figure F-336: IAC-085-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 23:28
Station (Replicate):	IAC-085 (2 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



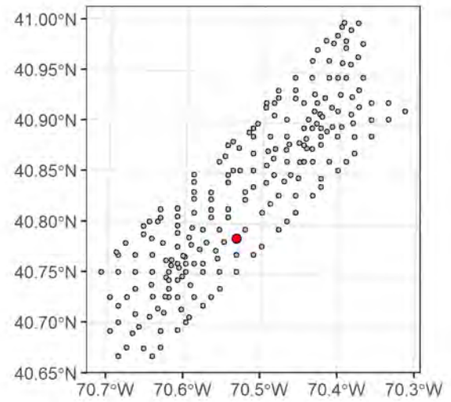
Figure F-337: IAC-085-C-PV

Sediment Profile Image



Figure F-338: IAC-085-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 23:32
Station (Replicate):	IAC-085 (1 of 2)
Depth (m):	-51.9
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



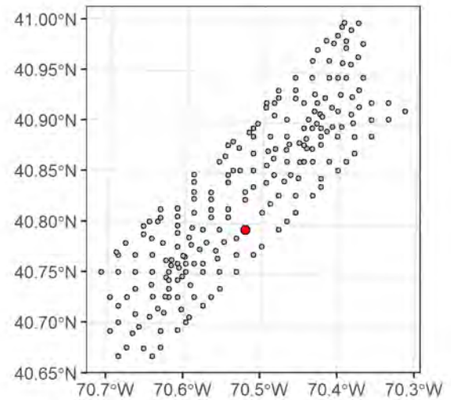
Figure F-339: IAC-086-A-PV

Sediment Profile Image



Figure F-340: IAC-086-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 00:22
Station (Replicate):	IAC-086 (2 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

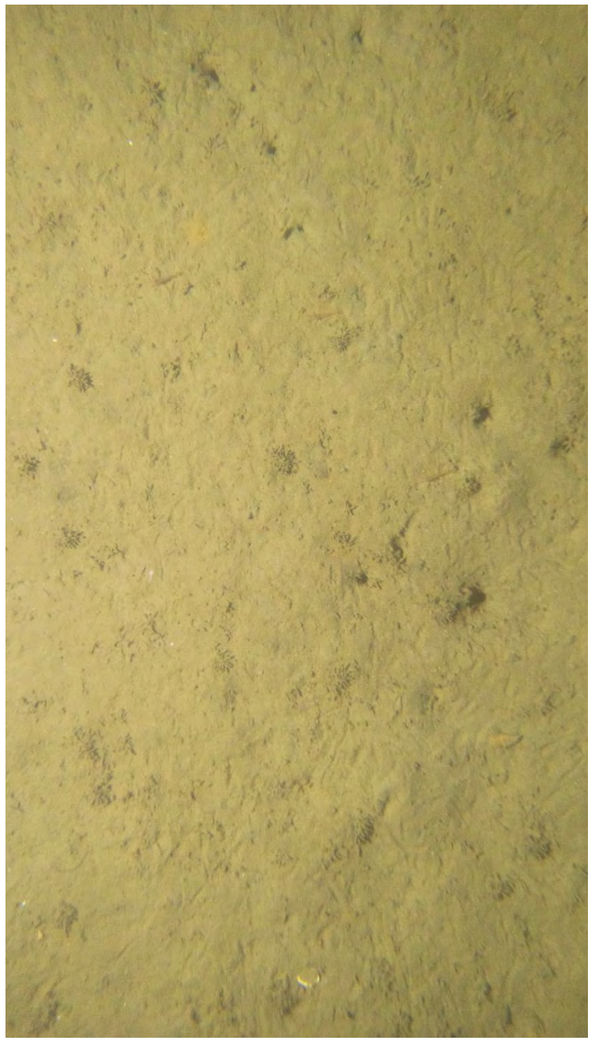


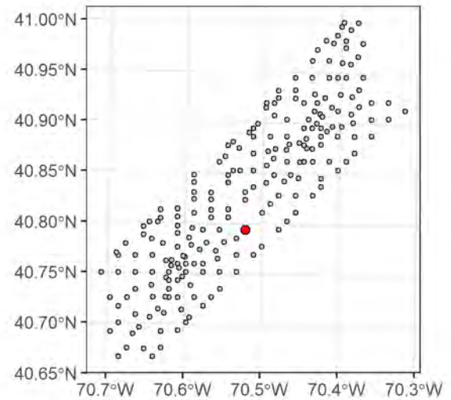
Figure F-341: IAC-086-B-PV

Sediment Profile Image



Figure F-342: IAC-086-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 00:27
Station (Replicate):	IAC-086 (1 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	5.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



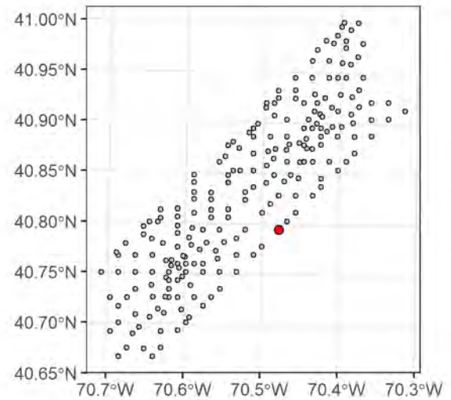
Figure F-343: IAC-087-B-PV

Sediment Profile Image



Figure F-344: IAC-087-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 07:28
Station (Replicate):	IAC-087 (2 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer borealis
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



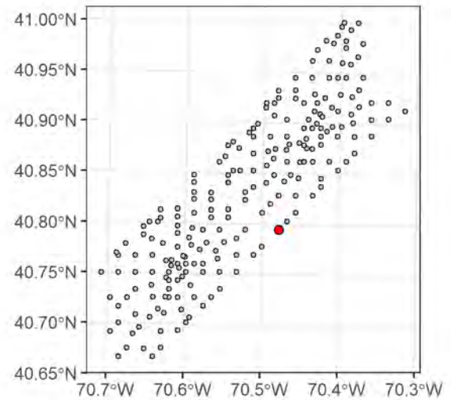
Figure F-345: IAC-087-C-PV

Sediment Profile Image



Figure F-346: IAC-087-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 07:37
Station (Replicate):	IAC-087 (1 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



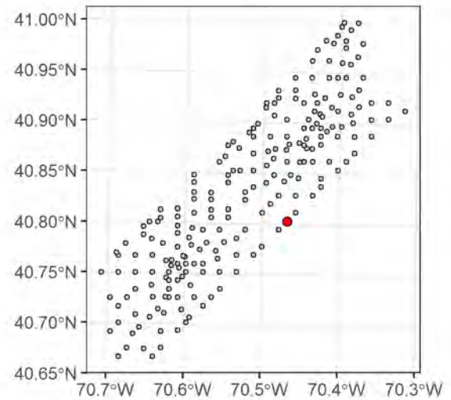
Figure F-347: IAC-088-A-PV

Sediment Profile Image



Figure F-348: IAC-088-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 06:47
Station (Replicate):	IAC-088 (2 of 2)
Depth (m):	-50.1
Prism Penetration (cm):	12.7
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

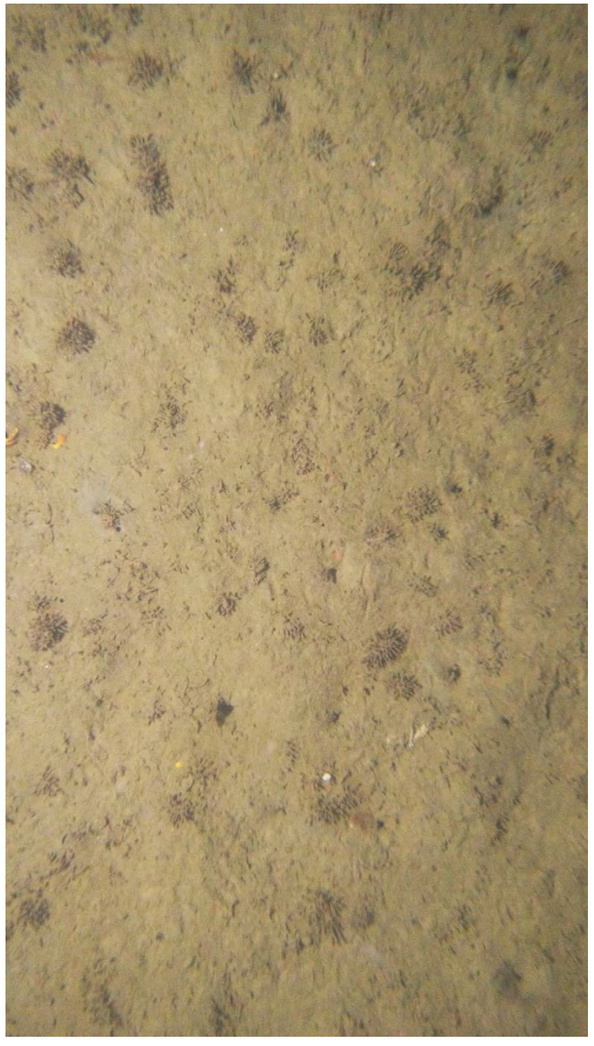


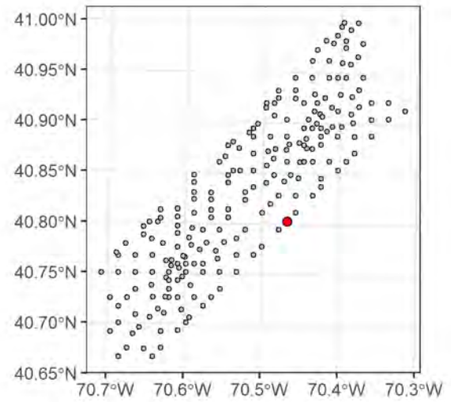
Figure F-349: IAC-088-B-PV

Sediment Profile Image



Figure F-350: IAC-088-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 06:57
Station (Replicate):	IAC-088 (1 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



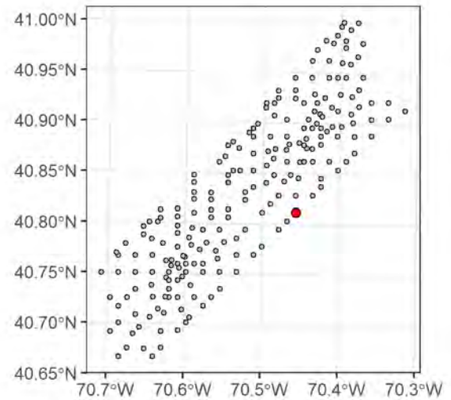
Figure F-351: IAC-089-A-PV

Sediment Profile Image



Figure F-352: IAC-089-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 05:51
Station (Replicate):	IAC-089 (2 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks, 7 squid egg cases

Plan-View Image



Figure F-353: IAC-089-C-PV

Sediment Profile Image

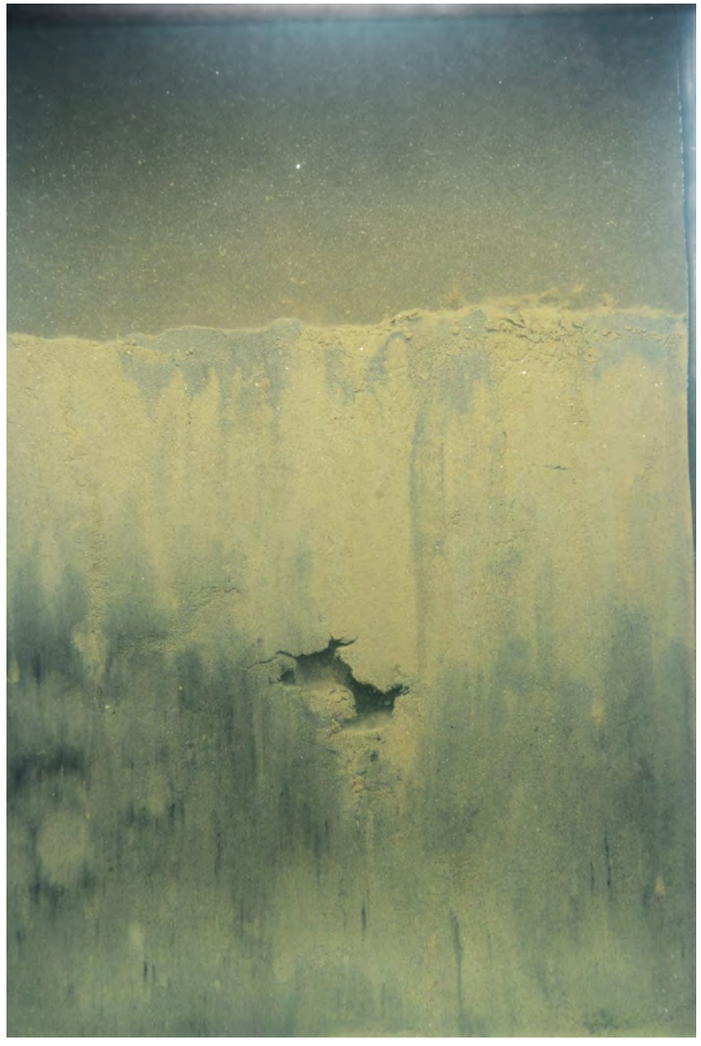
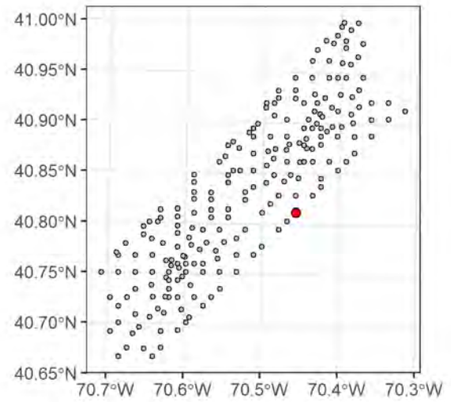


Figure F-354: IAC-089-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 05:56
Station (Replicate):	IAC-089 (1 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	5.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large (one with reduced sediment) and small burrows

Plan-View Image



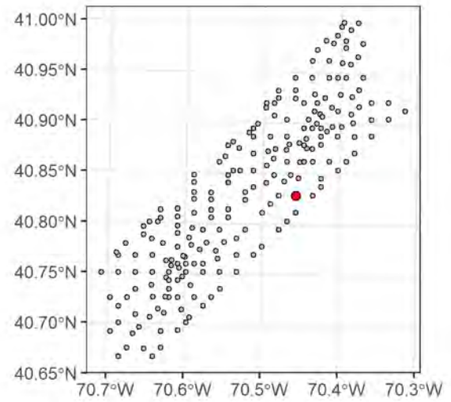
Figure F-355: IAC-090-A-PV

Sediment Profile Image



Figure F-356: IAC-090-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 05:00
Station (Replicate):	IAC-090 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



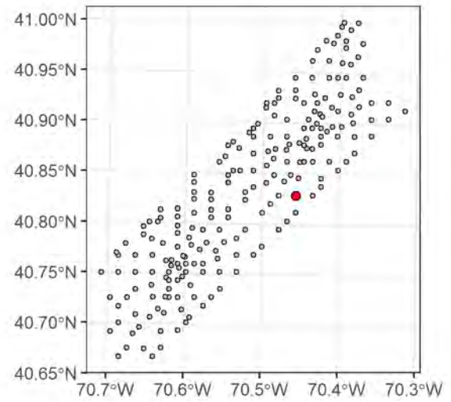
Figure F-357: IAC-090-B-PV

Sediment Profile Image



Figure F-358: IAC-090-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 05:05
Station (Replicate):	IAC-090 (1 of 2)
Depth (m):	-51
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, crab tracks

Plan-View Image



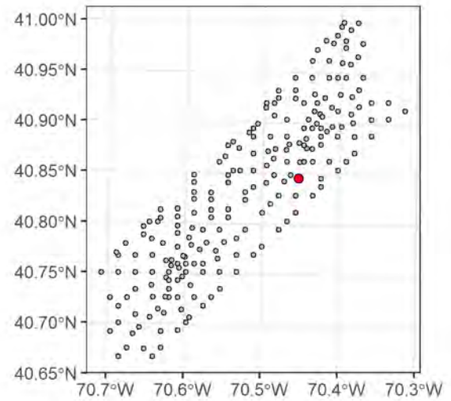
Figure F-359: IAC-091-A-PV

Sediment Profile Image



Figure F-360: IAC-091-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 01:54
Station (Replicate):	IAC-091 (2 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	12.2
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



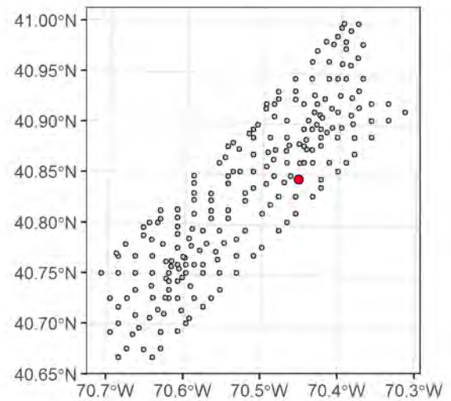
Figure F-361: IAC-091-B-PV

Sediment Profile Image



Figure F-362: IAC-091-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 01:59
Station (Replicate):	IAC-091 (1 of 2)
Depth (m):	-50.3
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

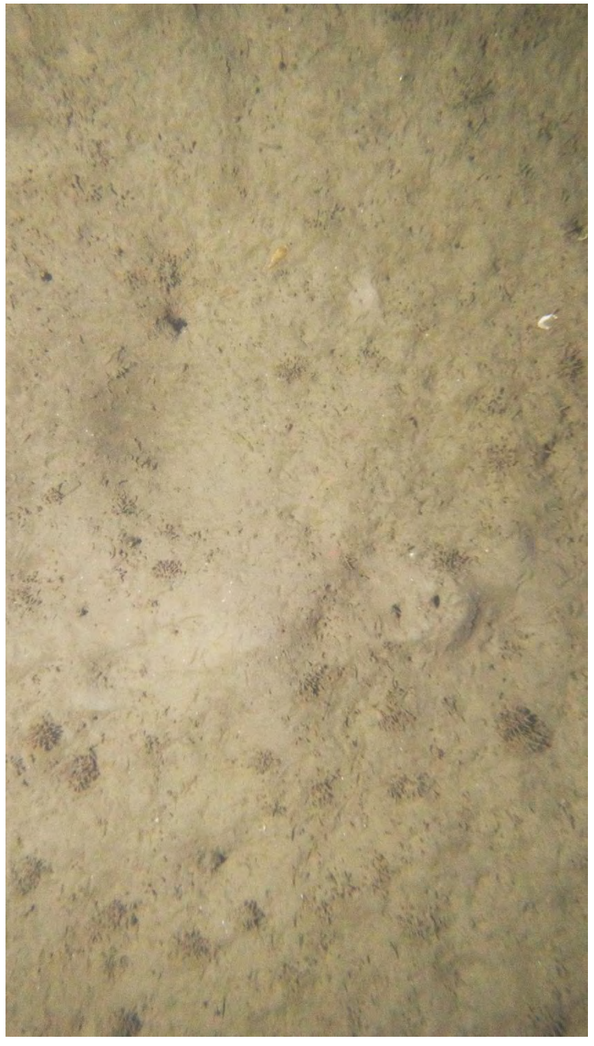


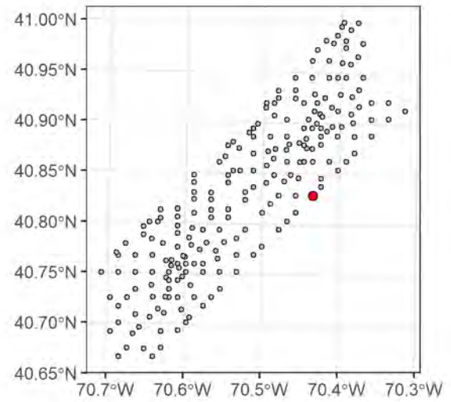
Figure F-363: IAC-092-B-PV

Sediment Profile Image



Figure F-364: IAC-092-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 04:14
Station (Replicate):	IAC-092 (2 of 2)
Depth (m):	-48.8
Prism Penetration (cm):	13.6
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



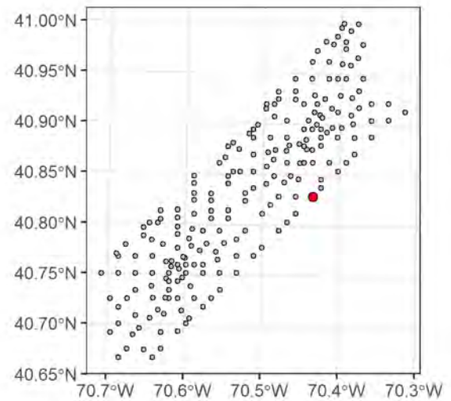
Figure F-365: IAC-092-A-PV

Sediment Profile Image



Figure F-366: IAC-092-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 04:18
Station (Replicate):	IAC-092 (1 of 2)
Depth (m):	-48.7
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



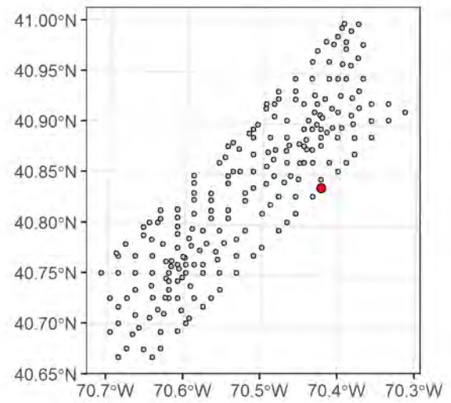
Figure F-367: IAC-093-B-PV

Sediment Profile Image



Figure F-368: IAC-093-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 03:27
Station (Replicate):	IAC-093 (2 of 2)
Depth (m):	-49.2
Prism Penetration (cm):	13.6
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



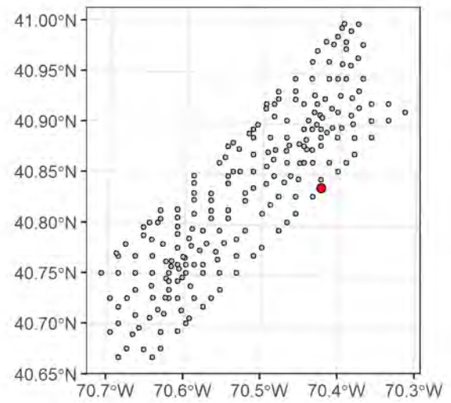
Figure F-369: IAC-093-A-PV

Sediment Profile Image



Figure F-370: IAC-093-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 03:31
Station (Replicate):	IAC-093 (1 of 2)
Depth (m):	-49.2
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer irroratus
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



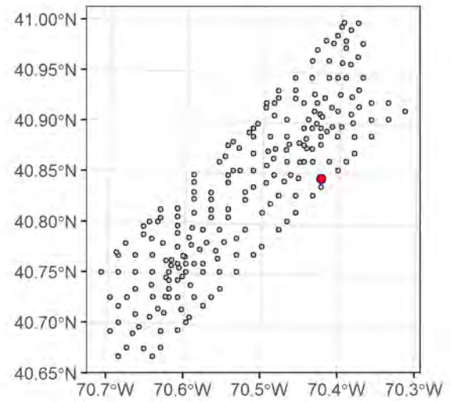
Figure F-371: IAC-094-B-PV

Sediment Profile Image



Figure F-372: IAC-094-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 02:43
Station (Replicate):	IAC-094 (2 of 2)
Depth (m):	-48.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, one very large hole/feeding void, faint tracks

Plan-View Image



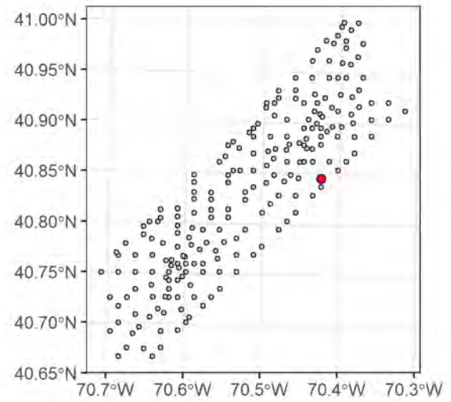
Figure F-373: IAC-094-C-PV

Sediment Profile Image



Figure F-374: IAC-094-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 02:54
Station (Replicate):	IAC-094 (1 of 2)
Depth (m):	-49
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 skate (Raja sp.)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



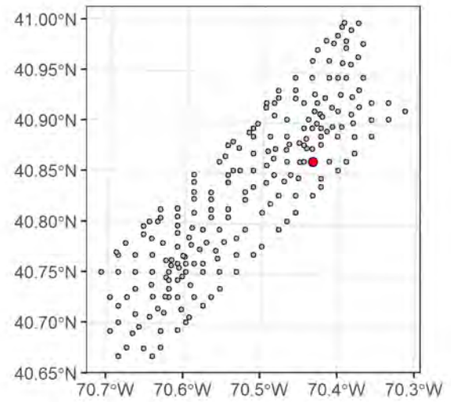
Figure F-375: IAC-095-A-PV

Sediment Profile Image



Figure F-376: IAC-095-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 20:43
Station (Replicate):	IAC-095 (2 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



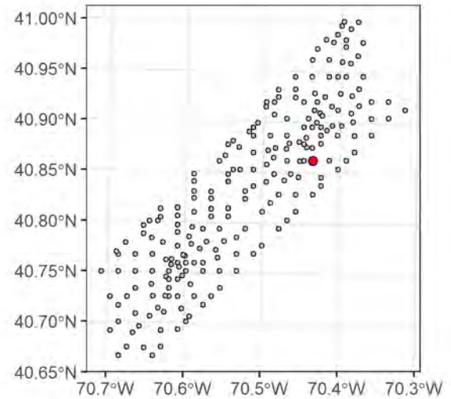
Figure F-377: IAC-095-C-PV

Sediment Profile Image



Figure F-378: IAC-095-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 20:48
Station (Replicate):	IAC-095 (1 of 2)
Depth (m):	-49.7
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

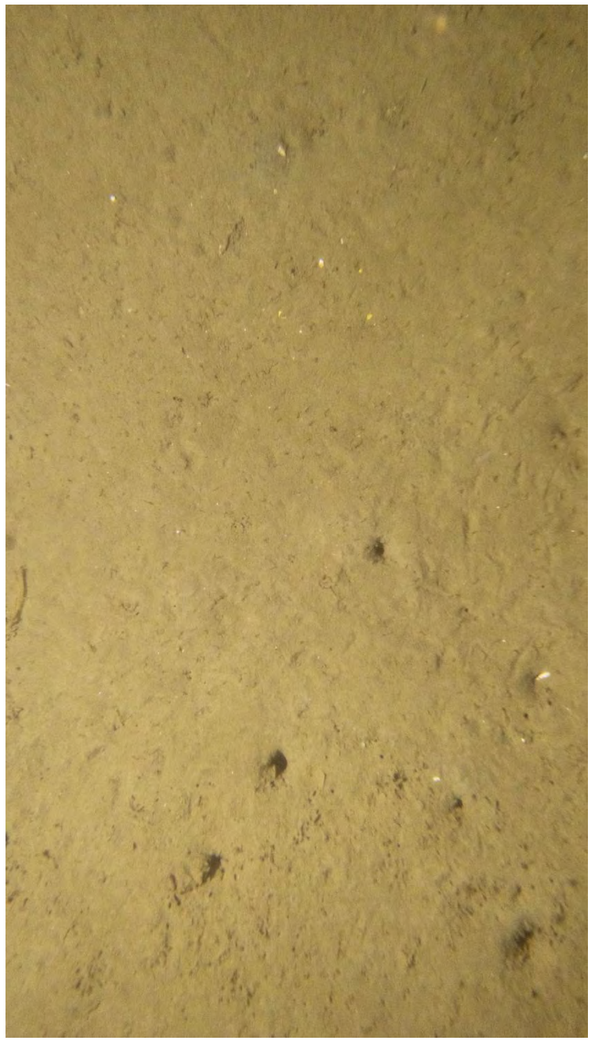


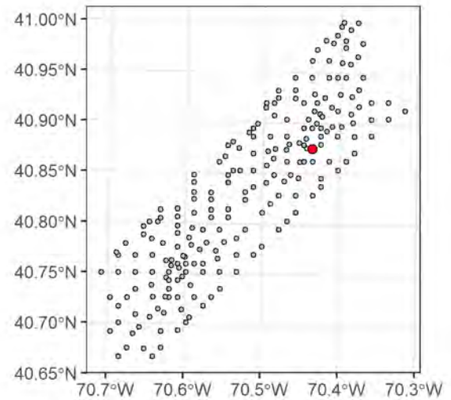
Figure F-379: IAC-096-A-PV

Sediment Profile Image



Figure F-380: IAC-096-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 16:21
Station (Replicate):	IAC-096 (2 of 2)
Depth (m):	-48
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



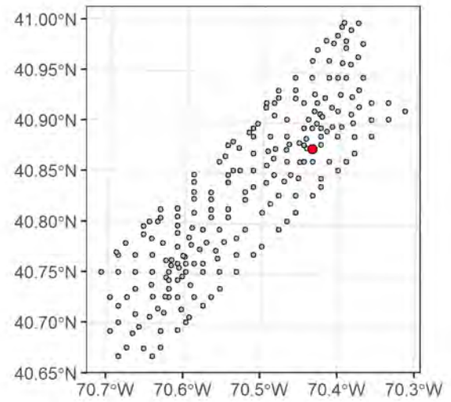
Figure F-381: IAC-096-C-PV

Sediment Profile Image



Figure F-382: IAC-096-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 16:24
Station (Replicate):	IAC-096 (1 of 2)
Depth (m):	-47.8
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



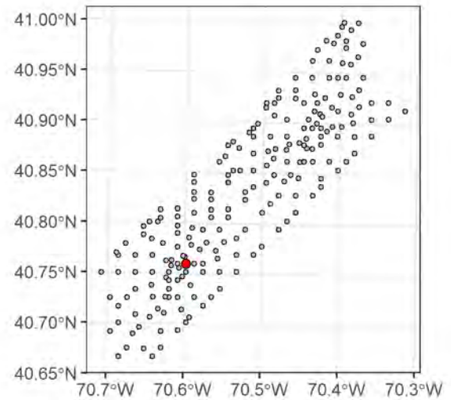
Figure F-383: IAC-097-A-PV

Sediment Profile Image



Figure F-384: IAC-097-A-SPI

Location



Attributes

Date Time (EST):	08/10/21 13:47
Station (Replicate):	IAC-097 (2 of 2)
Depth (m):	-54.8
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	hydroids 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks, two gastropod egg cases

Plan-View Image



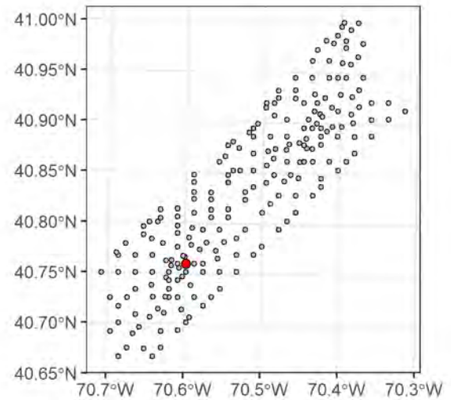
Figure F-385: IAC-097-B-PV

Sediment Profile Image



Figure F-386: IAC-097-B-SPI

Location



Attributes

Date Time (EST):	08/10/21 13:51
Station (Replicate):	IAC-097 (1 of 2)
Depth (m):	-54.6
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows, faint tracks

Plan-View Image



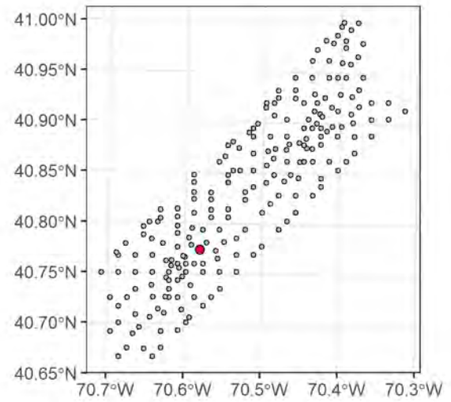
Figure F-387: IAC-098-A-PV

Sediment Profile Image



Figure F-388: IAC-098-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 20:11
Station (Replicate):	IAC-098 (2 of 2)
Depth (m):	-54.5
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	sparse amphipod tube clusters, large and small burrows, abundant crab tracks

Plan-View Image



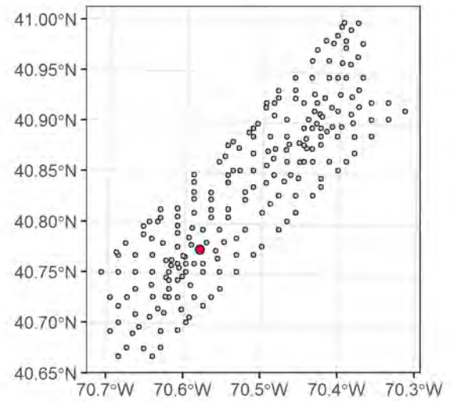
Figure F-389: IAC-098-C-PV

Sediment Profile Image



Figure F-390: IAC-098-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 20:15
Station (Replicate):	IAC-098 (1 of 2)
Depth (m):	-54.6
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Cancer irroratus 1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, abundant crab tracks

Plan-View Image



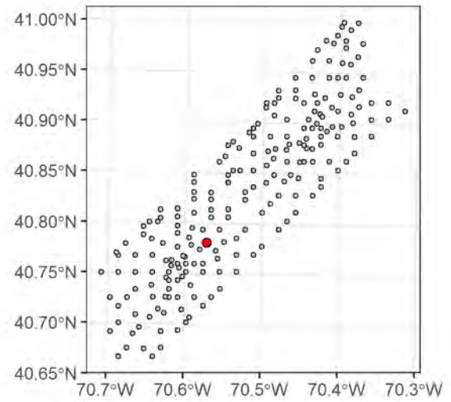
Figure F-391: IAC-099-A-PV

Sediment Profile Image



Figure F-392: IAC-099-A-SPI

Location



Attributes

Date Time (EST):	08/09/21 20:53
Station (Replicate):	IAC-099 (2 of 2)
Depth (m):	-53.9
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	large and small burrows, abundant crab tracks

Plan-View Image



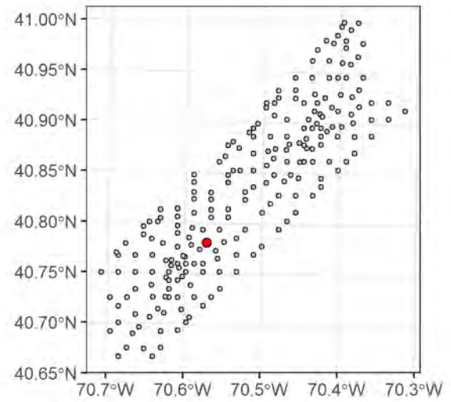
Figure F-393: IAC-099-B-PV

Sediment Profile Image



Figure F-394: IAC-099-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 21:03
Station (Replicate):	IAC-099 (1 of 2)
Depth (m):	-54.1
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	large and small burrows, abundant faint tracks

Plan-View Image



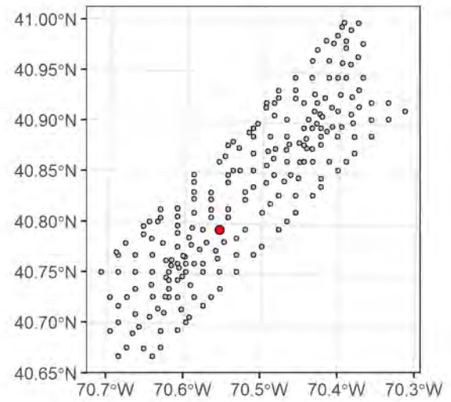
Figure F-395: IAC-100-A-PV

Sediment Profile Image



Figure F-396: IAC-100-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 16:05
Station (Replicate):	IAC-100 (2 of 2)
Depth (m):	-52.3
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	8 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



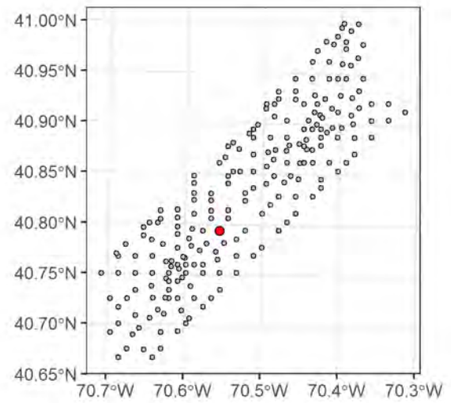
Figure F-397: IAC-100-B-PV

Sediment Profile Image



Figure F-398: IAC-100-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 16:14
Station (Replicate):	IAC-100 (1 of 2)
Depth (m):	-52.4
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



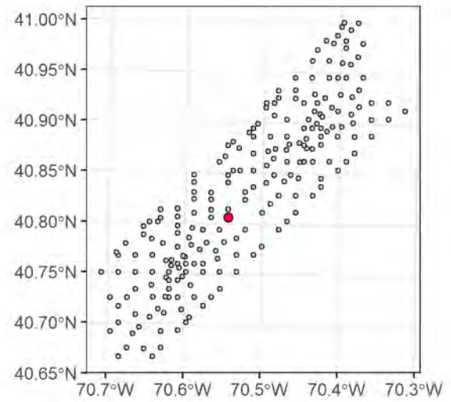
Figure F-399: IAC-101-A-PV

Sediment Profile Image



Figure F-400: IAC-101-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 15:15
Station (Replicate):	IAC-101 (2 of 2)
Depth (m):	-51.3
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

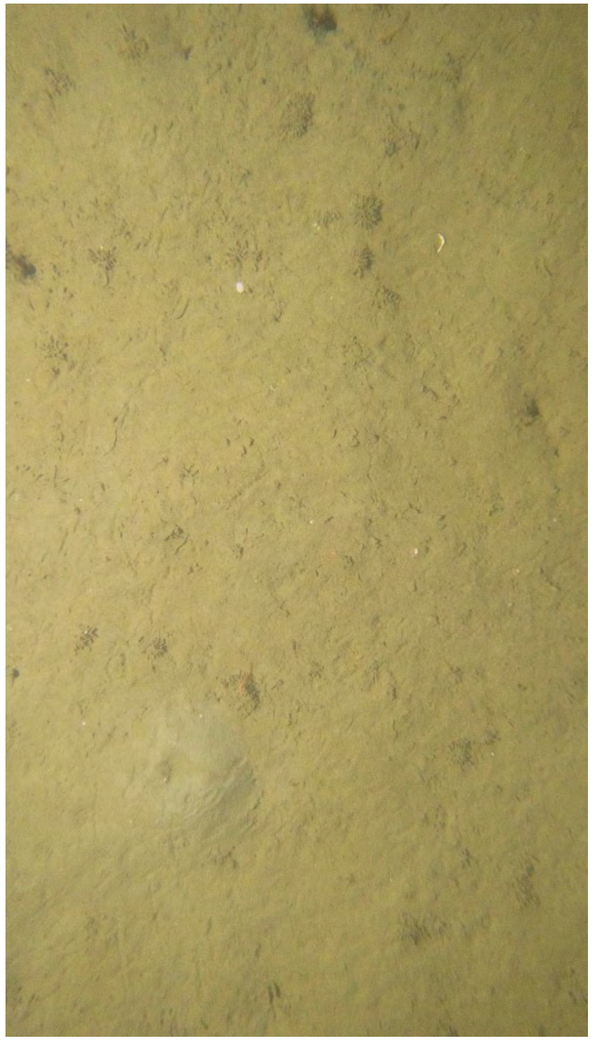


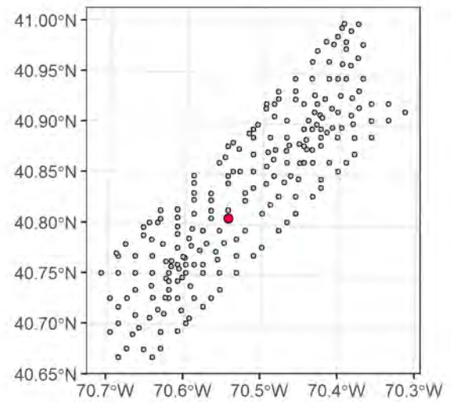
Figure F-401: IAC-101-B-PV

Sediment Profile Image



Figure F-402: IAC-101-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 15:23
Station (Replicate):	IAC-101 (1 of 2)
Depth (m):	-51.3
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



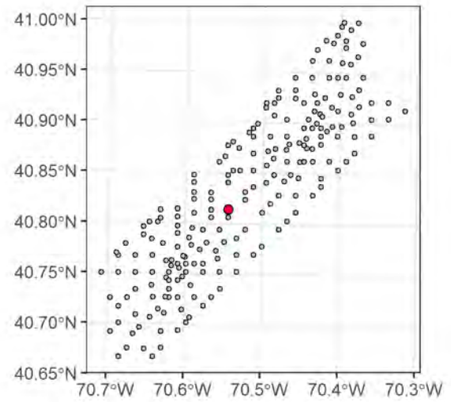
Figure F-403: IAC-102-A-PV

Sediment Profile Image



Figure F-404: IAC-102-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 14:36
Station (Replicate):	IAC-102 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	4 paguroidea, 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab tracks, dead/molt crab carapace

Plan-View Image

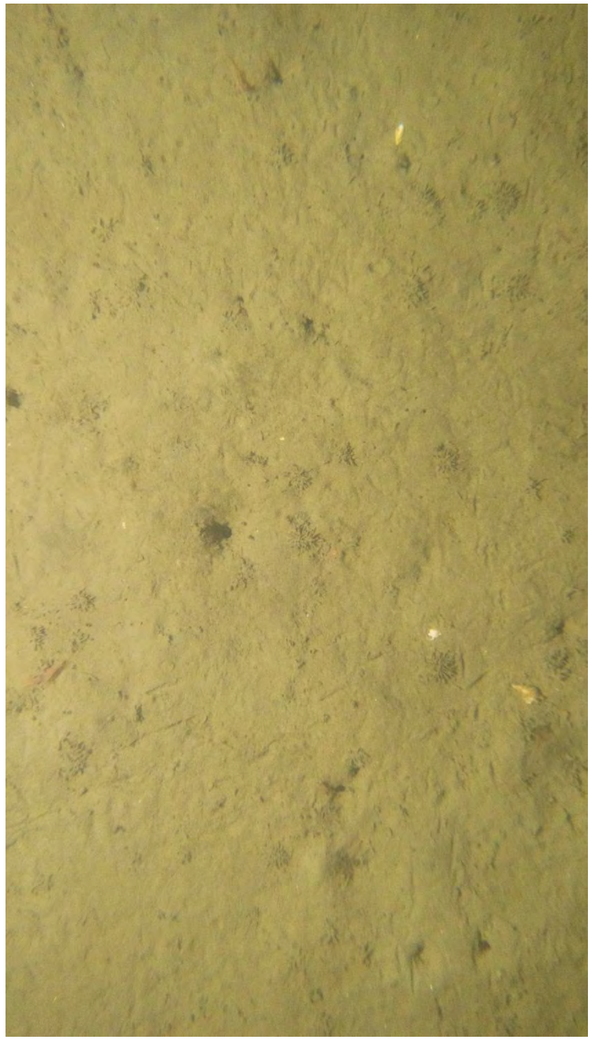


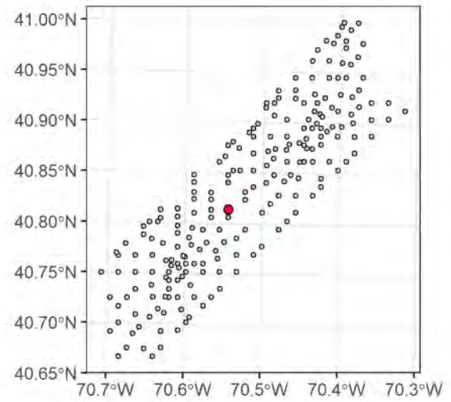
Figure F-405: IAC-102-B-PV

Sediment Profile Image



Figure F-406: IAC-102-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 14:47
Station (Replicate):	IAC-102 (1 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	11.9
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



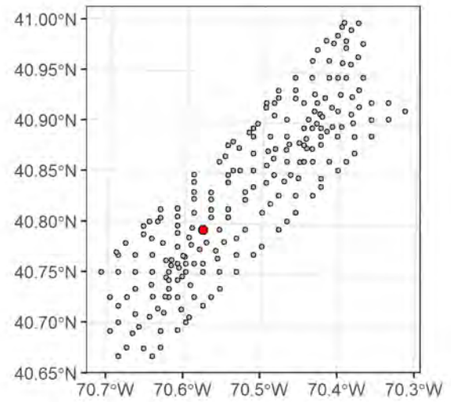
Figure F-407: IAC-103-B-PV

Sediment Profile Image



Figure F-408: IAC-103-B-SPI

Location



Attributes

Date Time (EST):	08/09/21 00:29
Station (Replicate):	IAC-103 (2 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp, 1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tubes, small burrows, abundant faint crab tracks

Plan-View Image



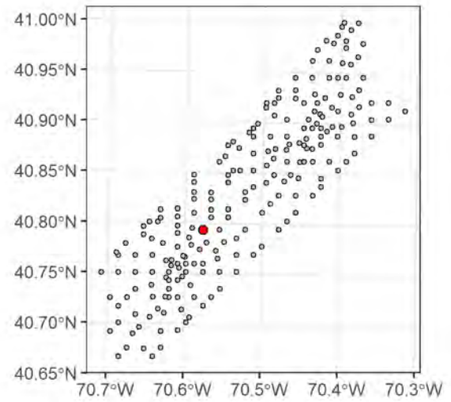
Figure F-409: IAC-103-A-PV

Sediment Profile Image



Figure F-410: IAC-103-C-SPI

Location



Attributes

Date Time (EST):	08/09/21 00:33
Station (Replicate):	IAC-103 (1 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	very few amphipod tubes, large and small burrows, abundant crab tracks

Plan-View Image



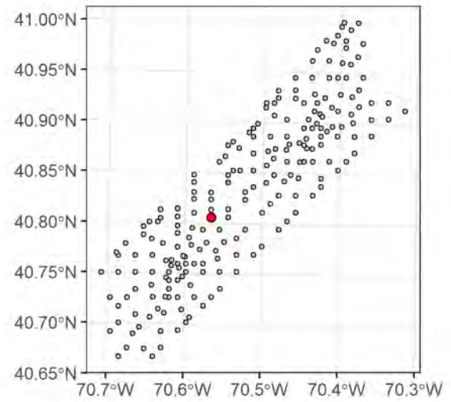
Figure F-411: IAC-104-A-PV

Sediment Profile Image



Figure F-412: IAC-104-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 13:27
Station (Replicate):	IAC-104 (2 of 2)
Depth (m):	-52.2
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	6 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image

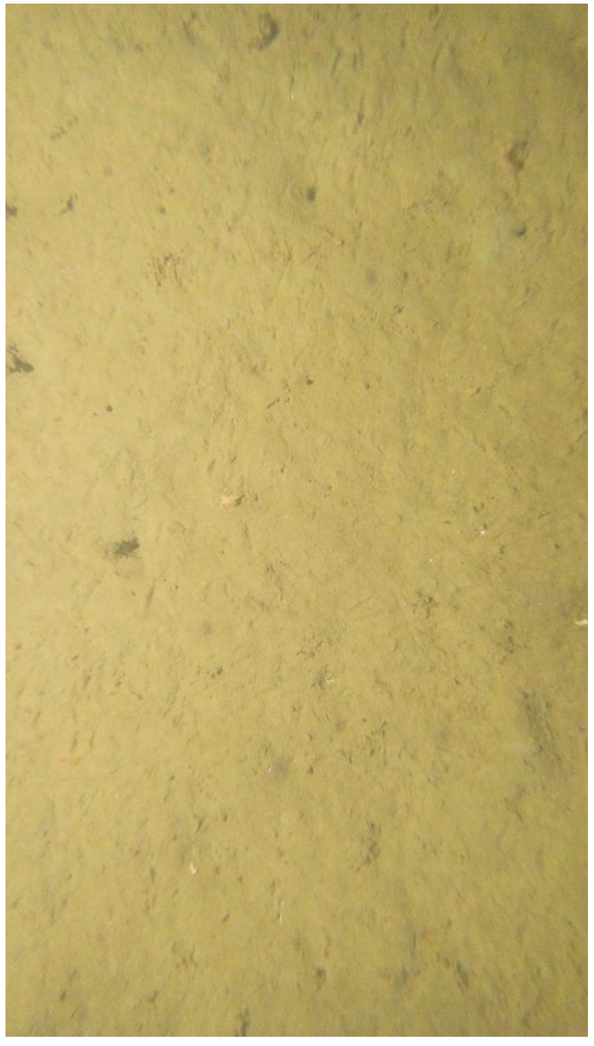


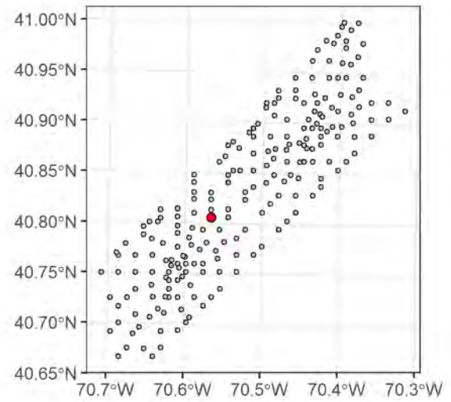
Figure F-413: IAC-104-C-PV

Sediment Profile Image



Figure F-414: IAC-104-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 13:49
Station (Replicate):	IAC-104 (1 of 2)
Depth (m):	-52.4
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea, 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



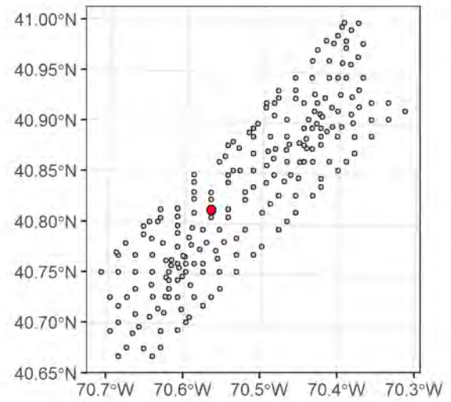
Figure F-415: IAC-105-B-PV

Sediment Profile Image



Figure F-416: IAC-105-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 17:28
Station (Replicate):	IAC-105 (2 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image

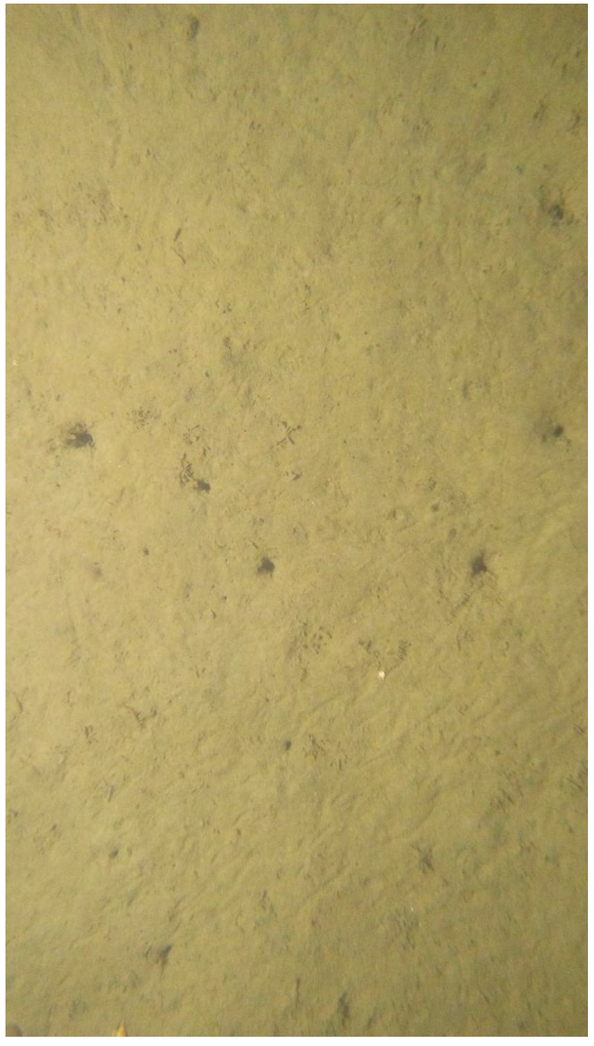


Figure F-417: IAC-105-A-PV

Sediment Profile Image

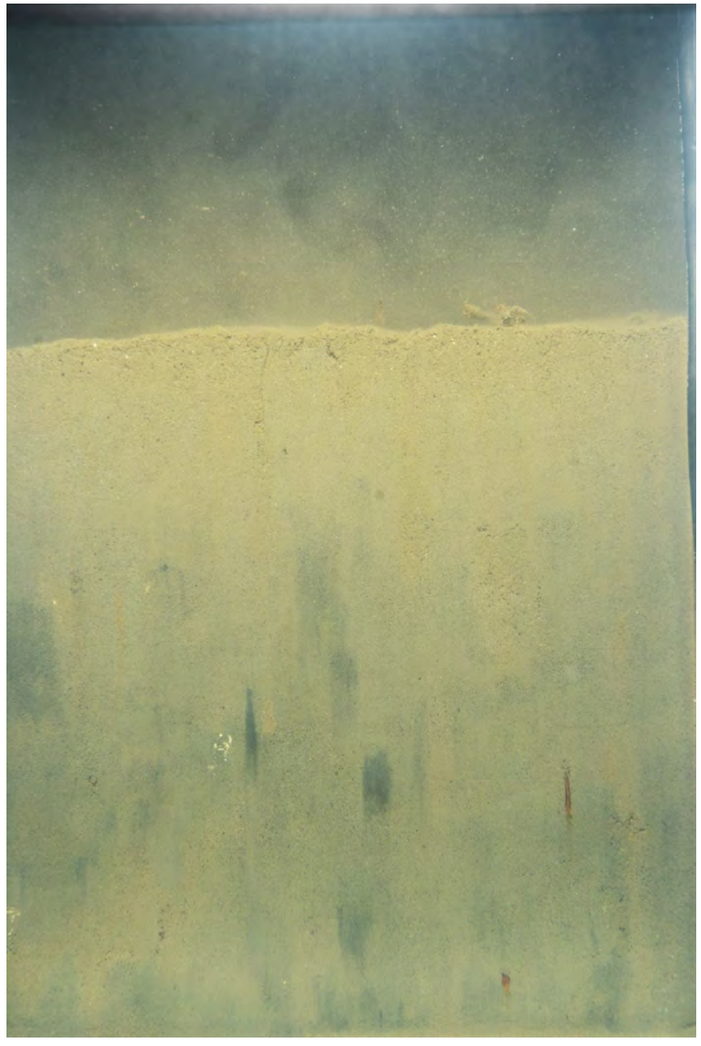
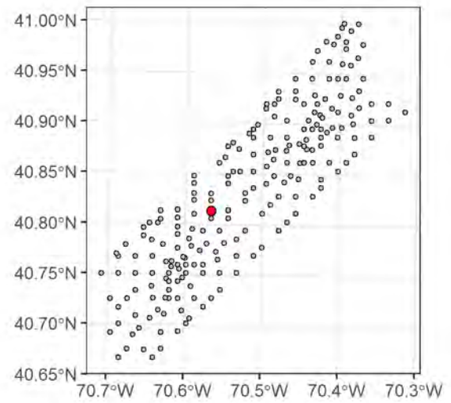


Figure F-418: IAC-105-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 17:32
Station (Replicate):	IAC-105 (1 of 2)
Depth (m):	-51.8
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint crab and gastropod tracks

Plan-View Image



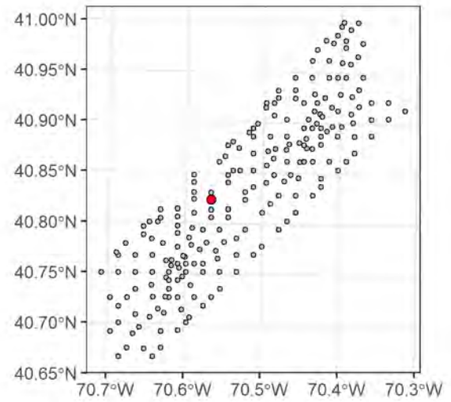
Figure F-419: IAC-106-A-PV

Sediment Profile Image



Figure F-420: IAC-106-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 18:29
Station (Replicate):	IAC-106 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	7.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



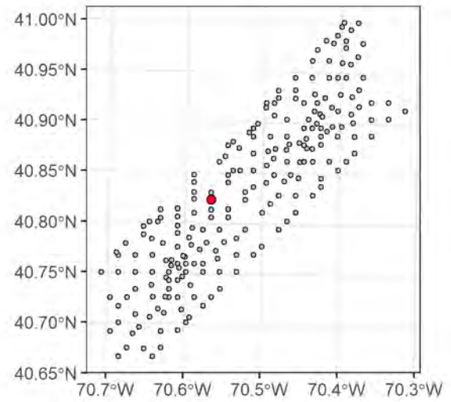
Figure F-421: IAC-106-C-PV

Sediment Profile Image



Figure F-422: IAC-106-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 18:34
Station (Replicate):	IAC-106 (1 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp, 1 Cancer sp.
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image

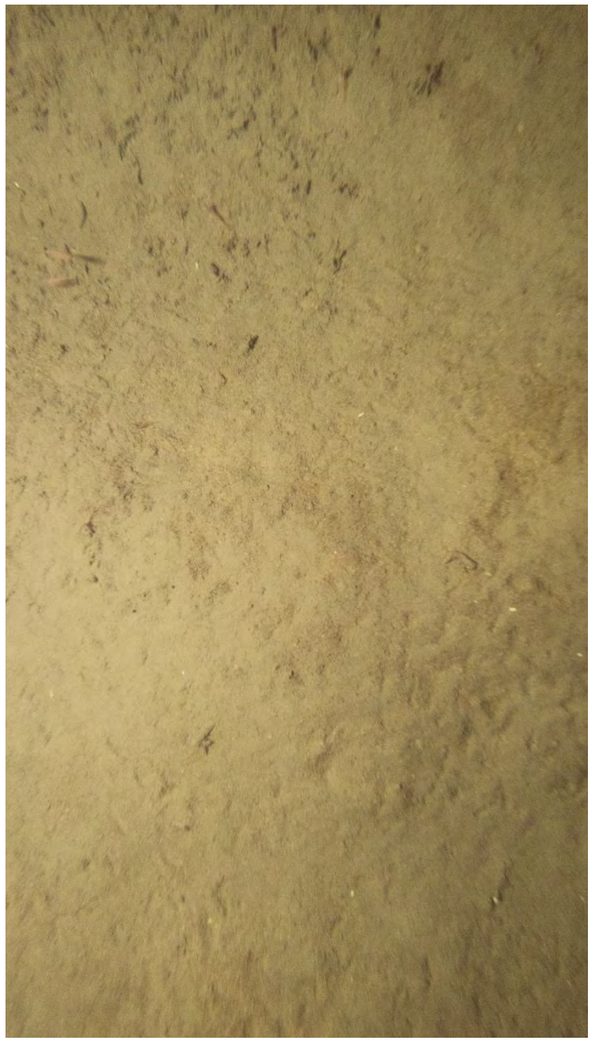


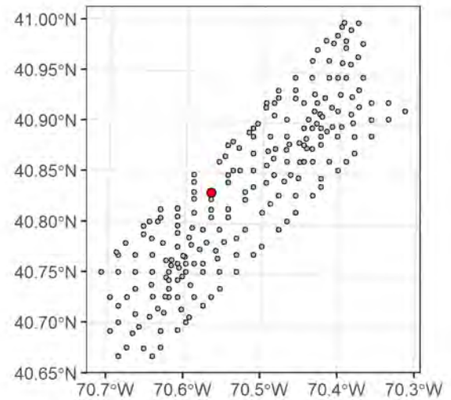
Figure F-423: IAC-107-B-PV

Sediment Profile Image



Figure F-424: IAC-107-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 19:15
Station (Replicate):	IAC-107 (2 of 2)
Depth (m):	-50.4
Prism Penetration (cm):	5.5
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows

Plan-View Image



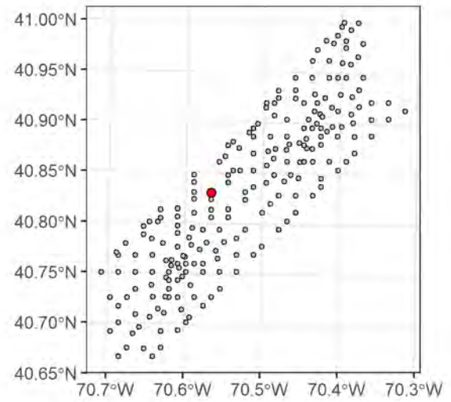
Figure F-425: IAC-107-C-PV

Sediment Profile Image



Figure F-426: IAC-107-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 19:20
Station (Replicate):	IAC-107 (1 of 2)
Depth (m):	-48
Prism Penetration (cm):	6.7
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tubes, small burrows, crab tracks

Plan-View Image



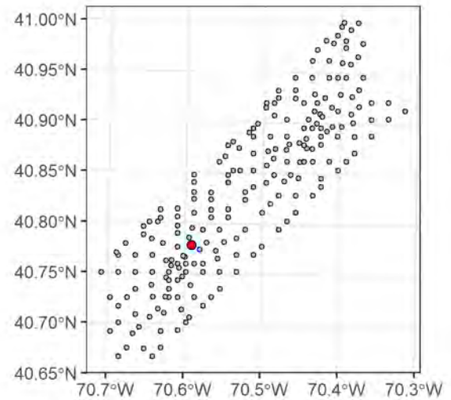
Figure F-427: IAC-108-A-PV

Sediment Profile Image



Figure F-428: IAC-108-E-SPI

Location



Attributes

Date Time (EST):	08/09/21 04:39
Station (Replicate):	IAC-108 (2 of 2)
Depth (m):	-53.1
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, crab tracks

Plan-View Image



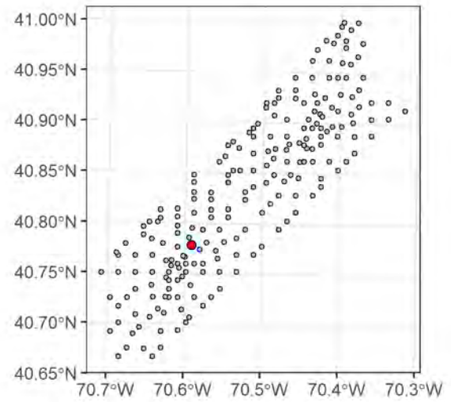
Figure F-429: IAC-108-F-PV

Sediment Profile Image



Figure F-430: IAC-108-F-SPI

Location



Attributes

Date Time (EST):	08/09/21 04:44
Station (Replicate):	IAC-108 (1 of 2)
Depth (m):	-53
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



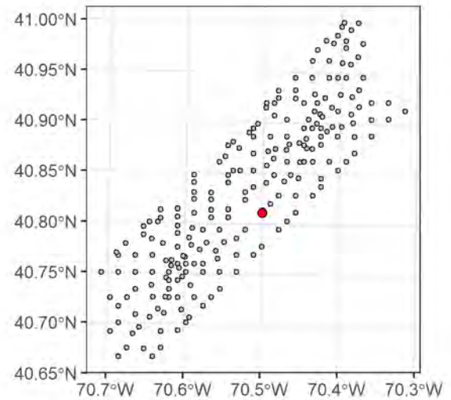
Figure F-431: IAC-109-A-PV

Sediment Profile Image



Figure F-432: IAC-109-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 08:21
Station (Replicate):	IAC-109 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



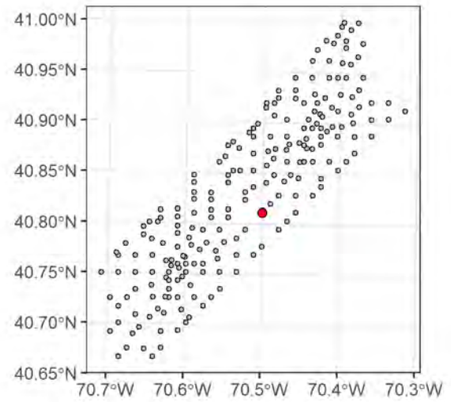
Figure F-433: IAC-109-B-PV

Sediment Profile Image



Figure F-434: IAC-109-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 08:25
Station (Replicate):	IAC-109 (1 of 2)
Depth (m):	-51
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

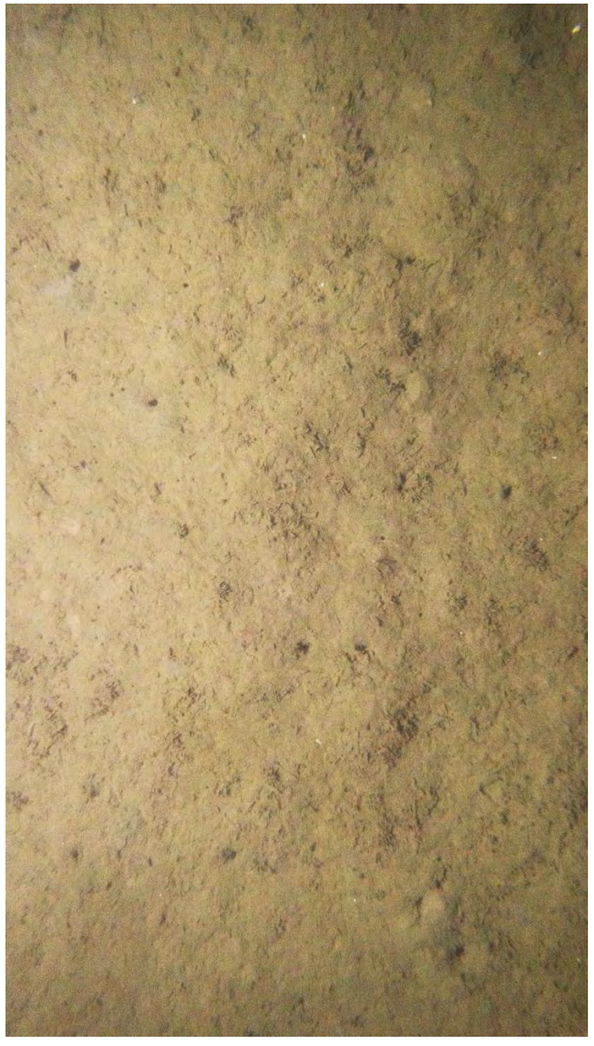


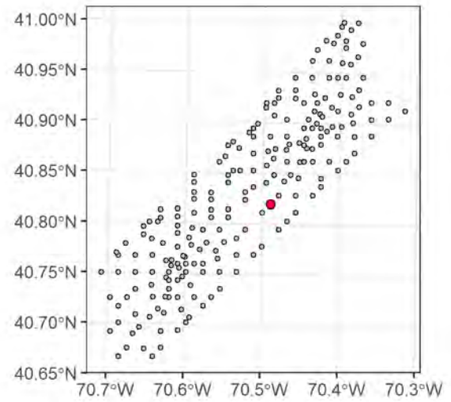
Figure F-435: IAC-110-C-PV

Sediment Profile Image



Figure F-436: IAC-110-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 09:03
Station (Replicate):	IAC-110 (2 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	18.2
aRPD Mean Depth (cm):	5.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



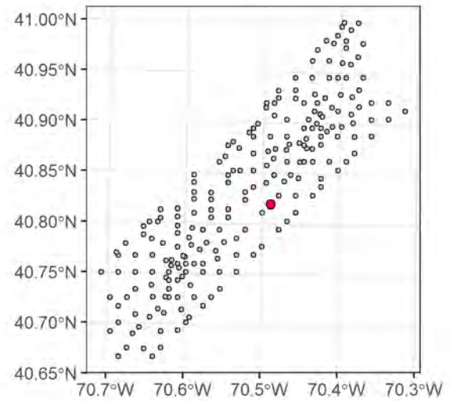
Figure F-437: IAC-110-B-PV

Sediment Profile Image



Figure F-438: IAC-110-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 09:08
Station (Replicate):	IAC-110 (1 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



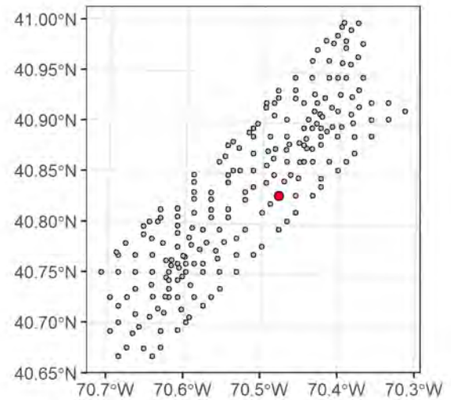
Figure F-439: IAC-111-A-PV

Sediment Profile Image



Figure F-440: IAC-111-D-SPI

Location



Attributes

Date Time (EST):	08/08/21 10:33
Station (Replicate):	IAC-111 (2 of 2)
Depth (m):	-52.2
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint tracks, dark image

Plan-View Image



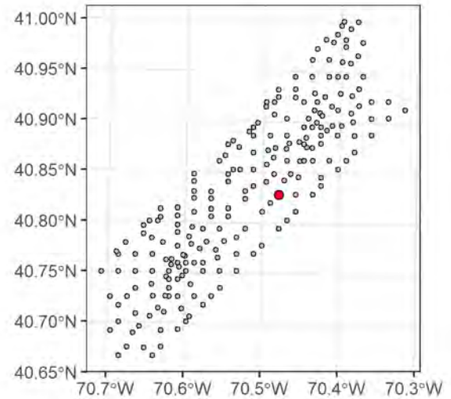
Figure F-441: IAC-111-B-PV

Sediment Profile Image



Figure F-442: IAC-111-E-SPI

Location



Attributes

Date Time (EST):	08/08/21 10:37
Station (Replicate):	IAC-111 (1 of 2)
Depth (m):	-52.1
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	30+ Bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, faint tracks

Plan-View Image



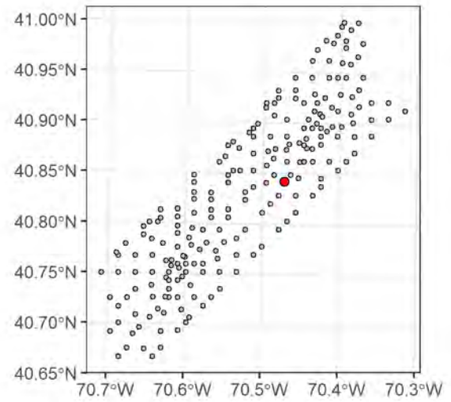
Figure F-443: IAC-112-B-PV

Sediment Profile Image



Figure F-444: IAC-112-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 00:20
Station (Replicate):	IAC-112 (2 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	6.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



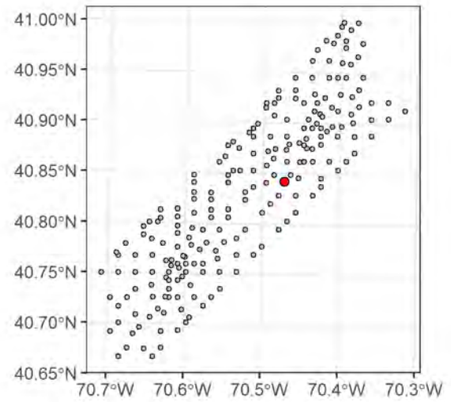
Figure F-445: IAC-112-C-PV

Sediment Profile Image



Figure F-446: IAC-112-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 00:29
Station (Replicate):	IAC-112 (1 of 2)
Depth (m):	-50.8
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



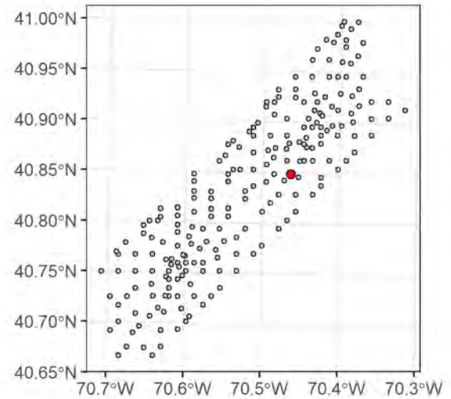
Figure F-447: IAC-113-A-PV

Sediment Profile Image



Figure F-448: IAC-113-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 01:10
Station (Replicate):	IAC-113 (2 of 2)
Depth (m):	-50.1
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image

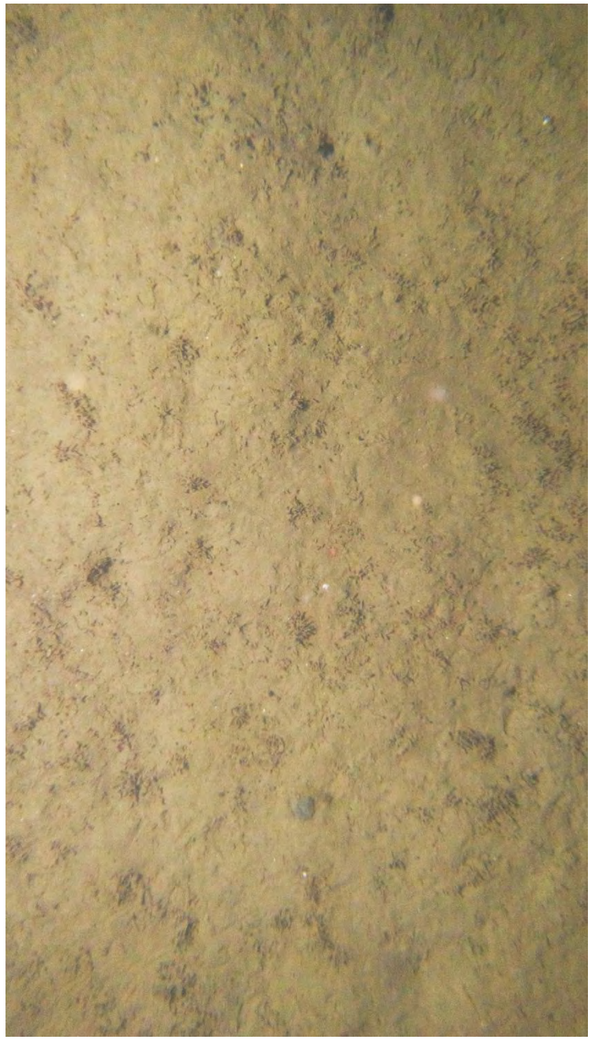


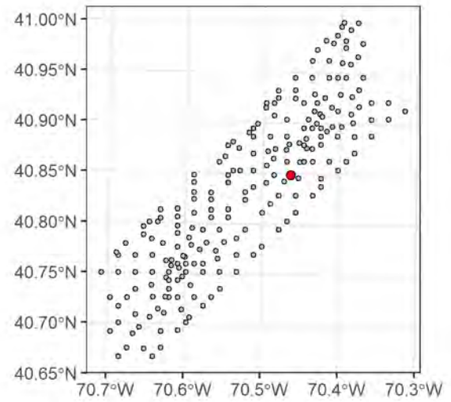
Figure F-449: IAC-113-B-PV

Sediment Profile Image



Figure F-450: IAC-113-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 01:15
Station (Replicate):	IAC-113 (1 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



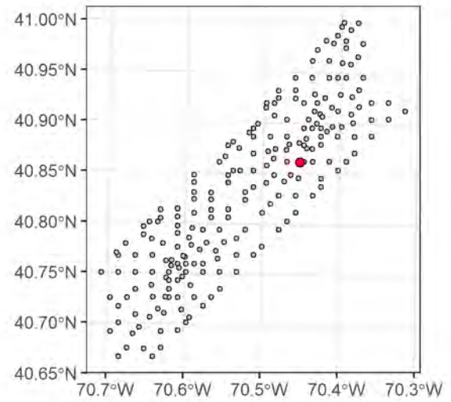
Figure F-451: IAC-114-A-PV

Sediment Profile Image



Figure F-452: IAC-114-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 21:53
Station (Replicate):	IAC-114 (2 of 2)
Depth (m):	-50
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



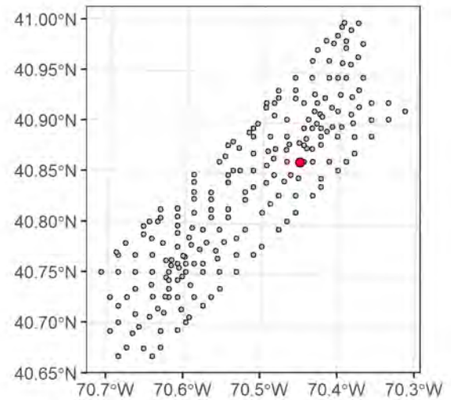
Figure F-453: IAC-114-B-PV

Sediment Profile Image



Figure F-454: IAC-114-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 21:58
Station (Replicate):	IAC-114 (1 of 2)
Depth (m):	-50
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



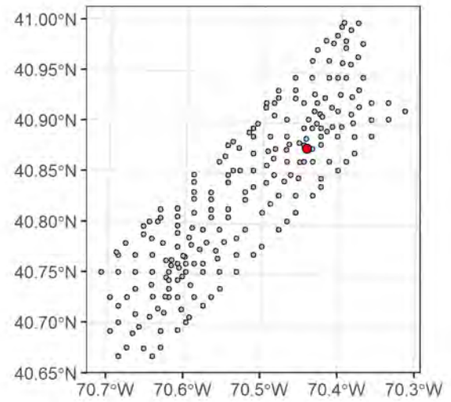
Figure F-455: IAC-115-A-PV

Sediment Profile Image



Figure F-456: IAC-115-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 15:38
Station (Replicate):	IAC-115 (2 of 2)
Depth (m):	-48.5
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image

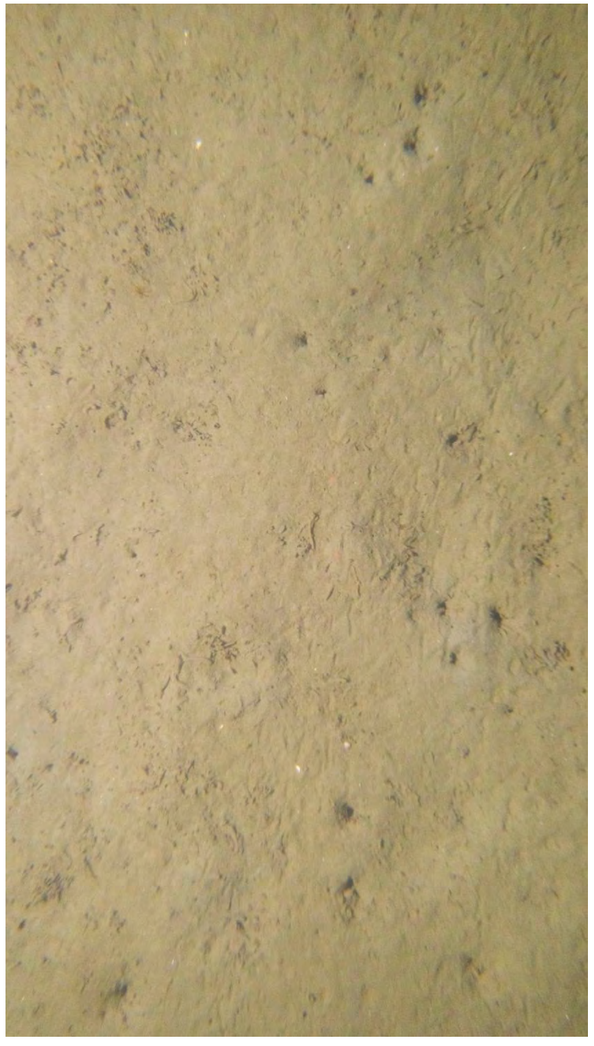


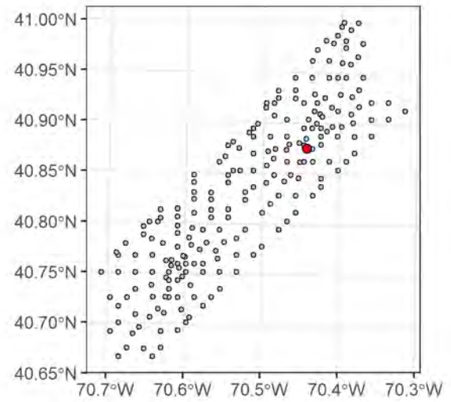
Figure F-457: IAC-115-C-PV

Sediment Profile Image



Figure F-458: IAC-115-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 15:46
Station (Replicate):	IAC-115 (1 of 2)
Depth (m):	-48.5
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



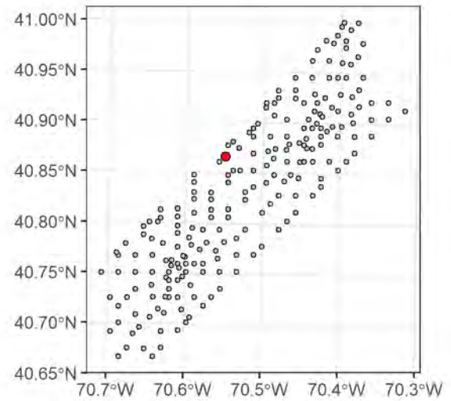
Figure F-459: IAC-116-A-PV

Sediment Profile Image



Figure F-460: IAC-116-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 17:33
Station (Replicate):	IAC-116 (2 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	17.5
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, one very large hole/feeding void

Plan-View Image



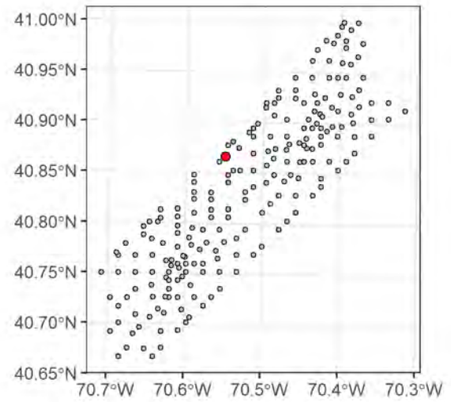
Figure F-461: IAC-116-C-PV

Sediment Profile Image



Figure F-462: IAC-116-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 17:43
Station (Replicate):	IAC-116 (1 of 2)
Depth (m):	-52.9
Prism Penetration (cm):	13
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



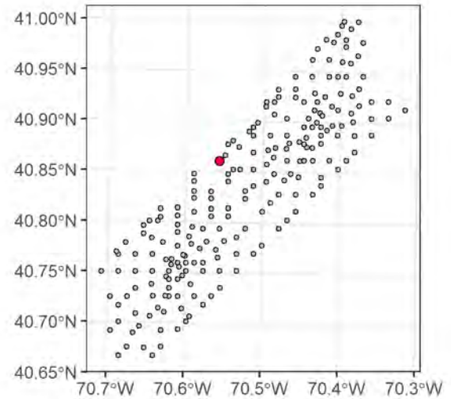
Figure F-463: IAC-117-B-PV

Sediment Profile Image



Figure F-464: IAC-117-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 18:58
Station (Replicate):	IAC-117 (2 of 2)
Depth (m):	-52.4
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



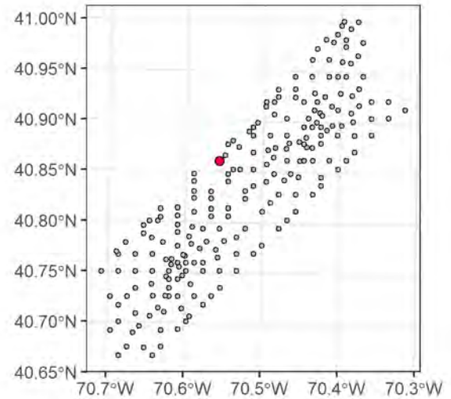
Figure F-465: IAC-117-A-PV

Sediment Profile Image



Figure F-466: IAC-117-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 19:02
Station (Replicate):	IAC-117 (1 of 2)
Depth (m):	-52.1
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	bivalves 1 shrimp, 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



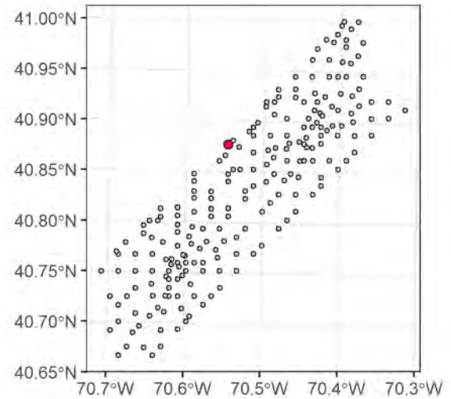
Figure F-467: IAC-118-A-PV

Sediment Profile Image



Figure F-468: IAC-118-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 16:01
Station (Replicate):	IAC-118 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp, 2 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



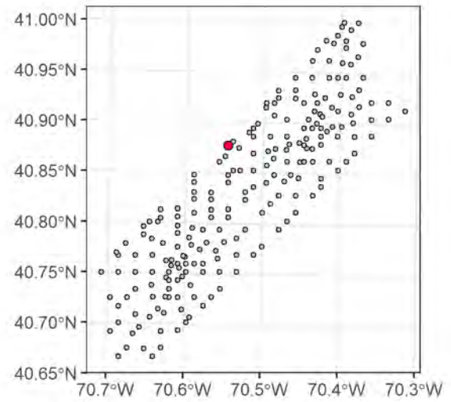
Figure F-469: IAC-118-C-PV

Sediment Profile Image



Figure F-470: IAC-118-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 16:10
Station (Replicate):	IAC-118 (1 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 burrowing sea stars (Astropecten?) 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tube clusters, large and small burrows

Plan-View Image



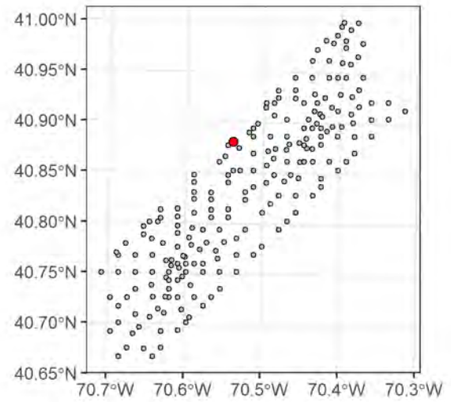
Figure F-471: IAC-119-A-PV

Sediment Profile Image



Figure F-472: IAC-119-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 15:01
Station (Replicate):	IAC-119 (2 of 2)
Depth (m):	-50.5
Prism Penetration (cm):	17.5
aRPD Mean Depth (cm):	2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tube clusters, large and small burrows

Plan-View Image

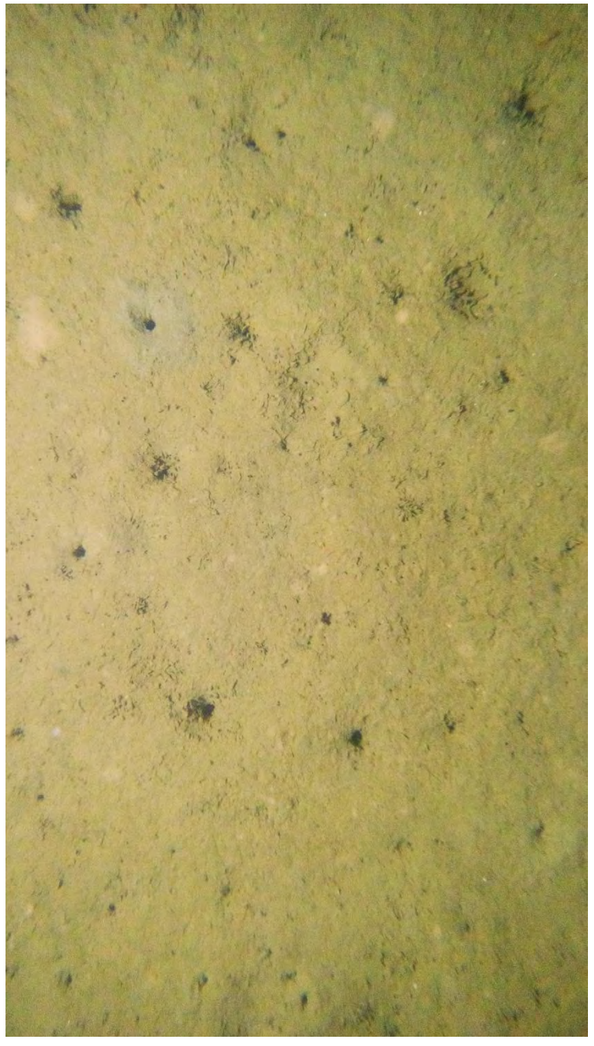


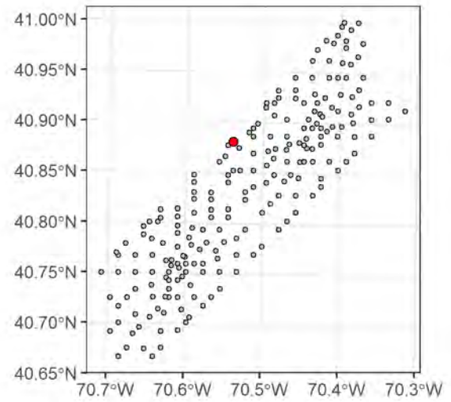
Figure F-473: IAC-119-B-PV

Sediment Profile Image



Figure F-474: IAC-119-E-SPI

Location



Attributes

Date Time (EST):	08/04/21 15:23
Station (Replicate):	IAC-119 (1 of 2)
Depth (m):	-50.5
Prism Penetration (cm):	16.8
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tube clusters, large and small burrows

Plan-View Image



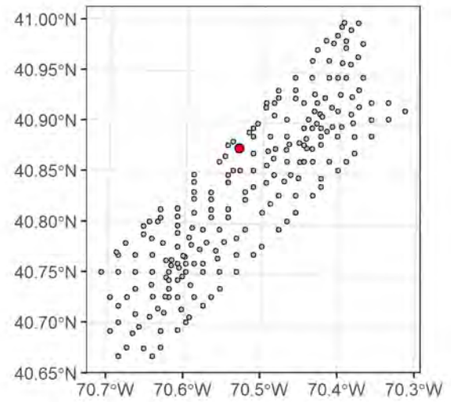
Figure F-475: IAC-120-A-PV

Sediment Profile Image



Figure F-476: IAC-120-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 16:46
Station (Replicate):	IAC-120 (2 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	5.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



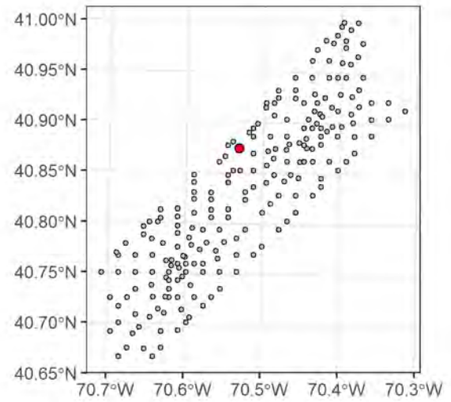
Figure F-477: IAC-120-B-PV

Sediment Profile Image



Figure F-478: IAC-120-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 16:50
Station (Replicate):	IAC-120 (1 of 2)
Depth (m):	-51.4
Prism Penetration (cm):	17.2
aRPD Mean Depth (cm):	6.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



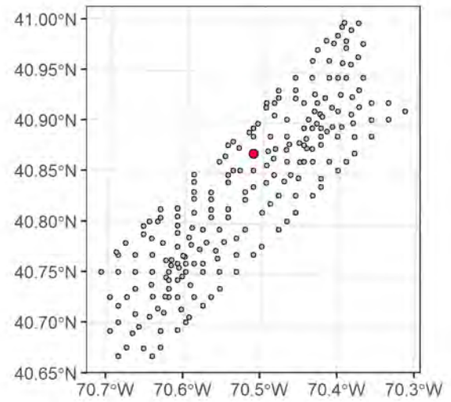
Figure F-479: IAC-121-A-PV

Sediment Profile Image



Figure F-480: IAC-121-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 07:16
Station (Replicate):	IAC-121 (2 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	18.9
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	abundant amphipod tube clusters, large and small burrows, crab tracks

Plan-View Image



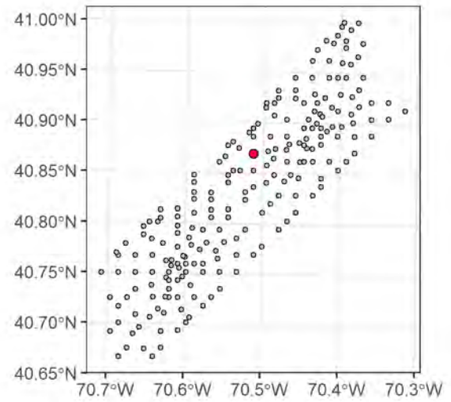
Figure F-481: IAC-121-B-PV

Sediment Profile Image



Figure F-482: IAC-121-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 07:21
Station (Replicate):	IAC-121 (1 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



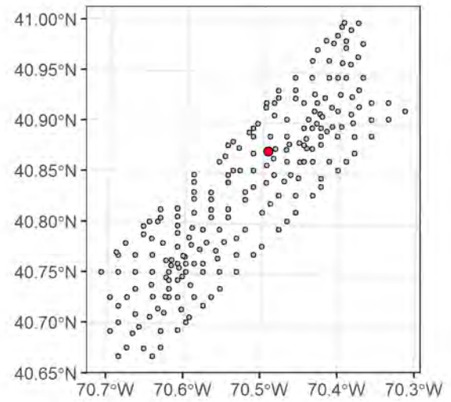
Figure F-483: IAC-122-C-PV

Sediment Profile Image



Figure F-484: IAC-122-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 10:06
Station (Replicate):	IAC-122 (2 of 2)
Depth (m):	-50.8
Prism Penetration (cm):	16.6
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, small burrows

Plan-View Image



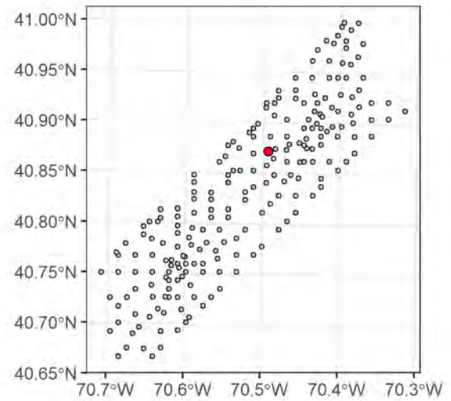
Figure F-485: IAC-122-B-PV

Sediment Profile Image



Figure F-486: IAC-122-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 10:10
Station (Replicate):	IAC-122 (1 of 2)
Depth (m):	-50.8
Prism Penetration (cm):	16.6
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



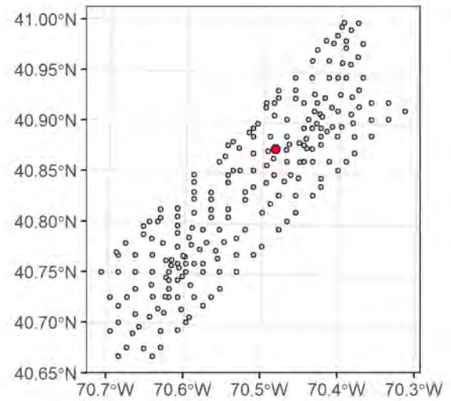
Figure F-487: IAC-123-E-PV

Sediment Profile Image



Figure F-488: IAC-123-E-SPI

Location



Attributes

Date Time (EST):	08/07/21 11:18
Station (Replicate):	IAC-123 (2 of 2)
Depth (m):	-50
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	5 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	microbial mat, small burrows, two very large burrows

Plan-View Image



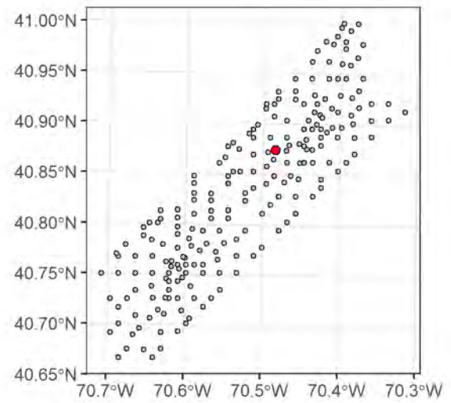
Figure F-489: IAC-123-D-PV

Sediment Profile Image



Figure F-490: IAC-123-F-SPI

Location



Attributes

Date Time (EST):	08/07/21 11:22
Station (Replicate):	IAC-123 (1 of 2)
Depth (m):	-50.1
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, small burrows, faint tracks

Plan-View Image



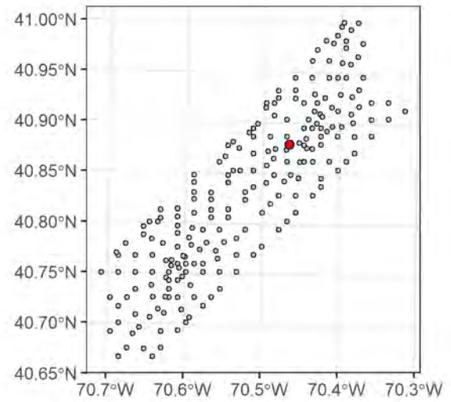
Figure F-491: IAC-124-B-PV

Sediment Profile Image



Figure F-492: IAC-124-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 13:27
Station (Replicate):	IAC-124 (2 of 2)
Depth (m):	-48.9
Prism Penetration (cm):	15.6
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp, 1 Paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image

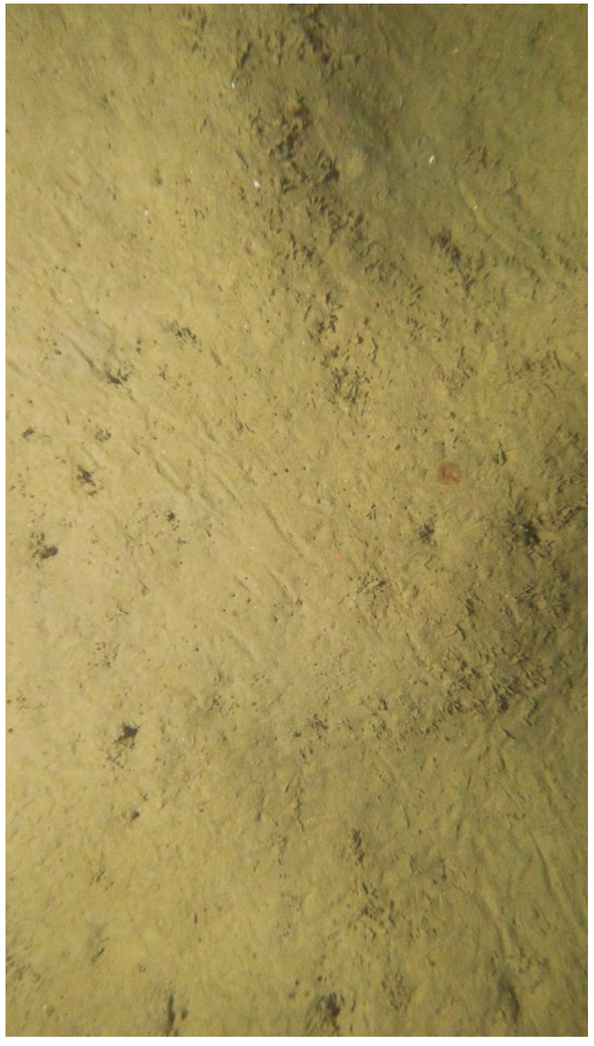


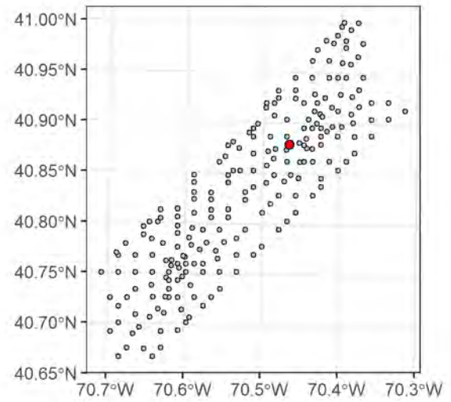
Figure F-493: IAC-124-A-PV

Sediment Profile Image



Figure F-494: IAC-124-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 13:30
Station (Replicate):	IAC-124 (1 of 2)
Depth (m):	-49
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks (Triglid tracks?)

Plan-View Image

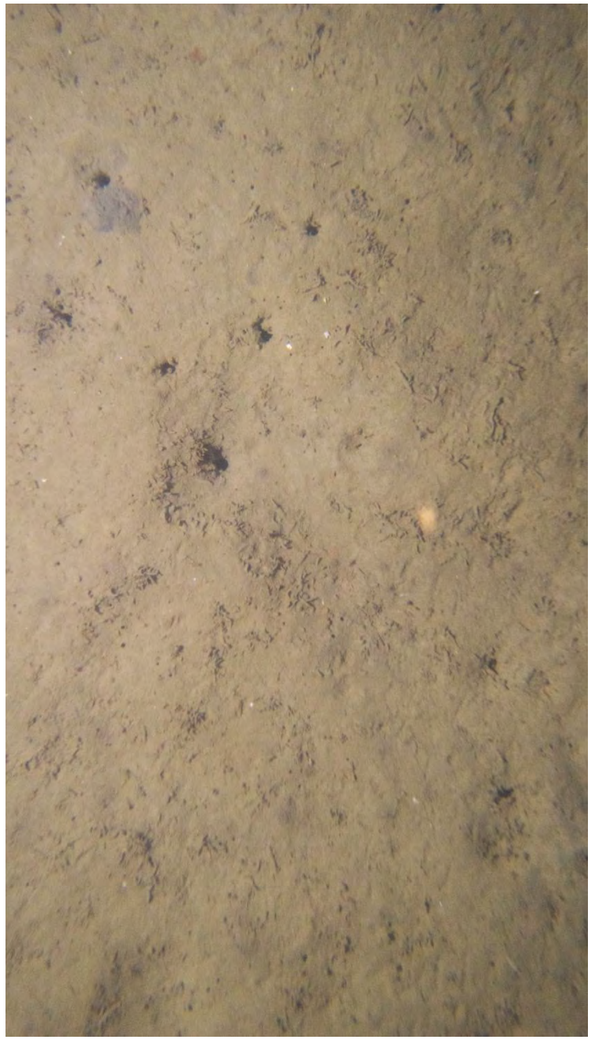


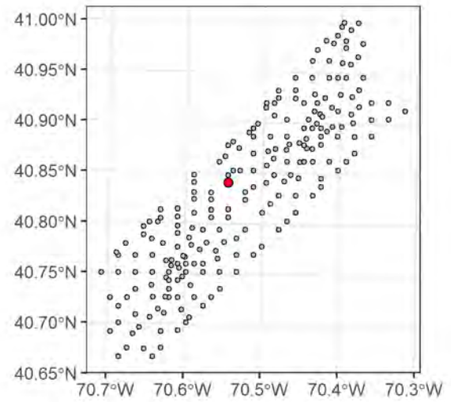
Figure F-495: IAC-125-A-PV

Sediment Profile Image



Figure F-496: IAC-125-A-SPI

Location



Attributes

Date Time (EST):	08/06/21 23:00
Station (Replicate):	IAC-125 (2 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large (one with reduced sediment) and small burrows

Plan-View Image



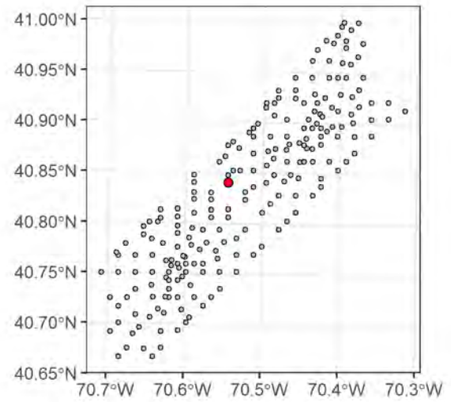
Figure F-497: IAC-125-C-PV

Sediment Profile Image



Figure F-498: IAC-125-B-SPI

Location



Attributes

Date Time (EST):	08/06/21 23:05
Station (Replicate):	IAC-125 (1 of 2)
Depth (m):	-51.4
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, microbial mat? focus issues

Plan-View Image

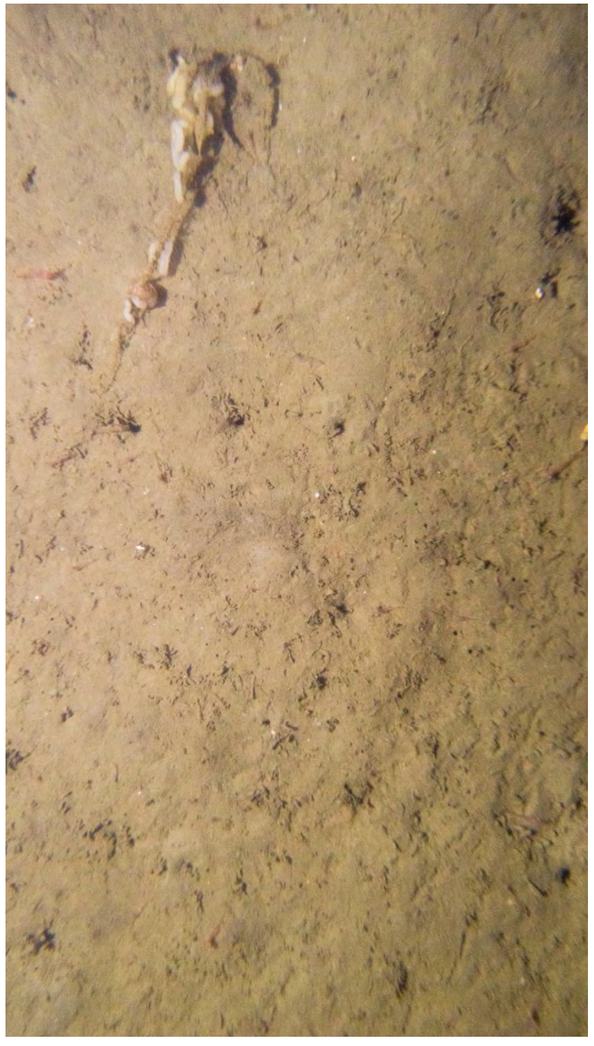


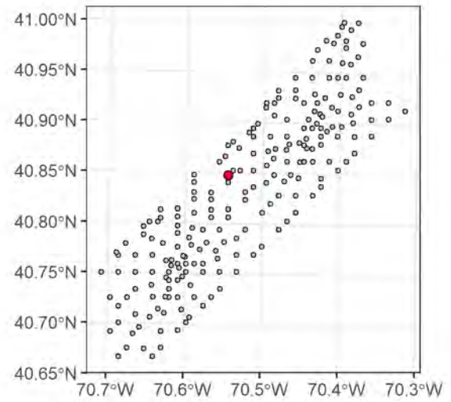
Figure F-499: IAC-126-B-PV

Sediment Profile Image



Figure F-500: IAC-126-B-SPI

Location



Attributes

Date Time (EST):	08/06/21 22:26
Station (Replicate):	IAC-126 (2 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, clump of 12+ squid eggs

Plan-View Image



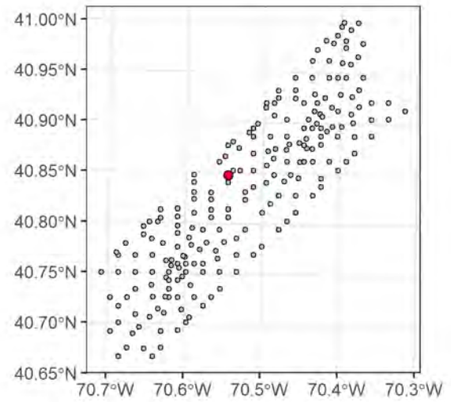
Figure F-501: IAC-126-A-PV

Sediment Profile Image



Figure F-502: IAC-126-C-SPI

Location



Attributes

Date Time (EST):	08/06/21 22:30
Station (Replicate):	IAC-126 (1 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



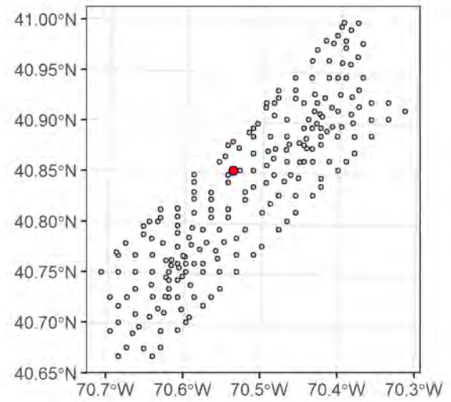
Figure F-503: IAC-127-A-PV

Sediment Profile Image



Figure F-504: IAC-127-A-SPI

Location



Attributes

Date Time (EST):	08/06/21 23:47
Station (Replicate):	IAC-127 (2 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Cancer irroratus
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image



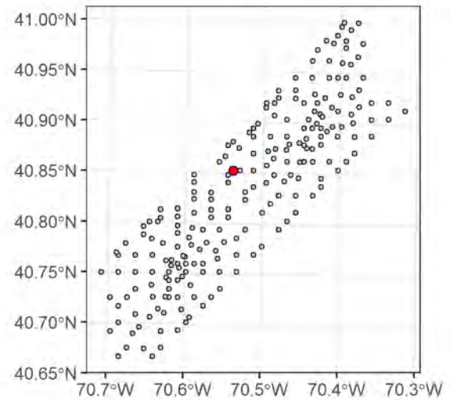
Figure F-505: IAC-127-B-PV

Sediment Profile Image



Figure F-506: IAC-127-C-SPI

Location



Attributes

Date Time (EST):	08/06/21 23:55
Station (Replicate):	IAC-127 (1 of 2)
Depth (m):	-51.4
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image



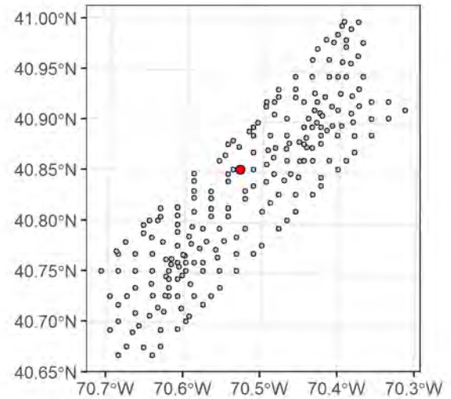
Figure F-507: IAC-128-B-PV

Sediment Profile Image



Figure F-508: IAC-128-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 00:47
Station (Replicate):	IAC-128 (2 of 2)
Depth (m):	-52.1
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	4.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	numerous bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	abundant amphipod tubes, large and small burrows, one dead/molt crab carapace

Plan-View Image



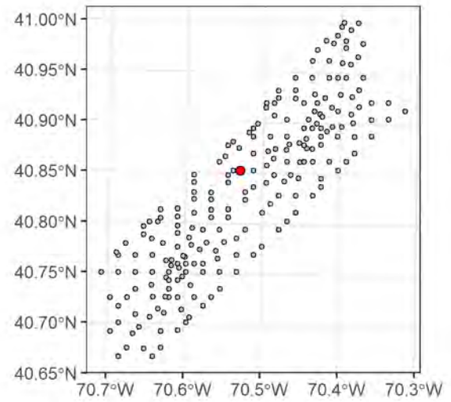
Figure F-509: IAC-128-A-PV

Sediment Profile Image



Figure F-510: IAC-128-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 00:52
Station (Replicate):	IAC-128 (1 of 2)
Depth (m):	-52.1
Prism Penetration (cm):	17.7
aRPD Mean Depth (cm):	5.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	abundant amphipod tube clusters, large and small burrows

Plan-View Image



Figure F-511: IAC-129-B-PV

Sediment Profile Image

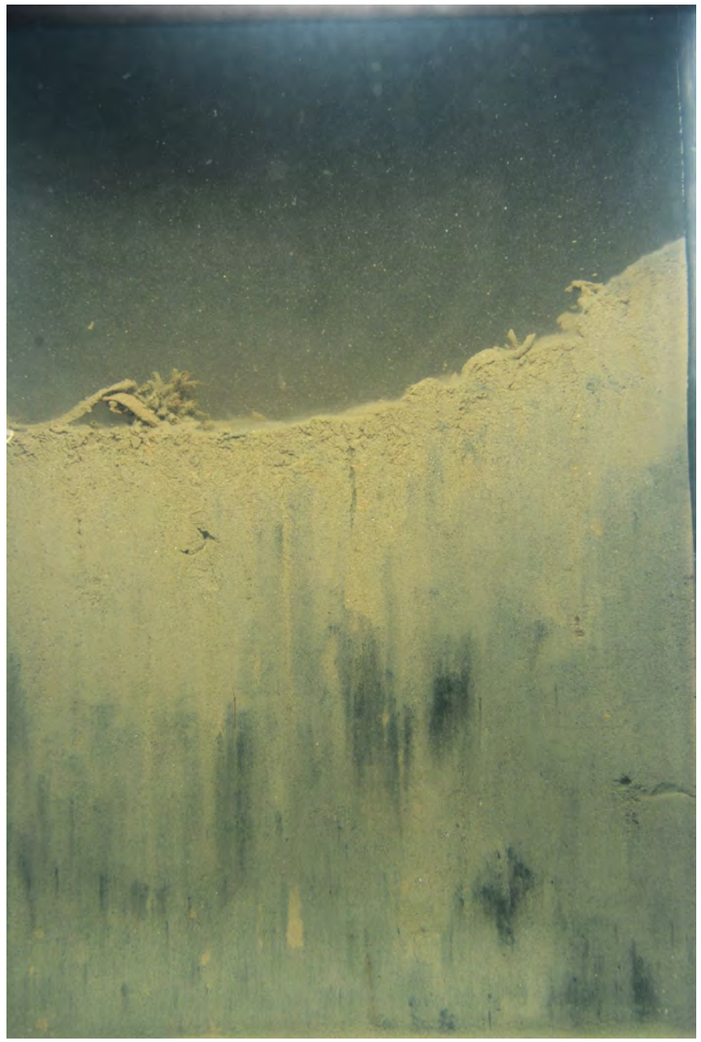
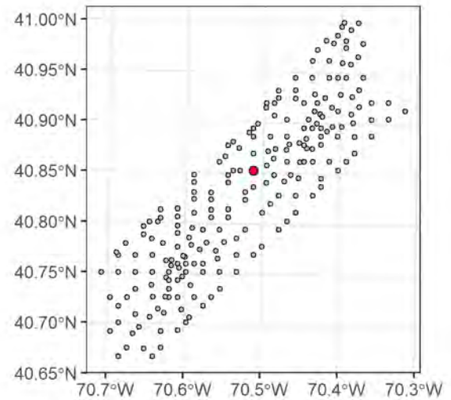


Figure F-512: IAC-129-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 01:33
Station (Replicate):	IAC-129 (2 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



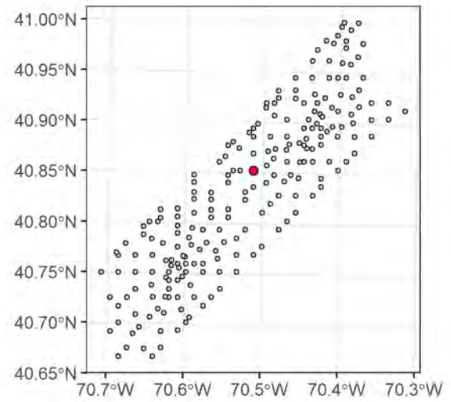
Figure F-513: IAC-129-A-PV

Sediment Profile Image



Figure F-514: IAC-129-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 01:38
Station (Replicate):	IAC-129 (1 of 2)
Depth (m):	-51.2
Prism Penetration (cm):	18.5
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	abundant amphipod tube clusters, small burrows

Plan-View Image



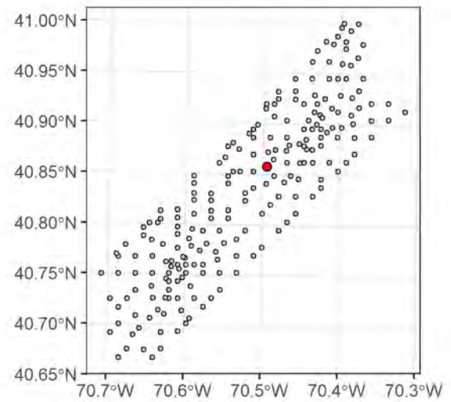
Figure F-515: IAC-130-B-PV

Sediment Profile Image



Figure F-516: IAC-130-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 08:10
Station (Replicate):	IAC-130 (2 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	17
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod and polychaete tubes, large and small burrows

Plan-View Image



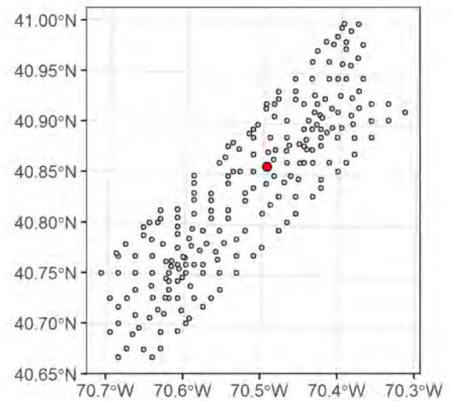
Figure F-517: IAC-130-A-PV

Sediment Profile Image



Figure F-518: IAC-130-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 08:14
Station (Replicate):	IAC-130 (1 of 2)
Depth (m):	-51.5
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	polychaete tubes, large and small burrows

Plan-View Image



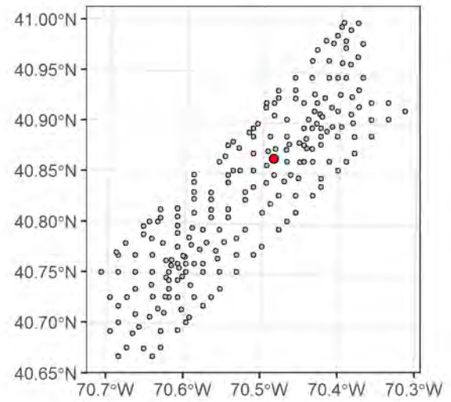
Figure F-519: IAC-131-E-PV

Sediment Profile Image



Figure F-520: IAC-131-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 08:46
Station (Replicate):	IAC-131 (2 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	numerous bivalves 1 fish in a burrow
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, polychaete tubes, small burrows

Plan-View Image



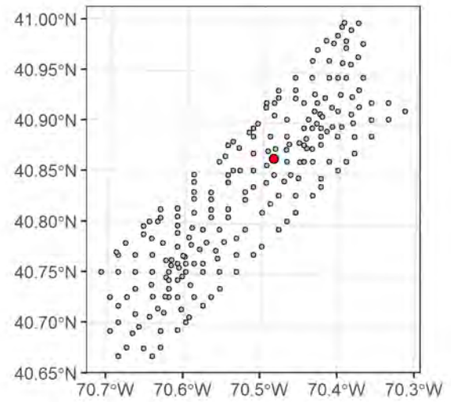
Figure F-521: IAC-131-D-PV

Sediment Profile Image



Figure F-522: IAC-131-D-SPI

Location



Attributes

Date Time (EST):	08/07/21 09:25
Station (Replicate):	IAC-131 (1 of 2)
Depth (m):	-50.9
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

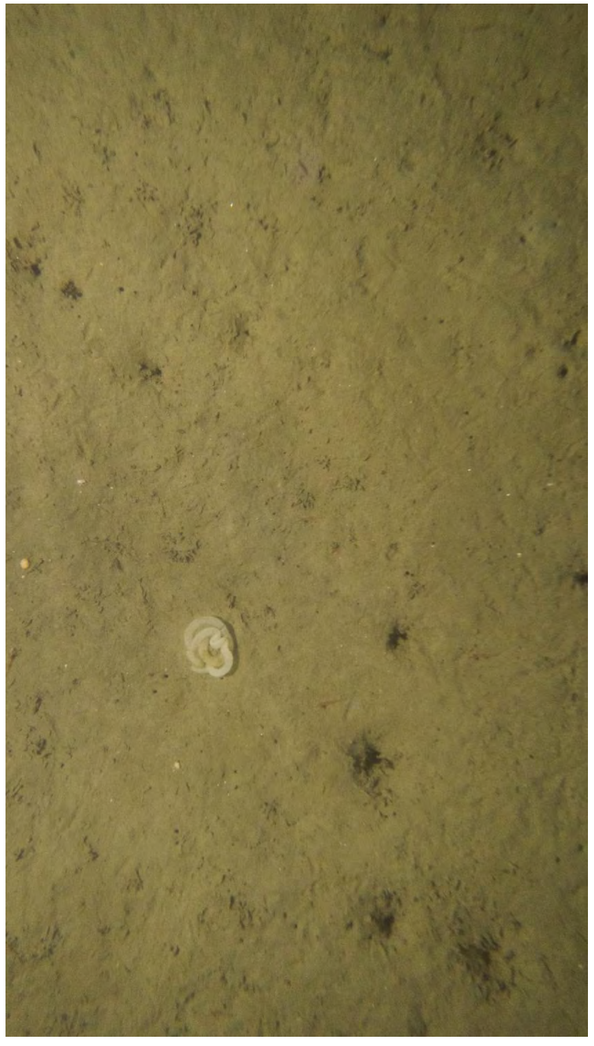


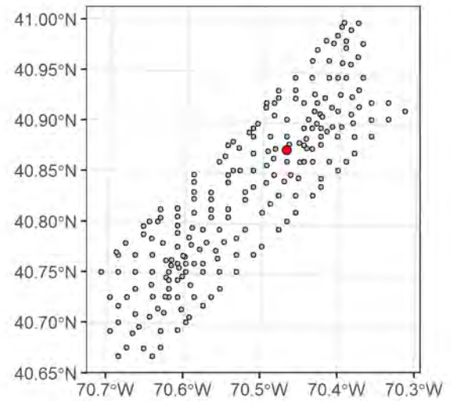
Figure F-523: IAC-132-A-PV

Sediment Profile Image



Figure F-524: IAC-132-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 12:35
Station (Replicate):	IAC-132 (2 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 2 small crabs (Heterocrypta granulata?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, large gastropod? egg case

Plan-View Image

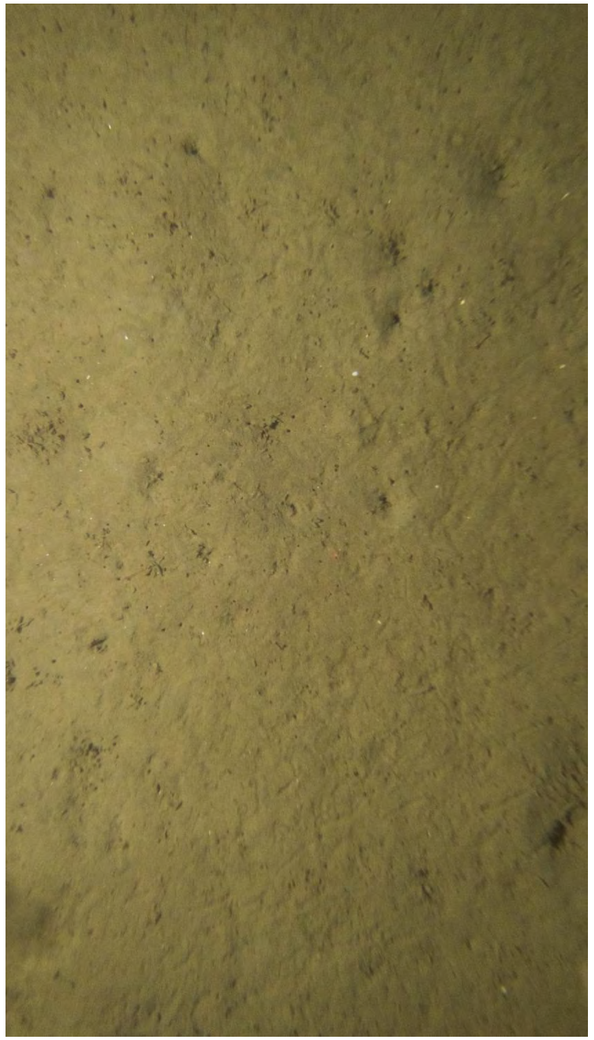


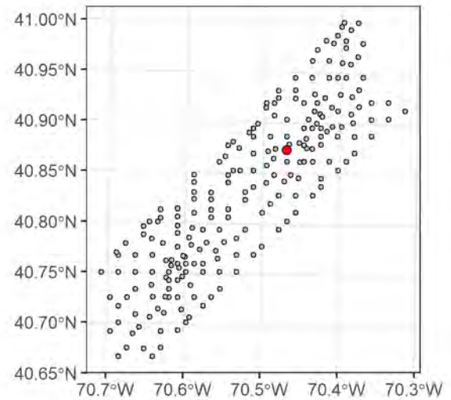
Figure F-525: IAC-132-B-PV

Sediment Profile Image



Figure F-526: IAC-132-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 12:45
Station (Replicate):	IAC-132 (1 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	18.7
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



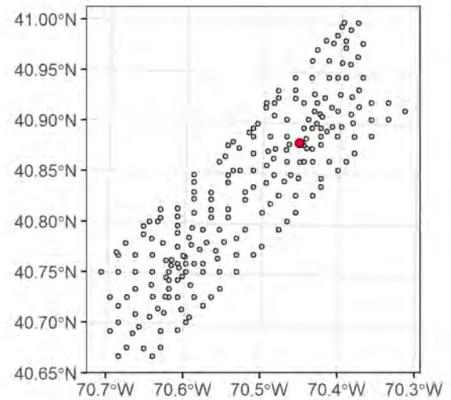
Figure F-527: IAC-133-A-PV

Sediment Profile Image



Figure F-528: IAC-133-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 14:17
Station (Replicate):	IAC-133 (2 of 2)
Depth (m):	-48.4
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large (one very large) and small burrows, faint tracks (Trigidae?)

Plan-View Image



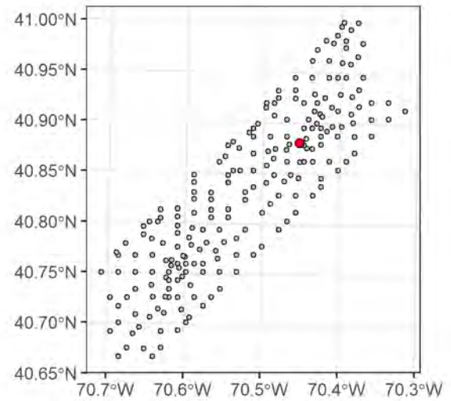
Figure F-529: IAC-133-C-PV

Sediment Profile Image



Figure F-530: IAC-133-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 14:22
Station (Replicate):	IAC-133 (1 of 2)
Depth (m):	-48.4
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 fish (indeterminate)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image

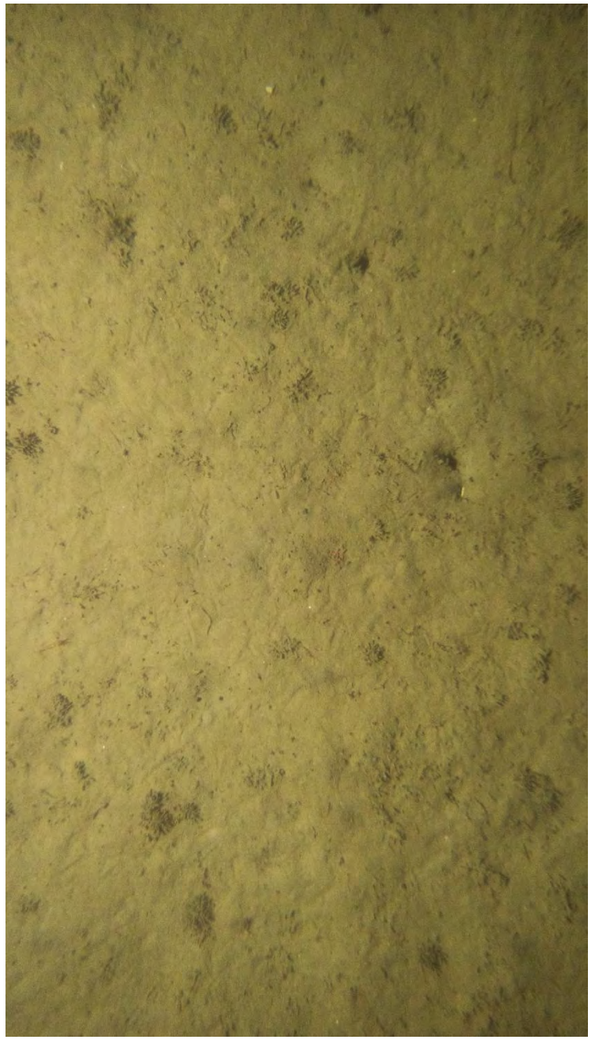


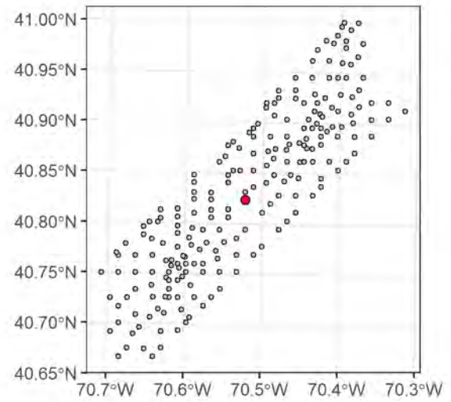
Figure F-531: IAC-134-A-PV

Sediment Profile Image



Figure F-532: IAC-134-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 13:53
Station (Replicate):	IAC-134 (2 of 2)
Depth (m):	-51
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	4.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



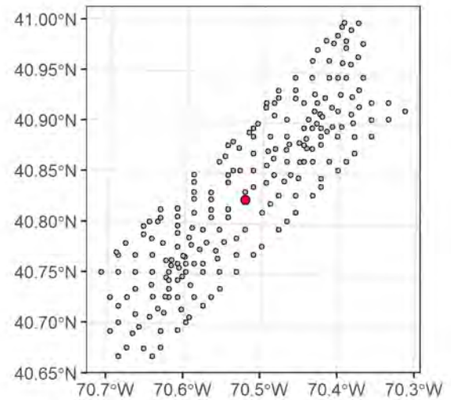
Figure F-533: IAC-134-B-PV

Sediment Profile Image



Figure F-534: IAC-134-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 14:02
Station (Replicate):	IAC-134 (1 of 2)
Depth (m):	-51.1
Prism Penetration (cm):	15.7
aRPD Mean Depth (cm):	5.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	4 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



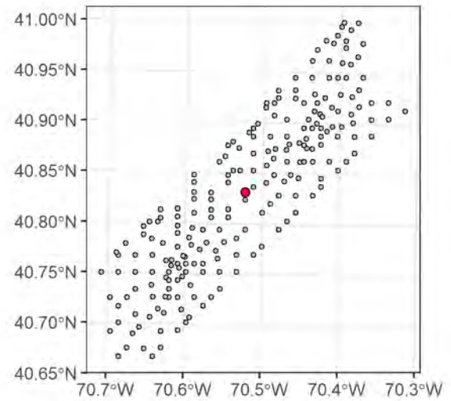
Figure F-535: IAC-135-A-PV

Sediment Profile Image



Figure F-536: IAC-135-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 13:05
Station (Replicate):	IAC-135 (2 of 2)
Depth (m):	-52.8
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	55+ bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

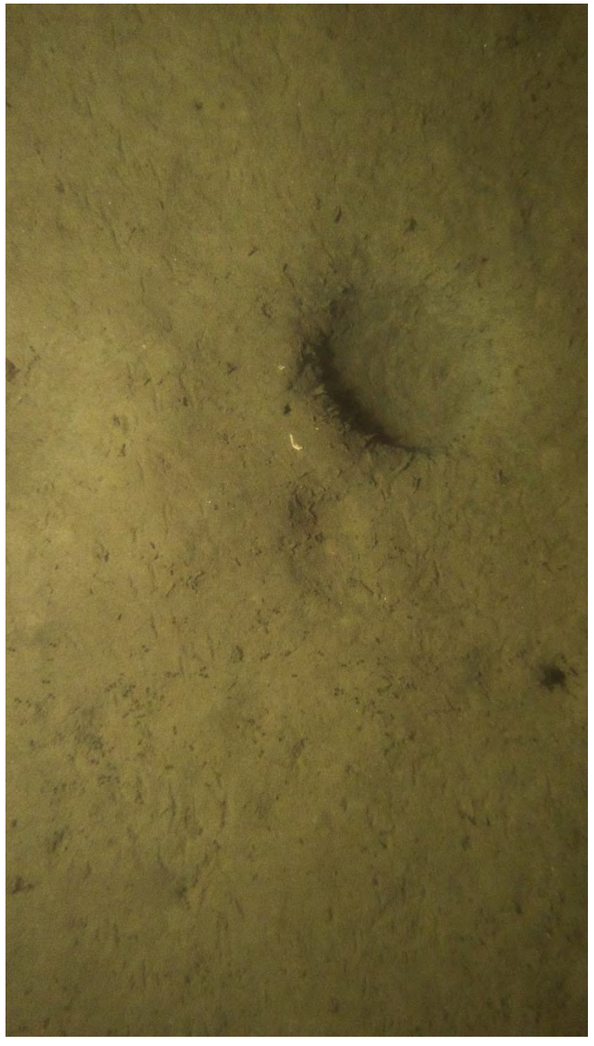


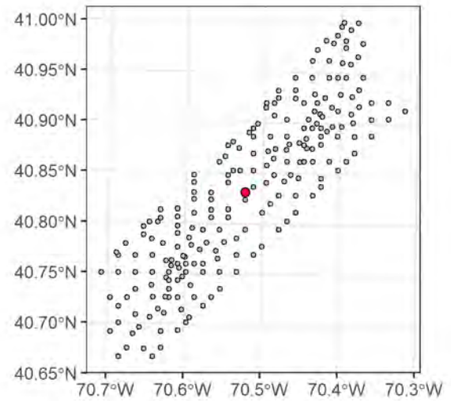
Figure F-537: IAC-135-B-PV

Sediment Profile Image



Figure F-538: IAC-135-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 13:09
Station (Replicate):	IAC-135 (1 of 2)
Depth (m):	-52.7
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	64+ bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, one very large hole/feeding void, crab tracks

Plan-View Image



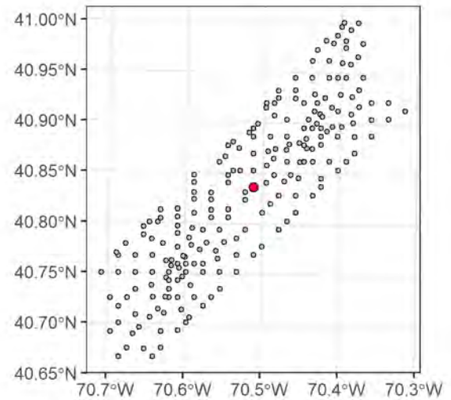
Figure F-539: IAC-136-A-PV

Sediment Profile Image



Figure F-540: IAC-136-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 12:20
Station (Replicate):	IAC-136 (2 of 2)
Depth (m):	-52.5
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	59+ bivalves 2 sea stars, 1 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint tracks

Plan-View Image



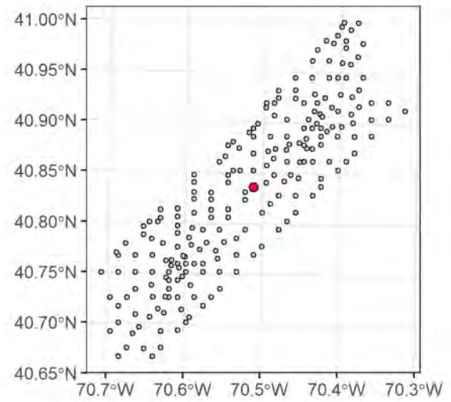
Figure F-541: IAC-136-B-PV

Sediment Profile Image



Figure F-542: IAC-136-C-SPI

Location



Attributes

Date Time (EST):	08/08/21 12:30
Station (Replicate):	IAC-136 (1 of 2)
Depth (m):	-52.5
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	bivalves 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	microbial mat/amphipod tubes?, large and small burrows, faint tracks, focus issues

Plan-View Image



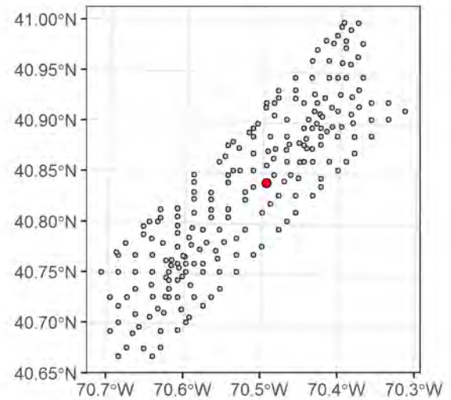
Figure F-543: IAC-137-A-PV

Sediment Profile Image



Figure F-544: IAC-137-A-SPI

Location



Attributes

Date Time (EST):	08/08/21 11:24
Station (Replicate):	IAC-137 (2 of 2)
Depth (m):	-52.3
Prism Penetration (cm):	17.3
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks, light issues

Plan-View Image



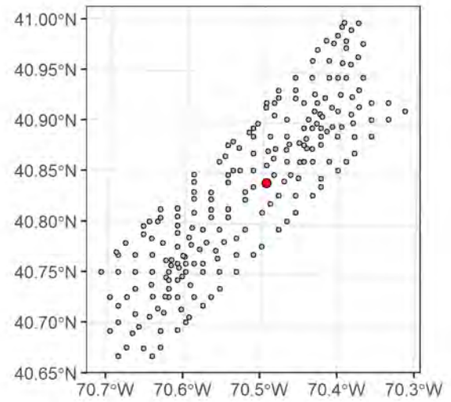
Figure F-545: IAC-137-C-PV

Sediment Profile Image



Figure F-546: IAC-137-B-SPI

Location



Attributes

Date Time (EST):	08/08/21 11:28
Station (Replicate):	IAC-137 (1 of 2)
Depth (m):	-52.4
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks, light/focus issues

Plan-View Image



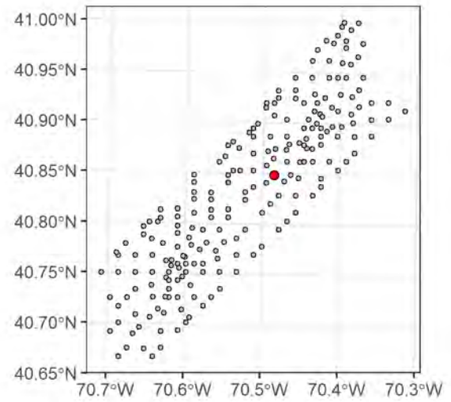
Figure F-547: IAC-138-B-PV

Sediment Profile Image



Figure F-548: IAC-138-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 23:22
Station (Replicate):	IAC-138 (2 of 2)
Depth (m):	-51.6
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, microbial mat, large and small burrows

Plan-View Image

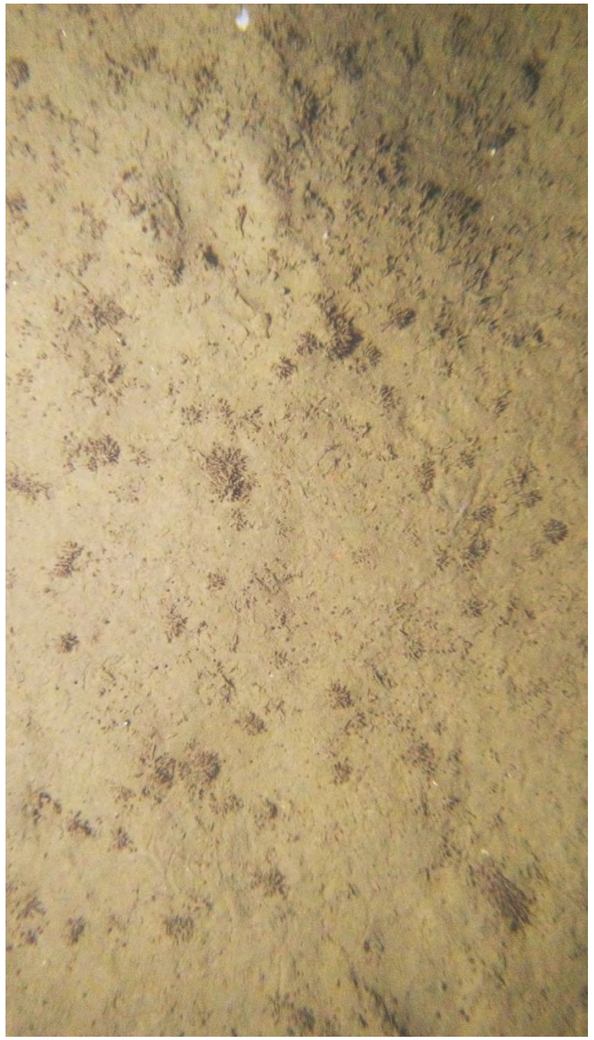


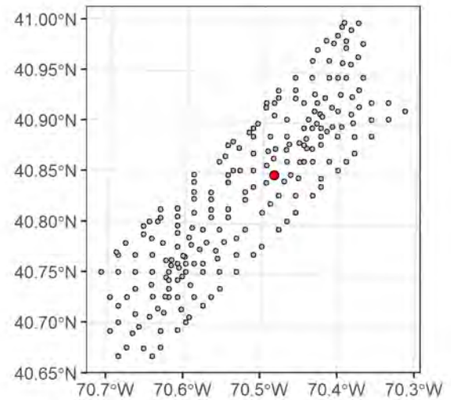
Figure F-549: IAC-138-A-PV

Sediment Profile Image



Figure F-550: IAC-138-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 23:26
Station (Replicate):	IAC-138 (1 of 2)
Depth (m):	-51.7
Prism Penetration (cm):	17.9
aRPD Mean Depth (cm):	5.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, polychaete tubes, large and small burrows

Plan-View Image



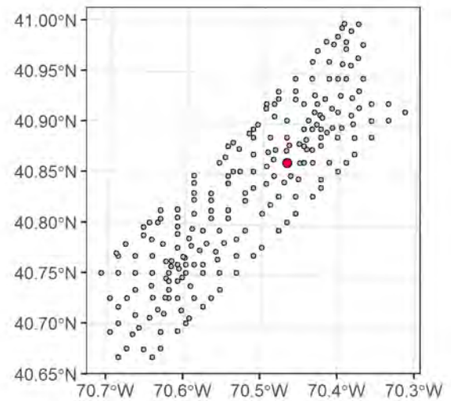
Figure F-551: IAC-139-A-PV

Sediment Profile Image



Figure F-552: IAC-139-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 22:37
Station (Replicate):	IAC-139 (2 of 2)
Depth (m):	-49.5
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



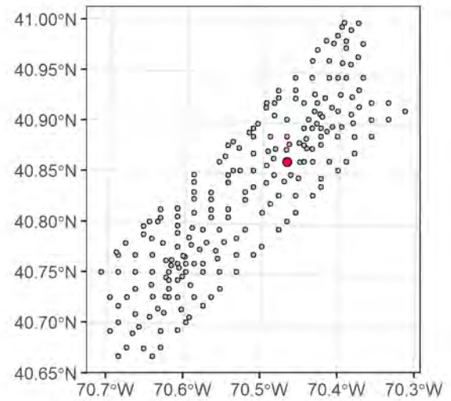
Figure F-553: IAC-139-B-PV

Sediment Profile Image



Figure F-554: IAC-139-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 22:46
Station (Replicate):	IAC-139 (1 of 2)
Depth (m):	-49.5
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



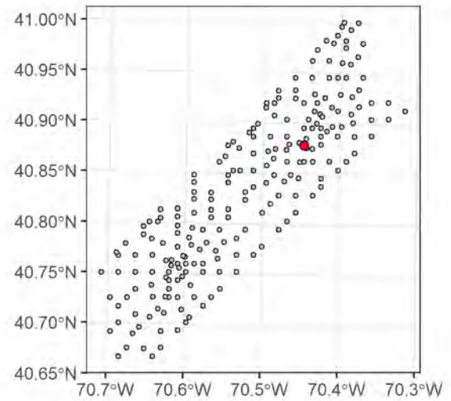
Figure F-555: IAC-140-A-PV

Sediment Profile Image



Figure F-556: IAC-140-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 14:58
Station (Replicate):	IAC-140 (2 of 2)
Depth (m):	-48.3
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



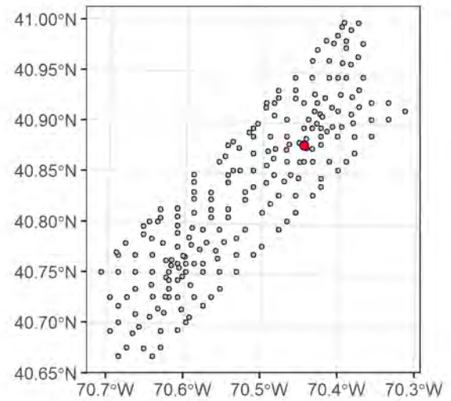
Figure F-557: IAC-140-B-PV

Sediment Profile Image



Figure F-558: IAC-140-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 15:07
Station (Replicate):	IAC-140 (1 of 2)
Depth (m):	-48.1
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

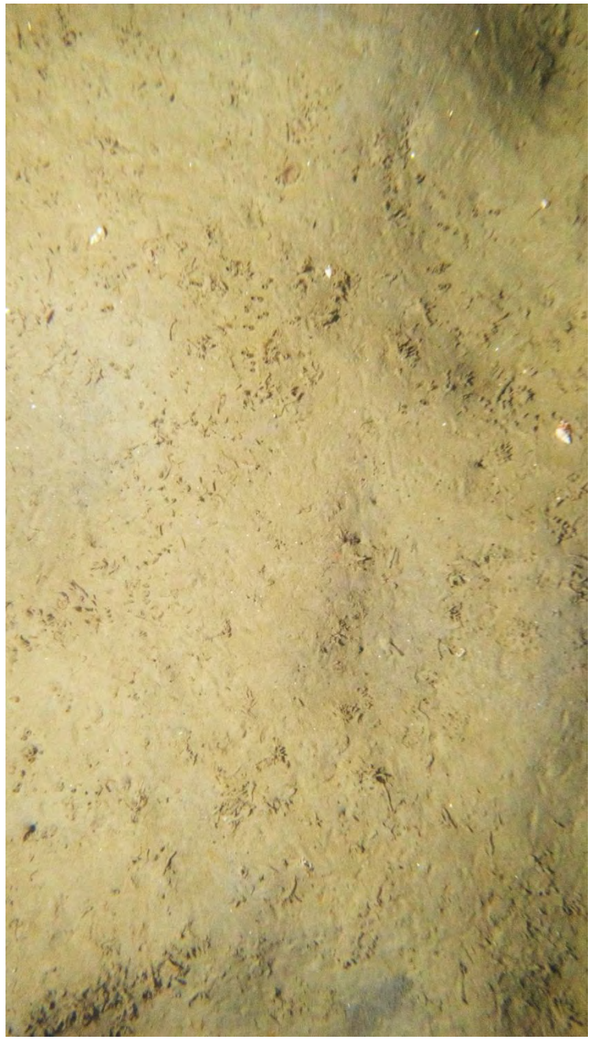


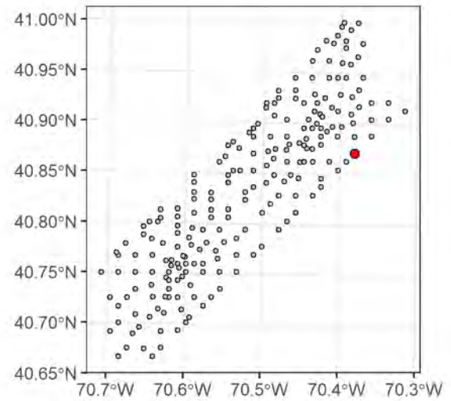
Figure F-559: IAC-141-A-PV

Sediment Profile Image



Figure F-560: IAC-141-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 17:51
Station (Replicate):	IAC-141 (2 of 2)
Depth (m):	-46
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	6.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	24 large bivalves 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, polychaete tubes, large and small burrows, faint tracks

Plan-View Image



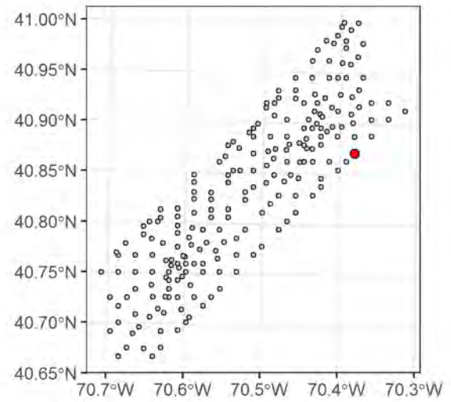
Figure F-561: IAC-141-C-PV

Sediment Profile Image



Figure F-562: IAC-141-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 17:55
Station (Replicate):	IAC-141 (1 of 2)
Depth (m):	-46
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, polychaete tubes, large and small burrows, faint tracks, one very large hole/feeding void

Plan-View Image



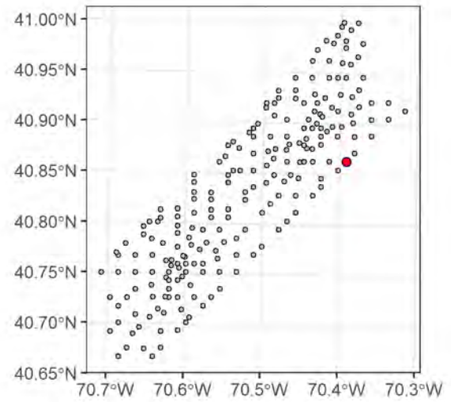
Figure F-563: IAC-142-B-PV

Sediment Profile Image



Figure F-564: IAC-142-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 18:42
Station (Replicate):	IAC-142 (2 of 2)
Depth (m):	-47.8
Prism Penetration (cm):	17
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	13 large bivalves 1 paguroidea, 1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint tracks, one very large hole/feeding void

Plan-View Image



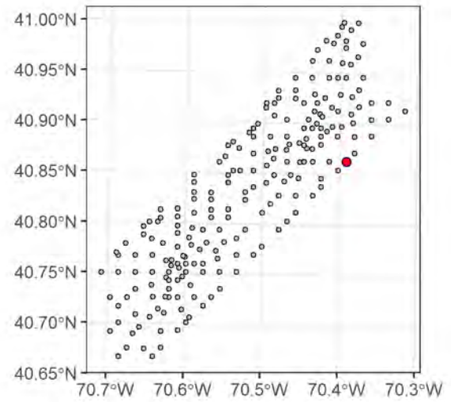
Figure F-565: IAC-142-A-PV

Sediment Profile Image



Figure F-566: IAC-142-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 18:47
Station (Replicate):	IAC-142 (1 of 2)
Depth (m):	-47.9
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	93 large bivalves 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint tracks

Plan-View Image



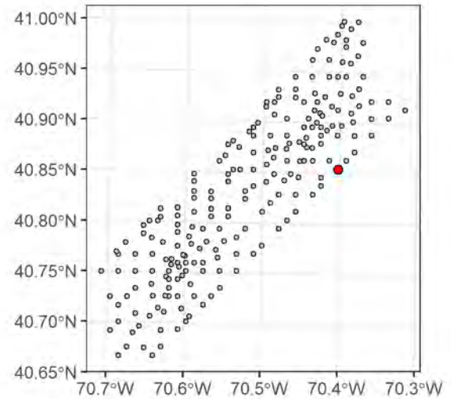
Figure F-567: IAC-143-A-PV

Sediment Profile Image



Figure F-568: IAC-143-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 19:18
Station (Replicate):	IAC-143 (2 of 2)
Depth (m):	-48.9
Prism Penetration (cm):	16.9
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 large bivalve
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod and polychaete tubes, large and small burrows, faint tracks, one very large hole/feeding void

Plan-View Image



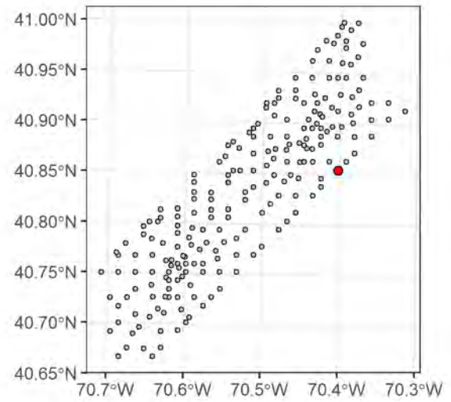
Figure F-569: IAC-143-B-PV

Sediment Profile Image



Figure F-570: IAC-143-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 19:27
Station (Replicate):	IAC-143 (1 of 2)
Depth (m):	-48.9
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, large and small burrows, faint tracks

Plan-View Image

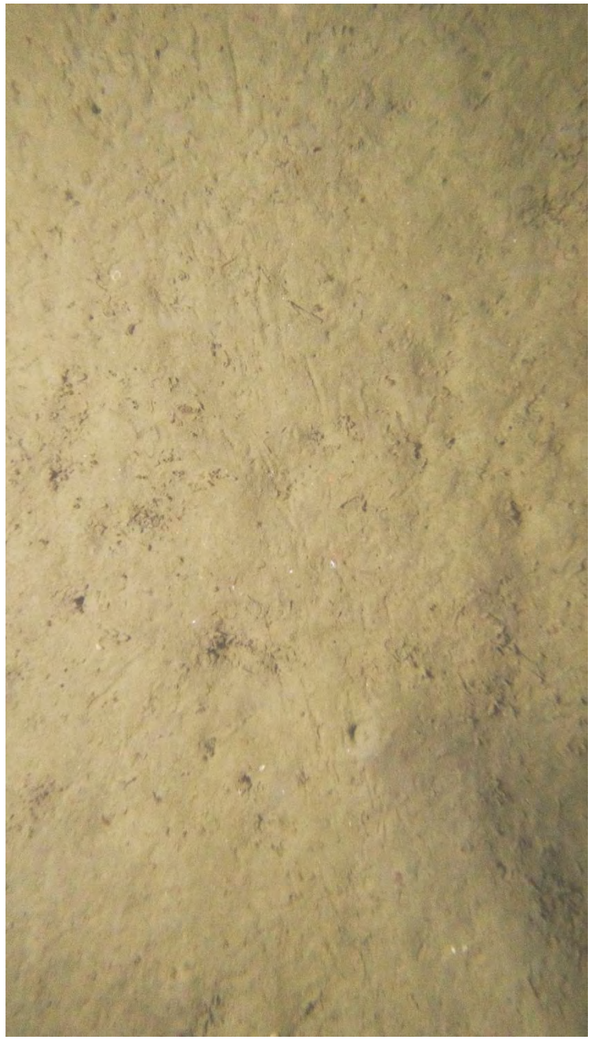


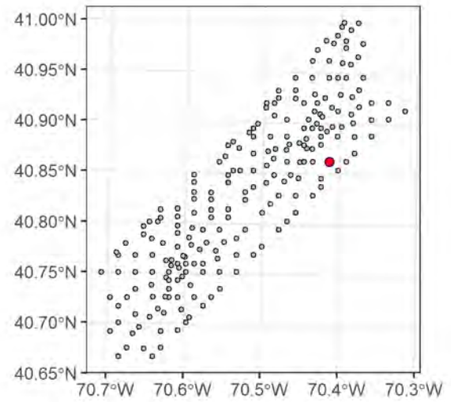
Figure F-571: IAC-144-B-PV

Sediment Profile Image



Figure F-572: IAC-144-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 20:01
Station (Replicate):	IAC-144 (2 of 2)
Depth (m):	-48.2
Prism Penetration (cm):	16.7
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	20+ large bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint tracks

Plan-View Image



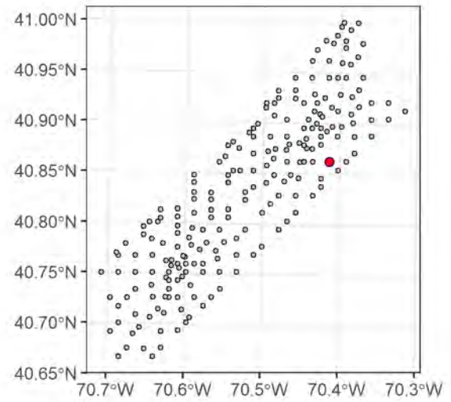
Figure F-573: IAC-144-A-PV

Sediment Profile Image



Figure F-574: IAC-144-C-SPI

Location



Attributes

Date Time (EST):	08/07/21 20:05
Station (Replicate):	IAC-144 (1 of 2)
Depth (m):	-48.3
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Ceriantharia 2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image

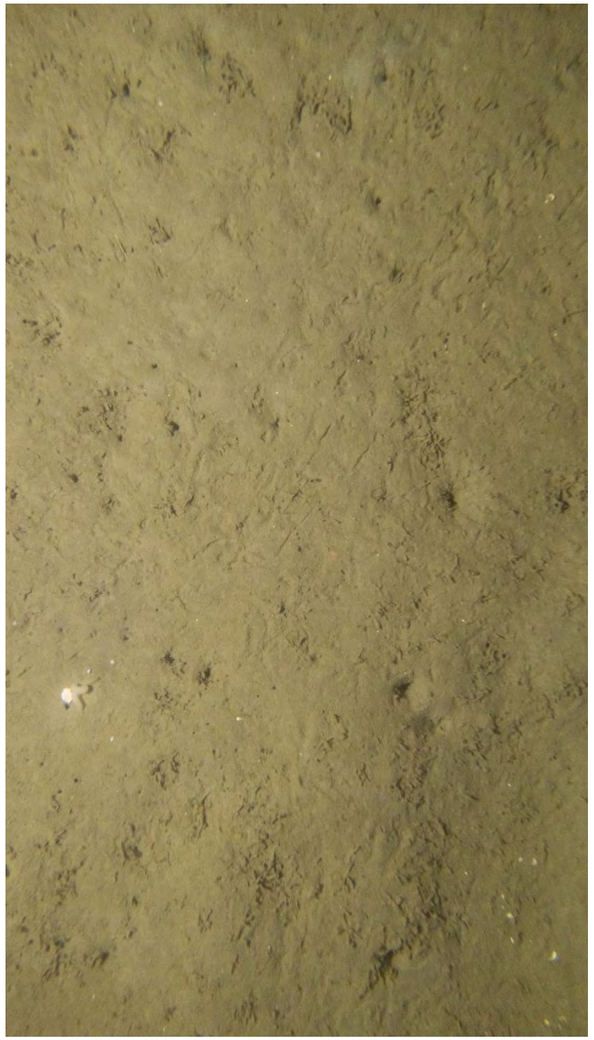


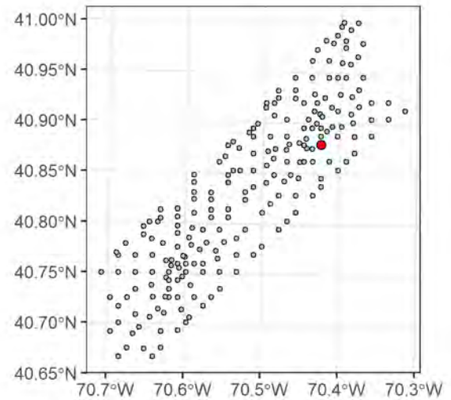
Figure F-575: IAC-145-A-PV

Sediment Profile Image



Figure F-576: IAC-145-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 16:52
Station (Replicate):	IAC-145 (2 of 2)
Depth (m):	-47.5
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 large bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, faint tracks, 1 gastropod egg case

Plan-View Image

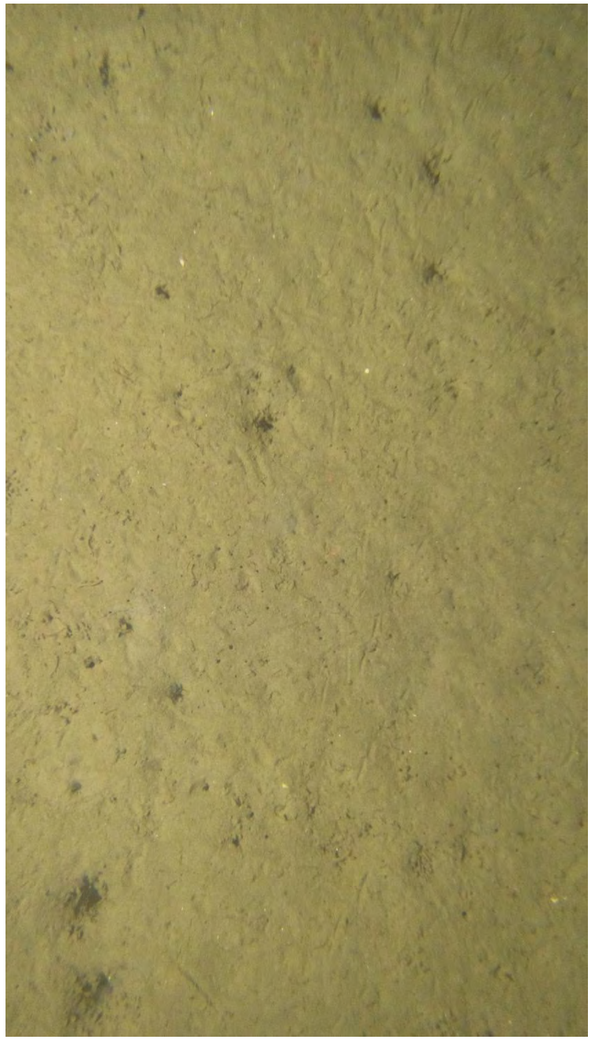


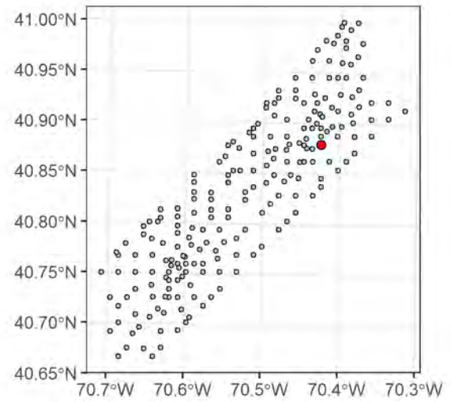
Figure F-577: IAC-145-B-PV

Sediment Profile Image



Figure F-578: IAC-145-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 16:54
Station (Replicate):	IAC-145 (1 of 2)
Depth (m):	-47.6
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tubes, large and small burrows, numerous faint tracks

Plan-View Image



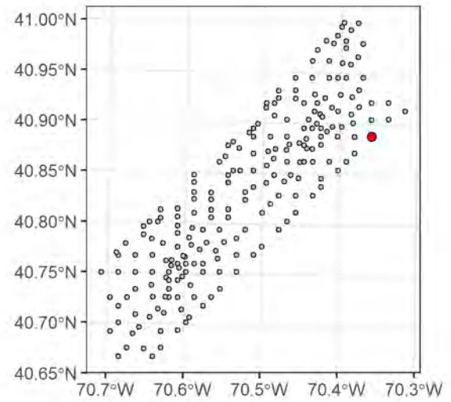
Figure F-579: IAC-146-B-PV

Sediment Profile Image



Figure F-580: IAC-146-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 00:48
Station (Replicate):	IAC-146 (2 of 2)
Depth (m):	-43.6
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	550 medium bivalves (estimated) 1 shrimp, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, small burrows

Plan-View Image



Figure F-581: IAC-146-A-PV

Sediment Profile Image

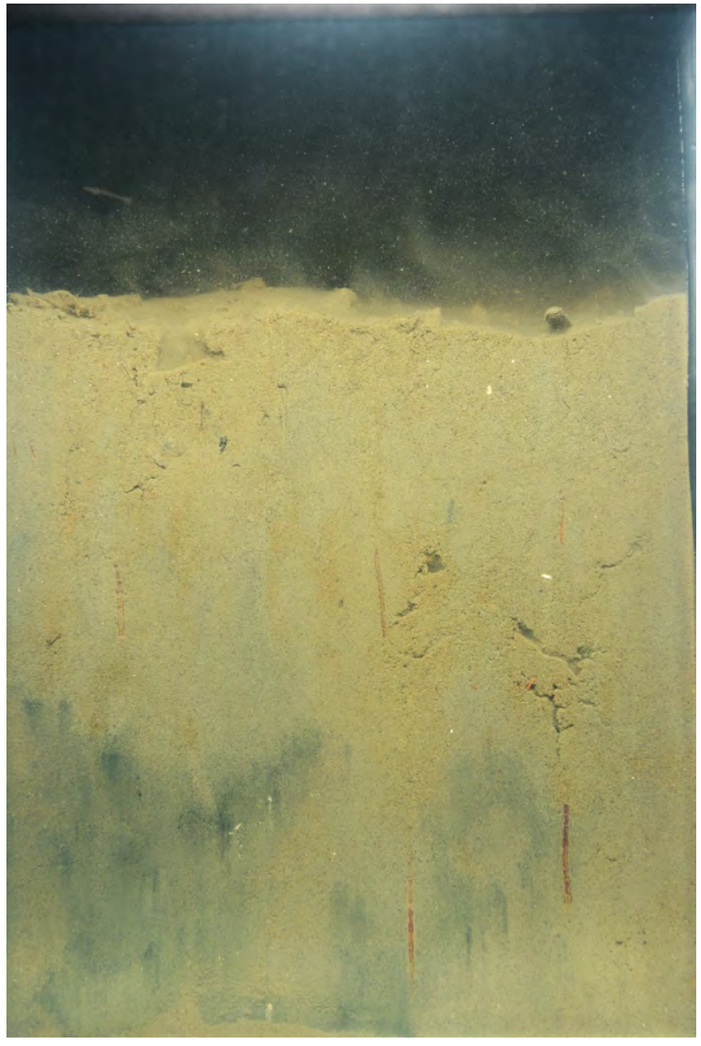
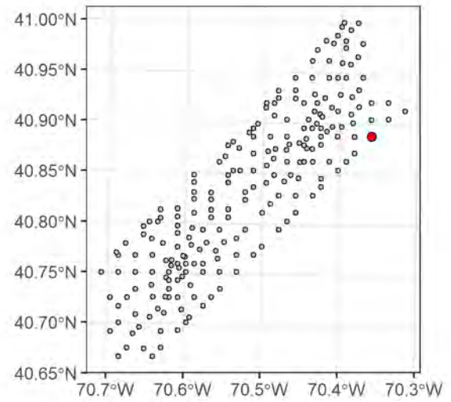


Figure F-582: IAC-146-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 00:53
Station (Replicate):	IAC-146 (1 of 2)
Depth (m):	-43.6
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	500 medium bivalves (estimated)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, burrows, and microbial mats

Plan-View Image



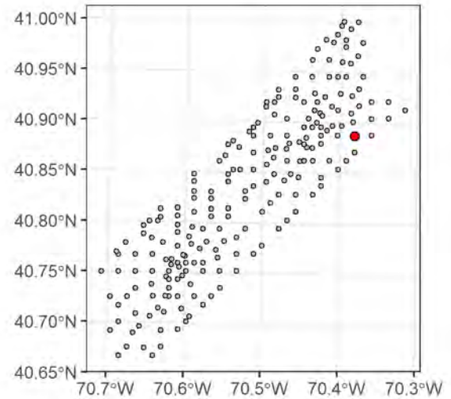
Figure F-583: IAC-147-A-PV

Sediment Profile Image



Figure F-584: IAC-147-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 01:35
Station (Replicate):	IAC-147 (2 of 2)
Depth (m):	-43.8
Prism Penetration (cm):	17.9
aRPD Mean Depth (cm):	4.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



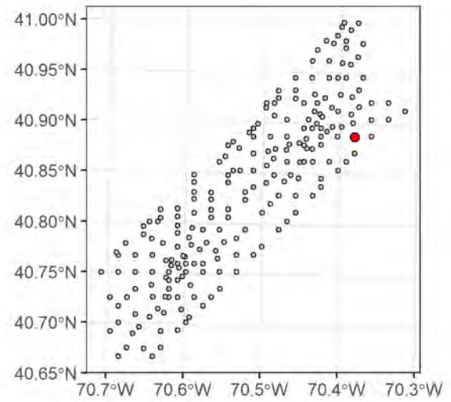
Figure F-585: IAC-147-C-PV

Sediment Profile Image



Figure F-586: IAC-147-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 01:41
Station (Replicate):	IAC-147 (1 of 2)
Depth (m):	-43.8
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	4.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



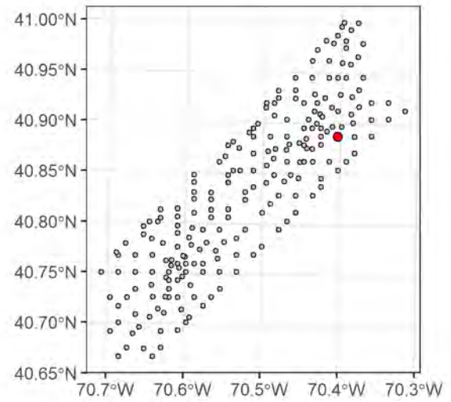
Figure F-587: IAC-148-B-PV

Sediment Profile Image



Figure F-588: IAC-148-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 02:29
Station (Replicate):	IAC-148 (2 of 2)
Depth (m):	-44.8
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



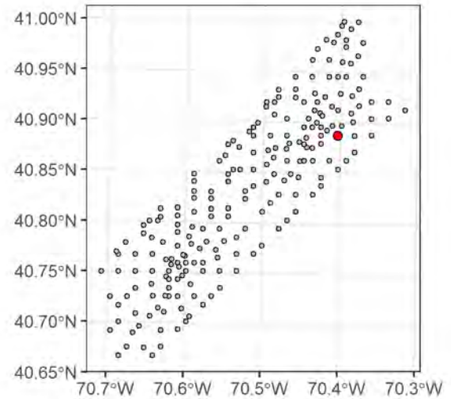
Figure F-589: IAC-148-A-PV

Sediment Profile Image



Figure F-590: IAC-148-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 02:34
Station (Replicate):	IAC-148 (1 of 2)
Depth (m):	-44.8
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows, faint tracks

Plan-View Image



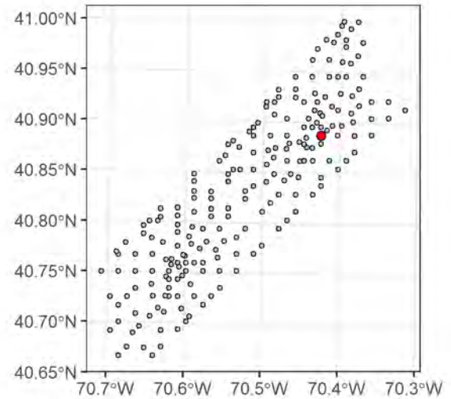
Figure F-591: IAC-149-A-PV

Sediment Profile Image



Figure F-592: IAC-149-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 05:17
Station (Replicate):	IAC-149 (2 of 2)
Depth (m):	-46.3
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



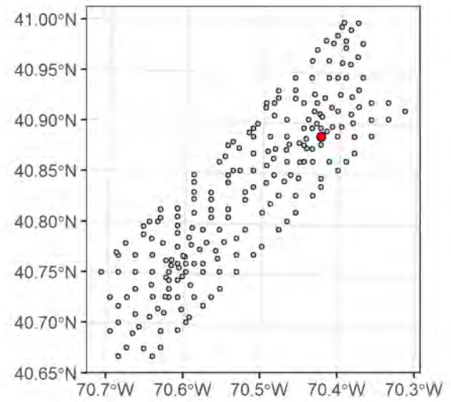
Figure F-593: IAC-149-B-PV

Sediment Profile Image



Figure F-594: IAC-149-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 05:22
Station (Replicate):	IAC-149 (1 of 2)
Depth (m):	-46.3
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	5.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



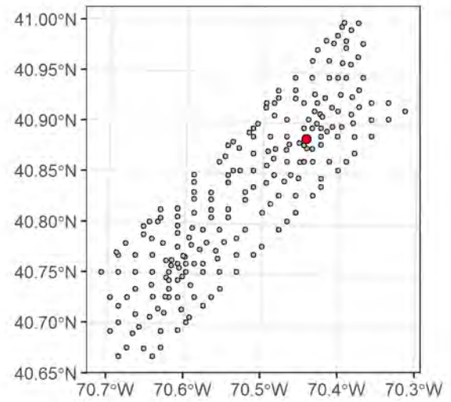
Figure F-595: IAC-150-B-PV

Sediment Profile Image



Figure F-596: IAC-150-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 09:10
Station (Replicate):	IAC-150 (2 of 2)
Depth (m):	-48
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug 1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, one large Triglid burrow

Plan-View Image



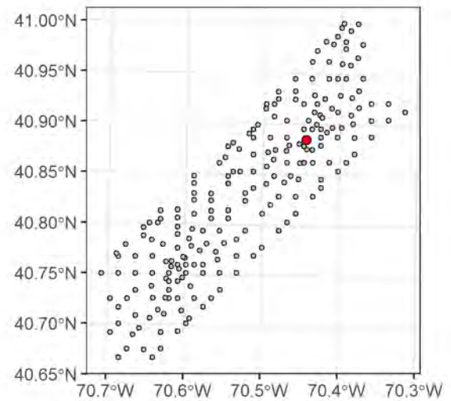
Figure F-597: IAC-150-A-PV

Sediment Profile Image



Figure F-598: IAC-150-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 09:15
Station (Replicate):	IAC-150 (1 of 2)
Depth (m):	-47.8
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, large and small burrows, faint tracks

Plan-View Image



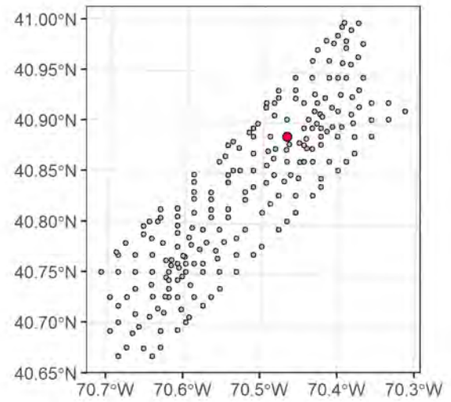
Figure F-599: IAC-151-A-PV

Sediment Profile Image



Figure F-600: IAC-151-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 09:56
Station (Replicate):	IAC-151 (2 of 2)
Depth (m):	-48.5
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



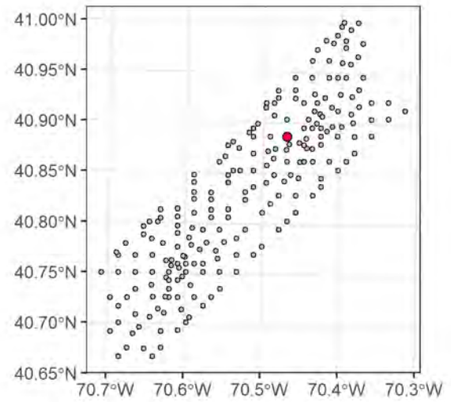
Figure F-601: IAC-151-B-PV

Sediment Profile Image



Figure F-602: IAC-151-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 10:05
Station (Replicate):	IAC-151 (1 of 2)
Depth (m):	-48.6
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



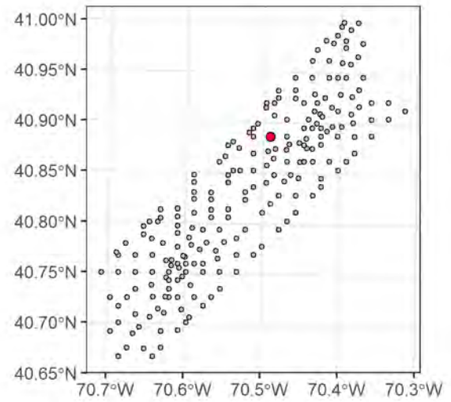
Figure F-603: IAC-152-A-PV

Sediment Profile Image



Figure F-604: IAC-152-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 10:43
Station (Replicate):	IAC-152 (2 of 2)
Depth (m):	-49.3
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	hydroids
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



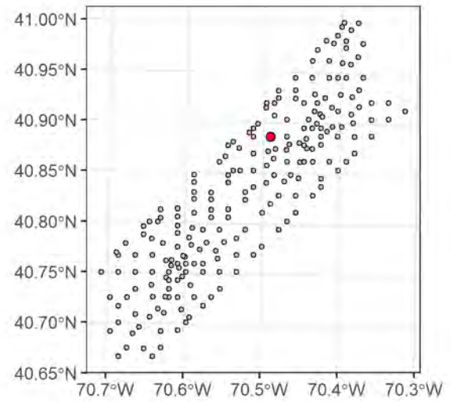
Figure F-605: IAC-152-B-PV

Sediment Profile Image



Figure F-606: IAC-152-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 10:49
Station (Replicate):	IAC-152 (1 of 2)
Depth (m):	-49.4
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



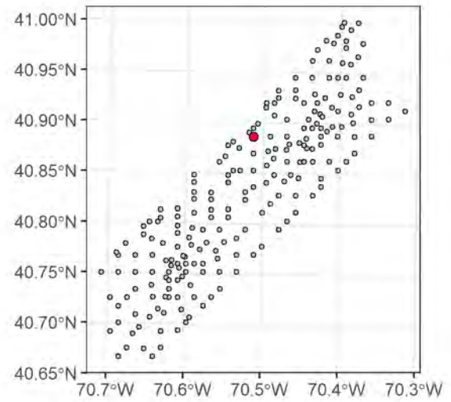
Figure F-607: IAC-153-B-PV

Sediment Profile Image



Figure F-608: IAC-153-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 14:01
Station (Replicate):	IAC-153 (2 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	15.8
aRPD Mean Depth (cm):	5.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



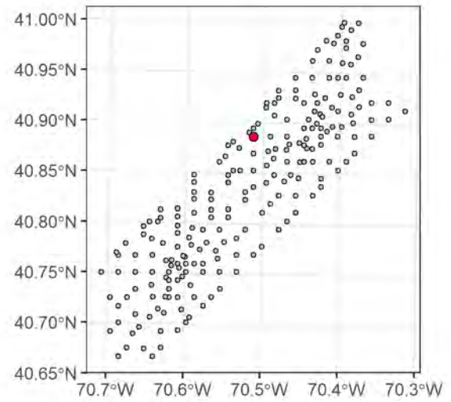
Figure F-609: IAC-153-C-PV

Sediment Profile Image



Figure F-610: IAC-153-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 14:06
Station (Replicate):	IAC-153 (1 of 2)
Depth (m):	-49.8
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	6.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod and polychaete tubes, large and small burrows

Plan-View Image



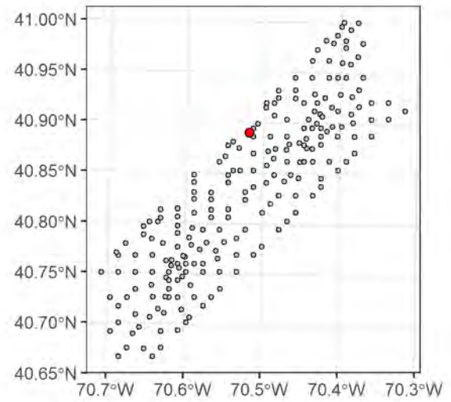
Figure F-611: IAC-154-A-PV

Sediment Profile Image



Figure F-612: IAC-154-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 13:14
Station (Replicate):	IAC-154 (2 of 2)
Depth (m):	-48.9
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



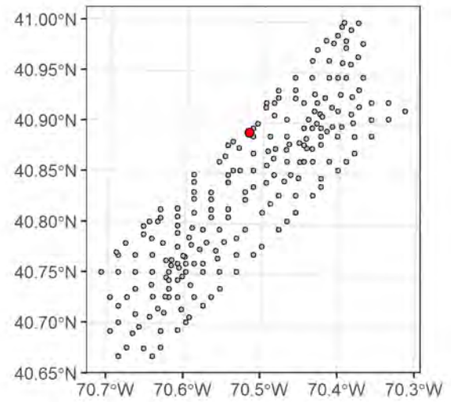
Figure F-613: IAC-154-B-PV

Sediment Profile Image



Figure F-614: IAC-154-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 13:20
Station (Replicate):	IAC-154 (1 of 2)
Depth (m):	-48.9
Prism Penetration (cm):	16.8
aRPD Mean Depth (cm):	8.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 Tritia trivittata
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



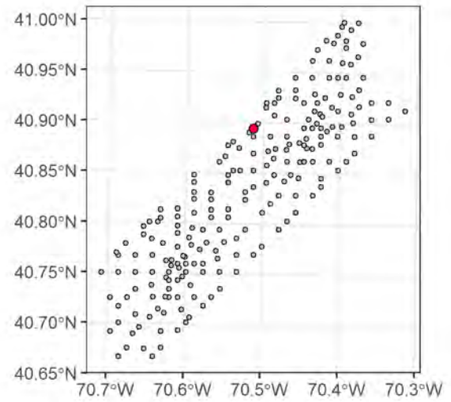
Figure F-615: IAC-155-B-PV

Sediment Profile Image



Figure F-616: IAC-155-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 12:36
Station (Replicate):	IAC-155 (2 of 2)
Depth (m):	-48.3
Prism Penetration (cm):	5.6
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tubes, small burrows, faint tracks

Plan-View Image



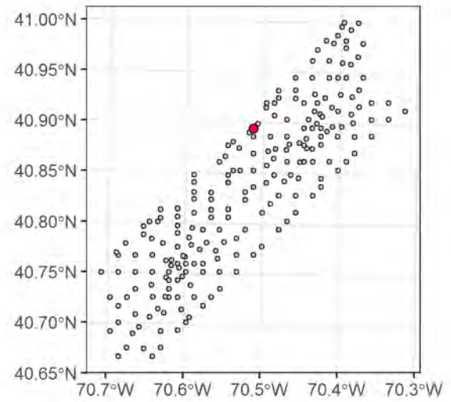
Figure F-617: IAC-155-A-PV

Sediment Profile Image



Figure F-618: IAC-155-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 12:43
Station (Replicate):	IAC-155 (1 of 2)
Depth (m):	-48.2
Prism Penetration (cm):	7
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 small crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	very few amphipod tubes, small burrows. cloud of suspended sediment

Plan-View Image



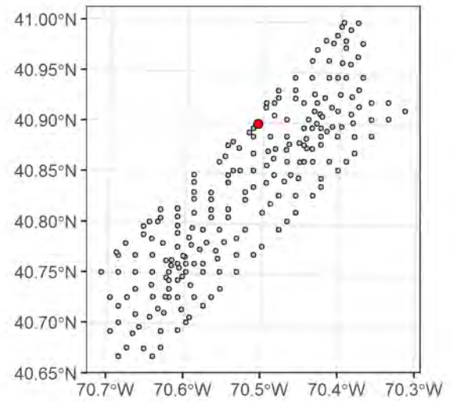
Figure F-619: IAC-156-A-PV

Sediment Profile Image



Figure F-620: IAC-156-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 11:30
Station (Replicate):	IAC-156 (2 of 2)
Depth (m):	-48.3
Prism Penetration (cm):	13.6
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	very few amphipod tubes, large and small burrows, faint tracks

Plan-View Image



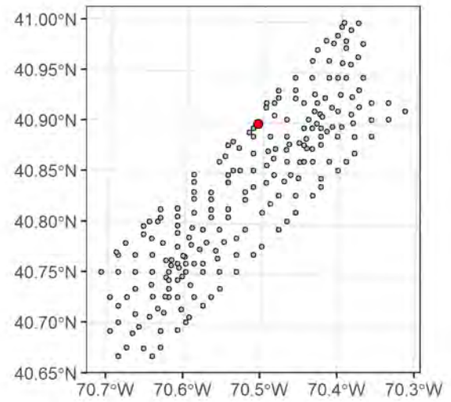
Figure F-621: IAC-156-B-PV

Sediment Profile Image



Figure F-622: IAC-156-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 11:34
Station (Replicate):	IAC-156 (1 of 2)
Depth (m):	-48.4
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	6.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



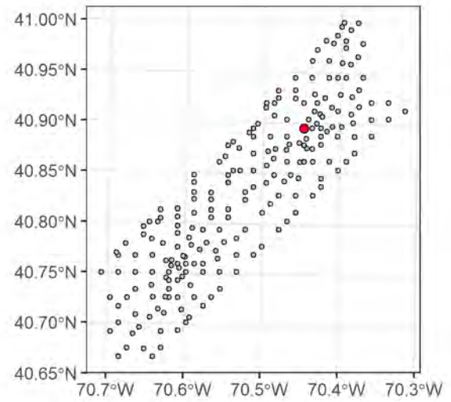
Figure F-623: IAC-157-A-PV

Sediment Profile Image



Figure F-624: IAC-157-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 08:26
Station (Replicate):	IAC-157 (2 of 2)
Depth (m):	-47
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	5.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



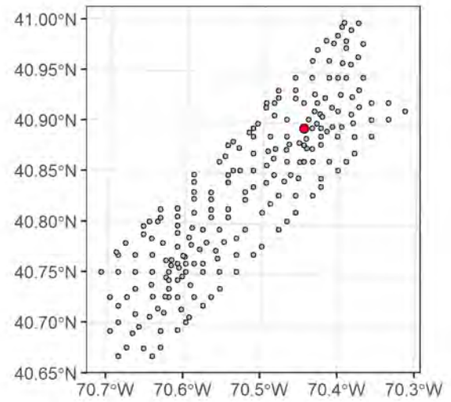
Figure F-625: IAC-157-B-PV

Sediment Profile Image



Figure F-626: IAC-157-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 08:31
Station (Replicate):	IAC-157 (1 of 2)
Depth (m):	-46.9
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 shrimp, 1 small crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



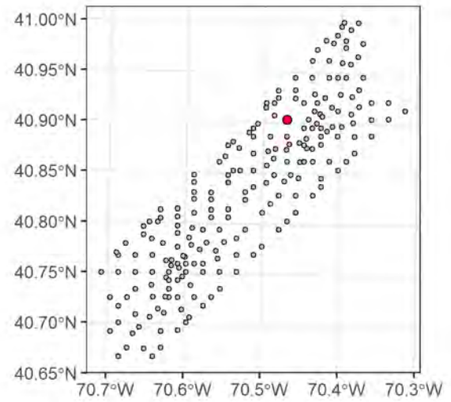
Figure F-627: IAC-158-B-PV

Sediment Profile Image



Figure F-628: IAC-158-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 11:09
Station (Replicate):	IAC-158 (2 of 2)
Depth (m):	-47
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	17 medium bivalves
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod and polychaete tubes, large and small burrows, faint tracks

Plan-View Image



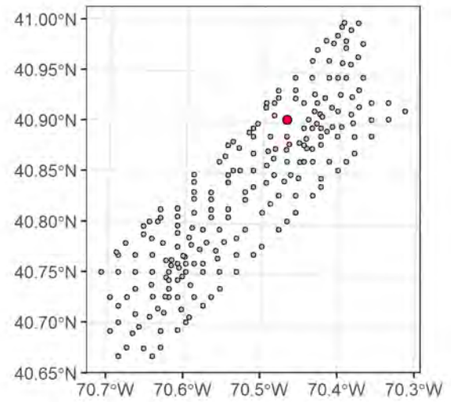
Figure F-629: IAC-158-A-PV

Sediment Profile Image



Figure F-630: IAC-158-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 11:13
Station (Replicate):	IAC-158 (1 of 2)
Depth (m):	-47
Prism Penetration (cm):	13.1
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod and polychaete tubes, large and small burrows, faint tracks

Plan-View Image



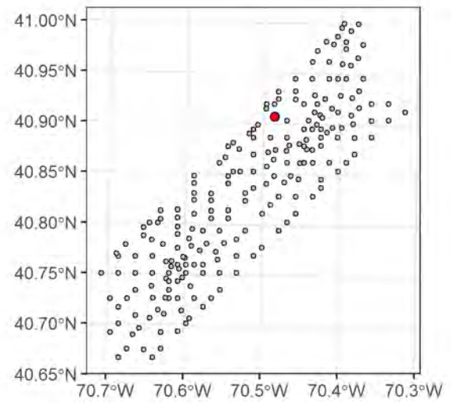
Figure F-631: IAC-159-A-PV

Sediment Profile Image



Figure F-632: IAC-159-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 10:19
Station (Replicate):	IAC-159 (2 of 2)
Depth (m):	-47.3
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	5.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



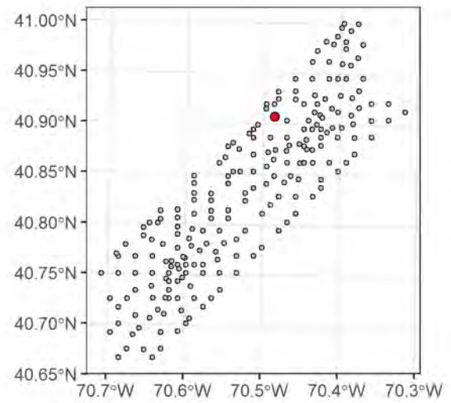
Figure F-633: IAC-159-B-PV

Sediment Profile Image



Figure F-634: IAC-159-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 10:28
Station (Replicate):	IAC-159 (1 of 2)
Depth (m):	-47.2
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	5.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



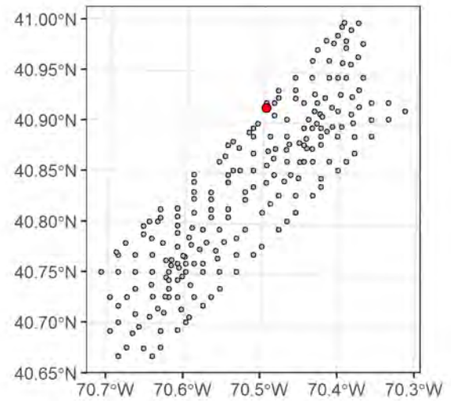
Figure F-635: IAC-160-B-PV

Sediment Profile Image



Figure F-636: IAC-160-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 09:40
Station (Replicate):	IAC-160 (2 of 2)
Depth (m):	-46.6
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



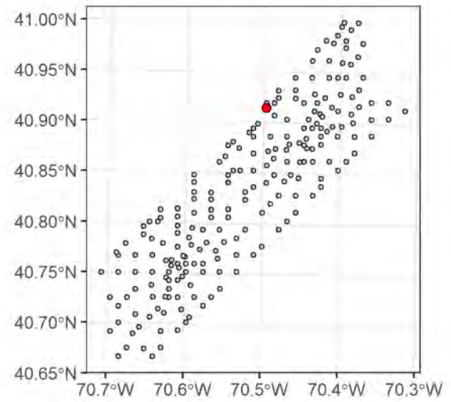
Figure F-637: IAC-160-A-PV

Sediment Profile Image



Figure F-638: IAC-160-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 09:45
Station (Replicate):	IAC-160 (1 of 2)
Depth (m):	-46.7
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



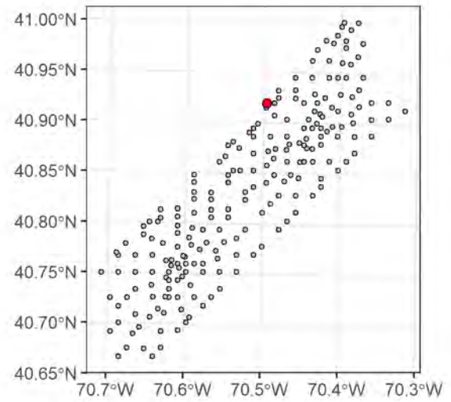
Figure F-639: IAC-161-A-PV

Sediment Profile Image



Figure F-640: IAC-161-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 08:58
Station (Replicate):	IAC-161 (2 of 2)
Depth (m):	-46.1
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image

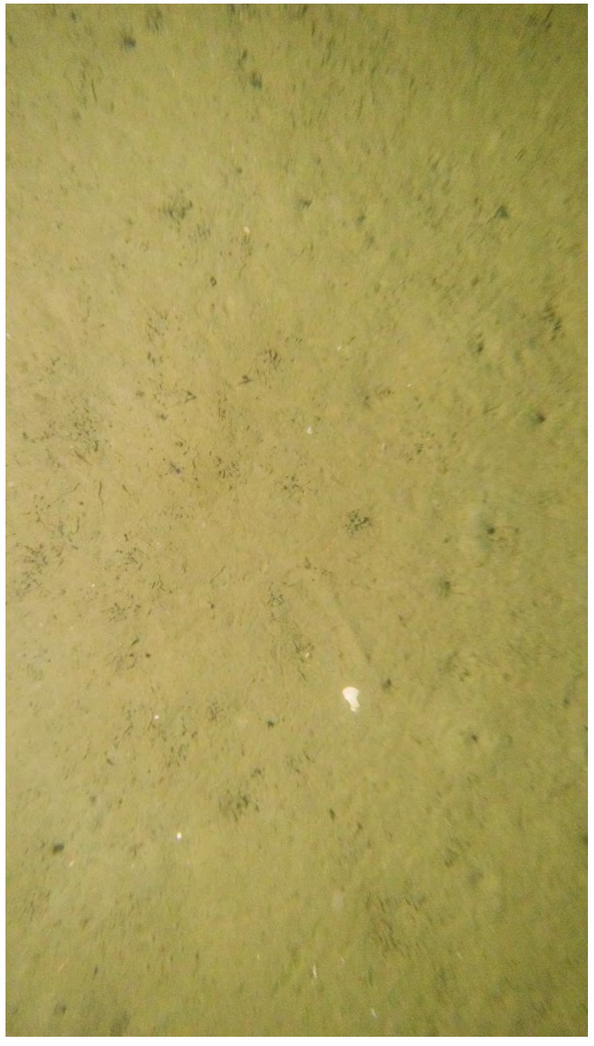


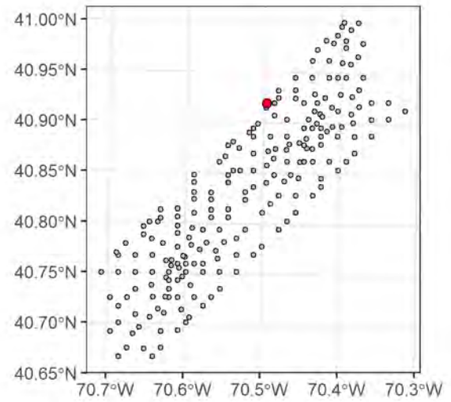
Figure F-641: IAC-161-C-PV

Sediment Profile Image



Figure F-642: IAC-161-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 09:06
Station (Replicate):	IAC-161 (1 of 2)
Depth (m):	-46.2
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image

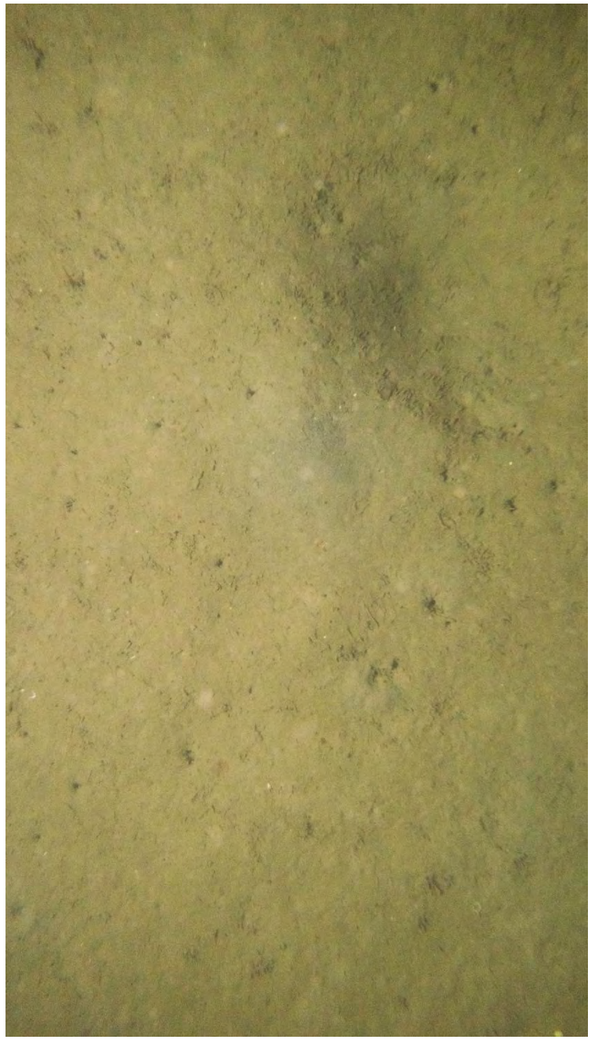


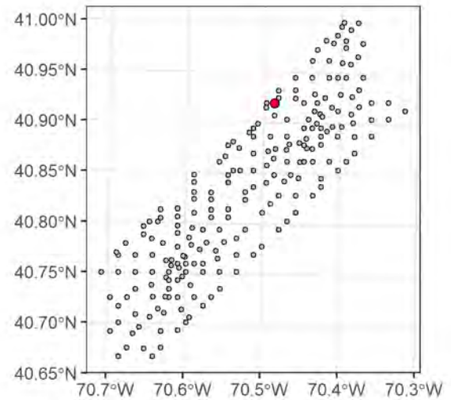
Figure F-643: IAC-162-A-PV

Sediment Profile Image



Figure F-644: IAC-162-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 08:20
Station (Replicate):	IAC-162 (2 of 2)
Depth (m):	-46.1
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod and polychaete tubes, large and small burrows

Plan-View Image



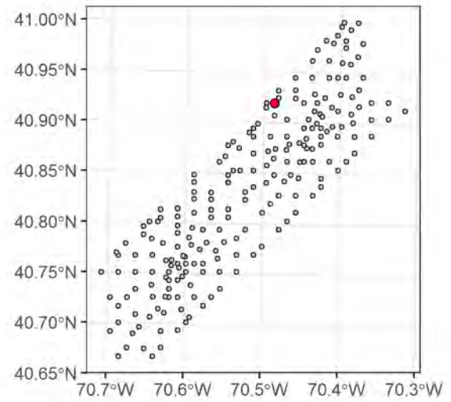
Figure F-645: IAC-162-B-PV

Sediment Profile Image



Figure F-646: IAC-162-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 08:24
Station (Replicate):	IAC-162 (1 of 2)
Depth (m):	-46.2
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes/microbial mat, large and small burrows

Plan-View Image

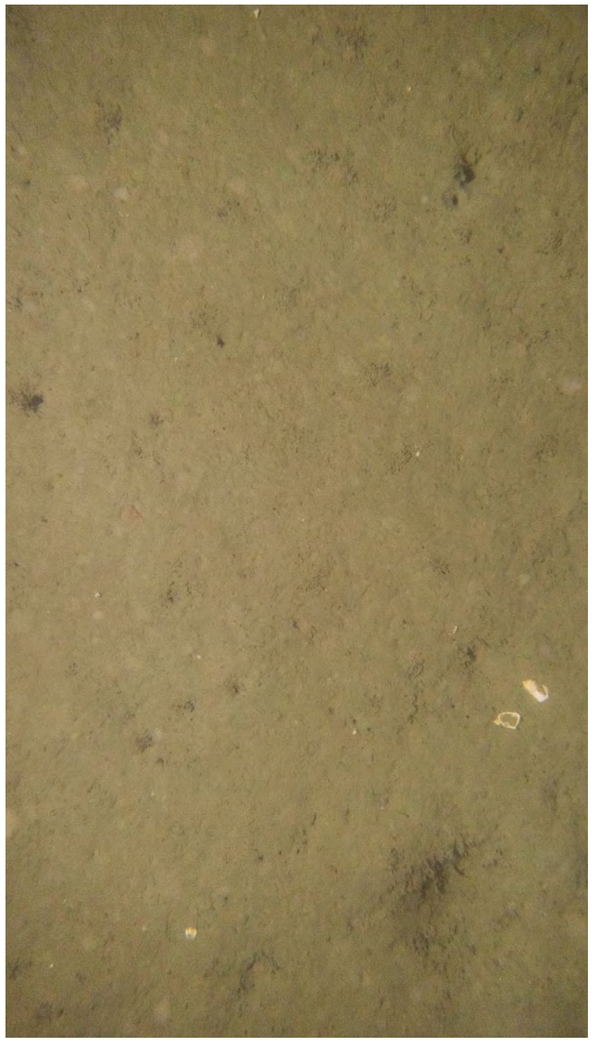


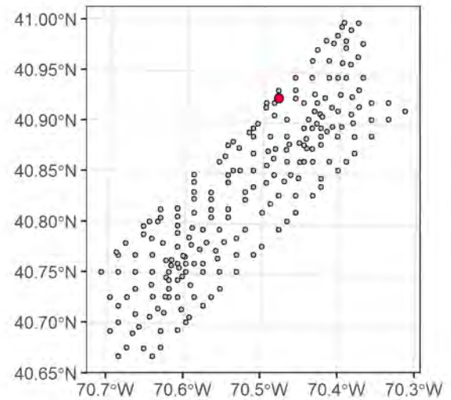
Figure F-647: IAC-163-A-PV

Sediment Profile Image



Figure F-648: IAC-163-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 07:43
Station (Replicate):	IAC-163 (2 of 2)
Depth (m):	-45.9
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	6.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



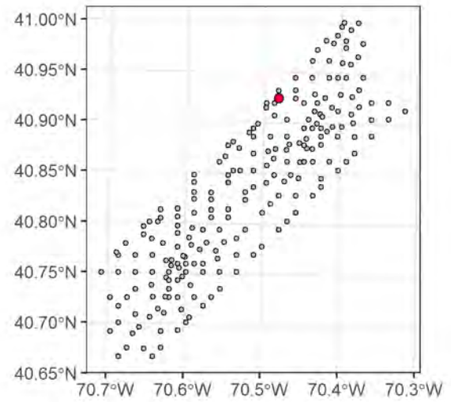
Figure F-649: IAC-163-B-PV

Sediment Profile Image



Figure F-650: IAC-163-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 07:52
Station (Replicate):	IAC-163 (1 of 2)
Depth (m):	-46
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 sea slug, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



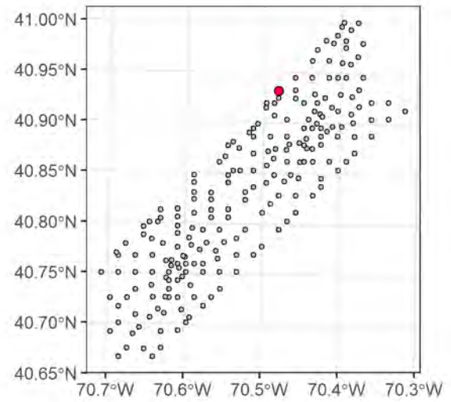
Figure F-651: IAC-164-A-PV

Sediment Profile Image



Figure F-652: IAC-164-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 07:08
Station (Replicate):	IAC-164 (2 of 2)
Depth (m):	-45.2
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



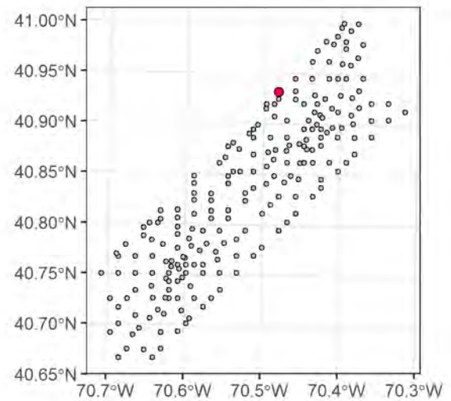
Figure F-653: IAC-164-B-PV

Sediment Profile Image



Figure F-654: IAC-164-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 07:18
Station (Replicate):	IAC-164 (1 of 2)
Depth (m):	-45.3
Prism Penetration (cm):	14.5
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



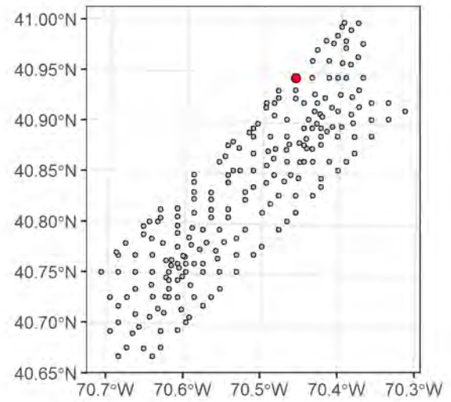
Figure F-655: IAC-165-C-PV

Sediment Profile Image



Figure F-656: IAC-165-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 18:29
Station (Replicate):	IAC-165 (2 of 2)
Depth (m):	-43.7
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



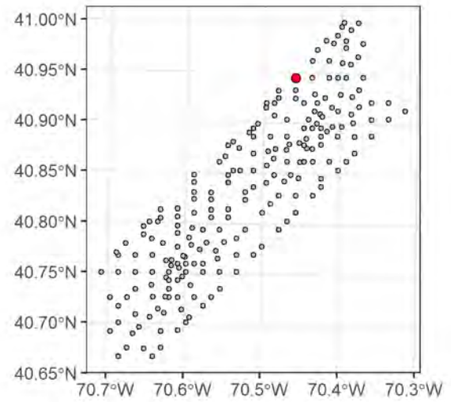
Figure F-657: IAC-165-B-PV

Sediment Profile Image



Figure F-658: IAC-165-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 18:35
Station (Replicate):	IAC-165 (1 of 2)
Depth (m):	-43.5
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 small crabs, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



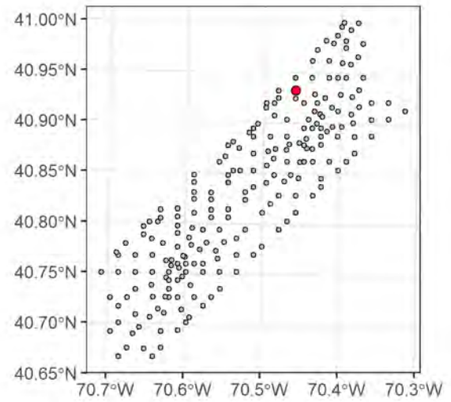
Figure F-659: IAC-166-B-PV

Sediment Profile Image



Figure F-660: IAC-166-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 06:23
Station (Replicate):	IAC-166 (2 of 2)
Depth (m):	-44.2
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, microbial mat, large and small burrows, worm castings

Plan-View Image



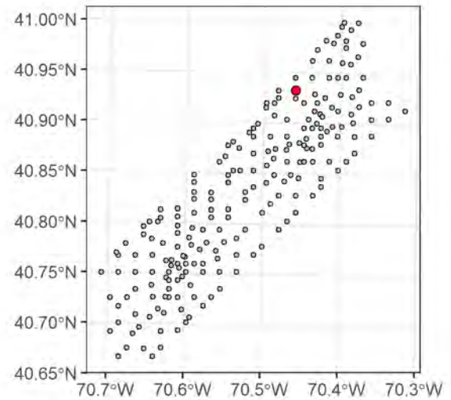
Figure F-661: IAC-166-A-PV

Sediment Profile Image



Figure F-662: IAC-166-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 06:27
Station (Replicate):	IAC-166 (1 of 2)
Depth (m):	-44
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image

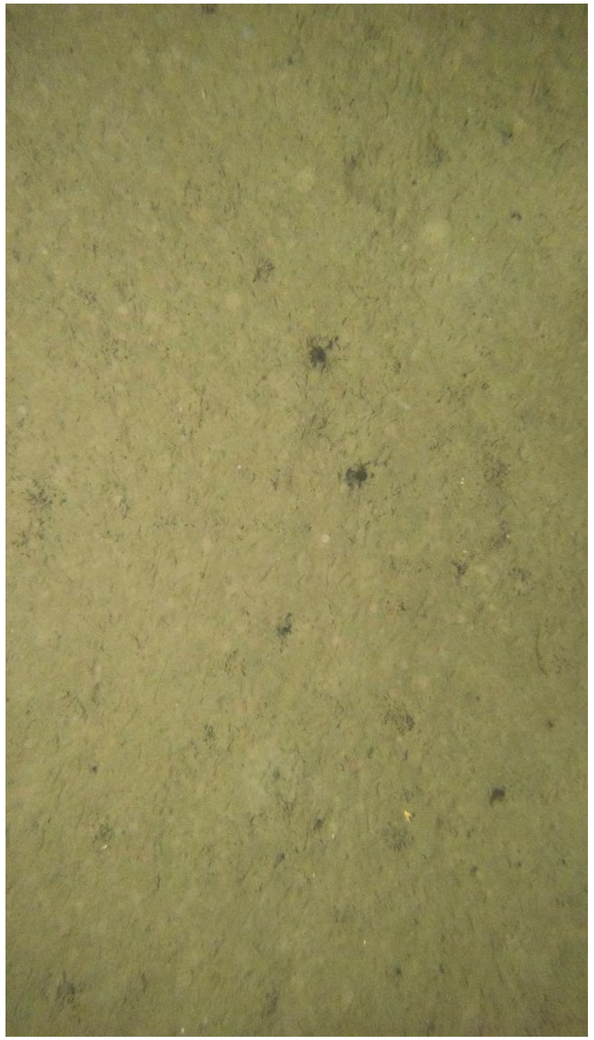


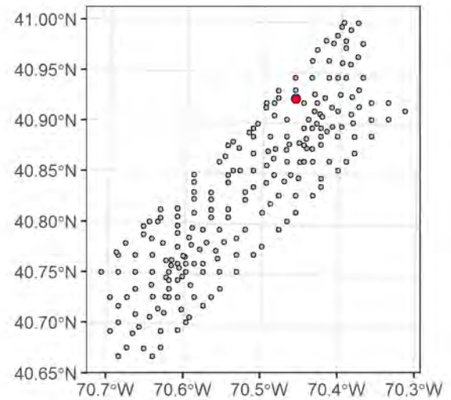
Figure F-663: IAC-167-A-PV

Sediment Profile Image



Figure F-664: IAC-167-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 05:06
Station (Replicate):	IAC-167 (2 of 2)
Depth (m):	-45.8
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	Amphipod tube clusters, large and small burrows, abundant faint tracks (crab?)

Plan-View Image



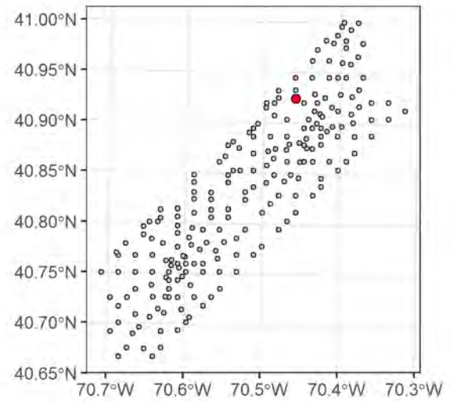
Figure F-665: IAC-167-C-PV

Sediment Profile Image



Figure F-666: IAC-167-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 05:10
Station (Replicate):	IAC-167 (1 of 2)
Depth (m):	-45.7
Prism Penetration (cm):	10.8
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows, abundant faint tracks (crab?), three large holes/feeding voids

Plan-View Image



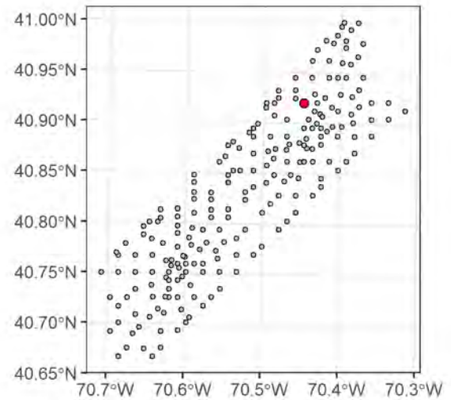
Figure F-667: IAC-168-B-PV

Sediment Profile Image



Figure F-668: IAC-168-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 04:21
Station (Replicate):	IAC-168 (2 of 2)
Depth (m):	-45.2
Prism Penetration (cm):	12.6
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large (one with reduced sediment) and small burrows, abundant faint tracks (crab?)

Plan-View Image



Figure F-669: IAC-168-C-PV

Sediment Profile Image

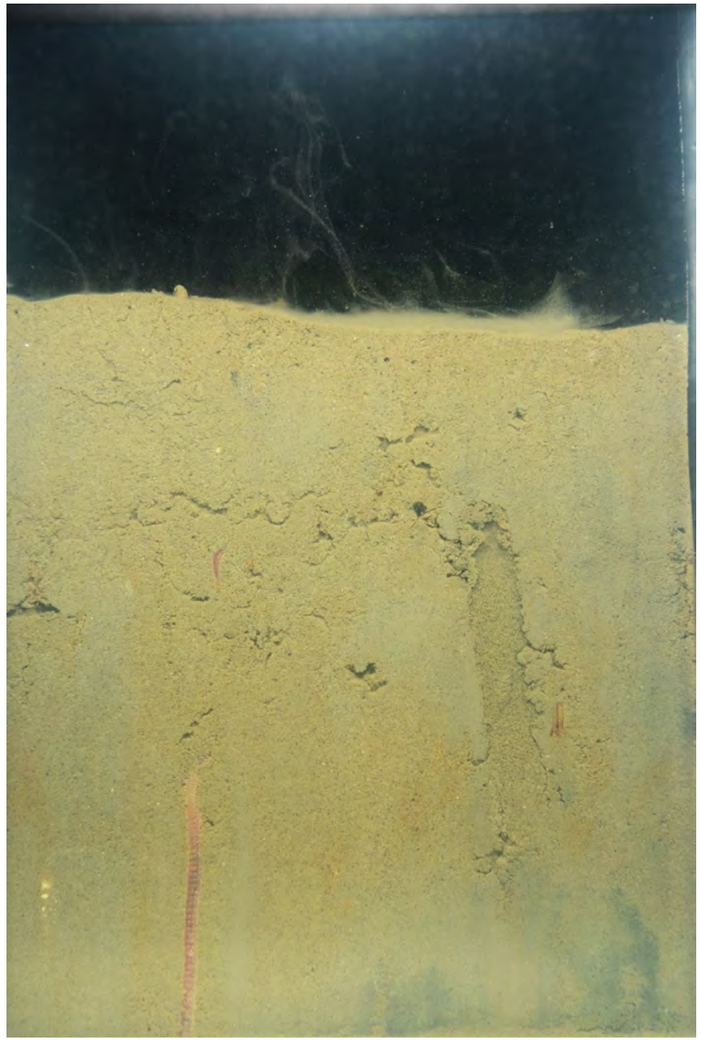
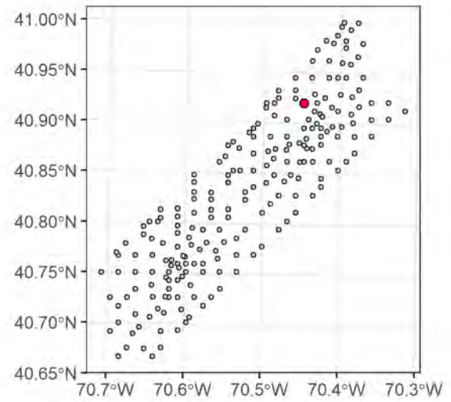


Figure F-670: IAC-168-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 04:26
Station (Replicate):	IAC-168 (1 of 2)
Depth (m):	-45.1
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	4.6
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 Tritia trivittata, 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	Amphipod tube clusters, large and small burrows

Plan-View Image



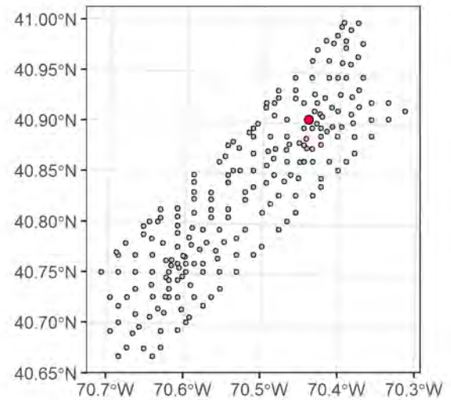
Figure F-671: IAC-169-A-PV

Sediment Profile Image



Figure F-672: IAC-169-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 12:19
Station (Replicate):	IAC-169 (2 of 2)
Depth (m):	-45.4
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



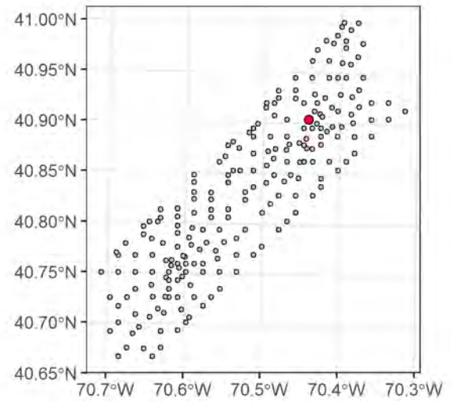
Figure F-673: IAC-169-B-PV

Sediment Profile Image



Figure F-674: IAC-169-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 12:28
Station (Replicate):	IAC-169 (1 of 2)
Depth (m):	-45.6
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	4.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



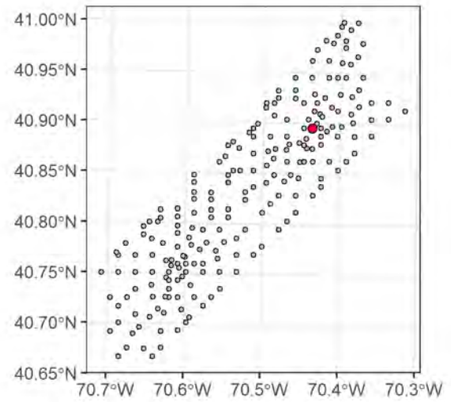
Figure F-675: IAC-170-A-PV

Sediment Profile Image



Figure F-676: IAC-170-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 07:46
Station (Replicate):	IAC-170 (2 of 2)
Depth (m):	-46.5
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



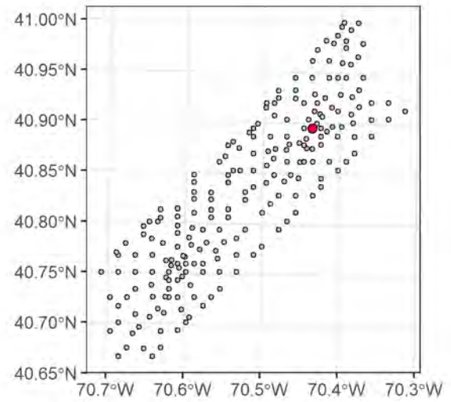
Figure F-677: IAC-170-B-PV

Sediment Profile Image



Figure F-678: IAC-170-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 07:51
Station (Replicate):	IAC-170 (1 of 2)
Depth (m):	-46.6
Prism Penetration (cm):	15.2
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	200 medium bivalves (estimated) 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows, 1 gastropod egg case

Plan-View Image



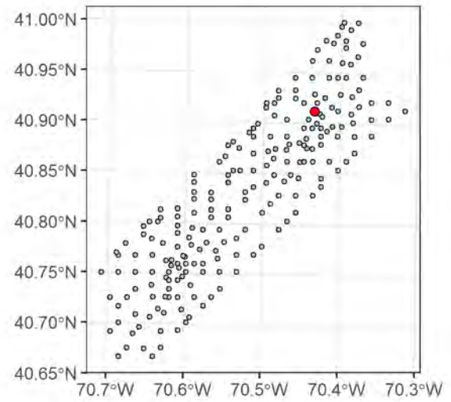
Figure F-679: IAC-171-A-PV

Sediment Profile Image



Figure F-680: IAC-171-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 13:07
Station (Replicate):	IAC-171 (2 of 2)
Depth (m):	-44.7
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod and polychaete tubes, large and small burrows, faint tracks

Plan-View Image



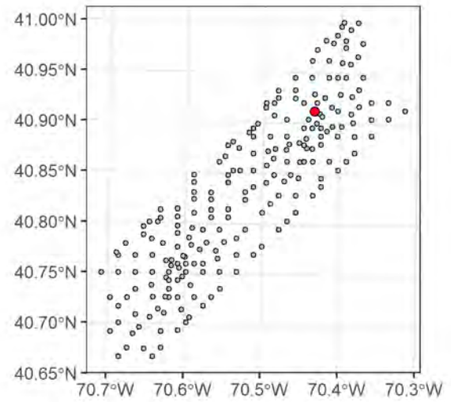
Figure F-681: IAC-171-B-PV

Sediment Profile Image



Figure F-682: IAC-171-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 13:14
Station (Replicate):	IAC-171 (1 of 2)
Depth (m):	-44.7
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	5.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint tracks

Plan-View Image



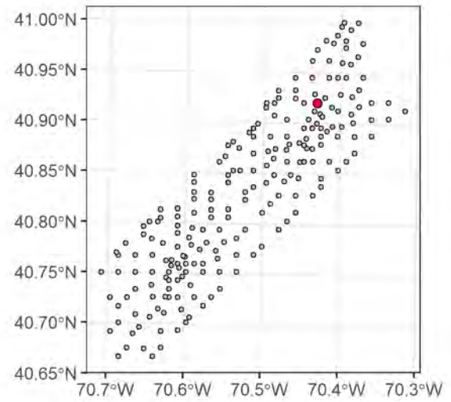
Figure F-683: IAC-172-A-PV

Sediment Profile Image



Figure F-684: IAC-172-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 02:42
Station (Replicate):	IAC-172 (2 of 2)
Depth (m):	-44.4
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



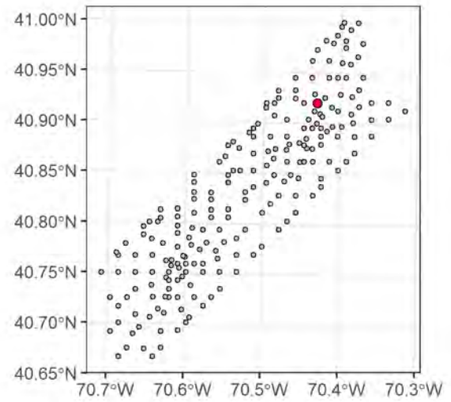
Figure F-685: IAC-172-B-PV

Sediment Profile Image



Figure F-686: IAC-172-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 02:52
Station (Replicate):	IAC-172 (1 of 2)
Depth (m):	-44.3
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	4.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



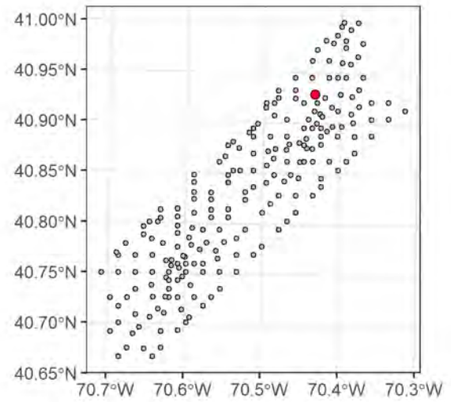
Figure F-687: IAC-173-B-PV

Sediment Profile Image



Figure F-688: IAC-173-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 03:29
Station (Replicate):	IAC-173 (2 of 2)
Depth (m):	-44.1
Prism Penetration (cm):	16.6
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod and polychaete tubes, large and small burrows

Plan-View Image



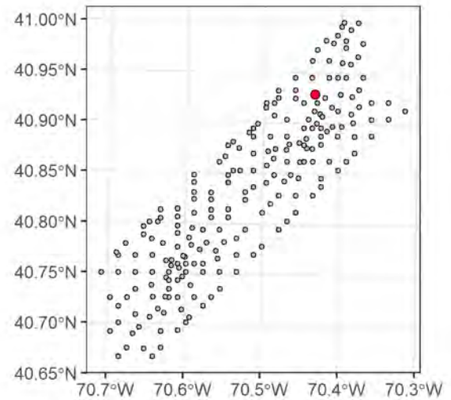
Figure F-689: IAC-173-A-PV

Sediment Profile Image



Figure F-690: IAC-173-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 03:34
Station (Replicate):	IAC-173 (1 of 2)
Depth (m):	-44.1
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea, 1 sea slug
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



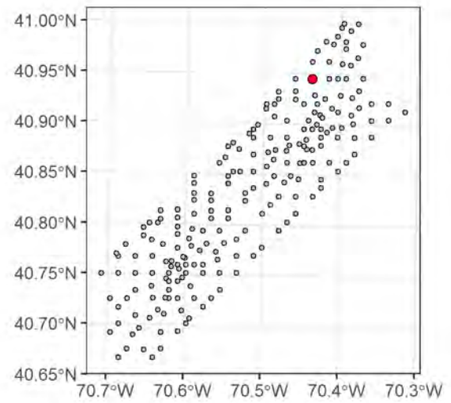
Figure F-691: IAC-174-A-PV

Sediment Profile Image



Figure F-692: IAC-174-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 19:16
Station (Replicate):	IAC-174 (2 of 2)
Depth (m):	-43
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	4.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 small crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, small burrows

Plan-View Image



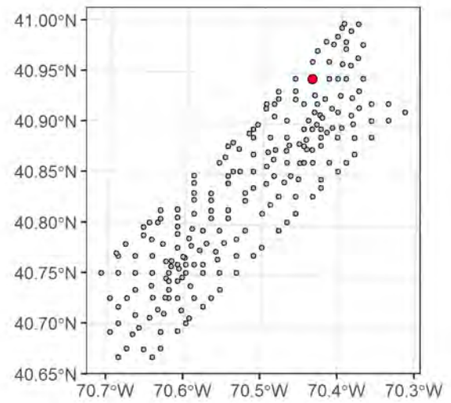
Figure F-693: IAC-174-B-PV

Sediment Profile Image



Figure F-694: IAC-174-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 19:22
Station (Replicate):	IAC-174 (1 of 2)
Depth (m):	-43.1
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, small burrows

Plan-View Image



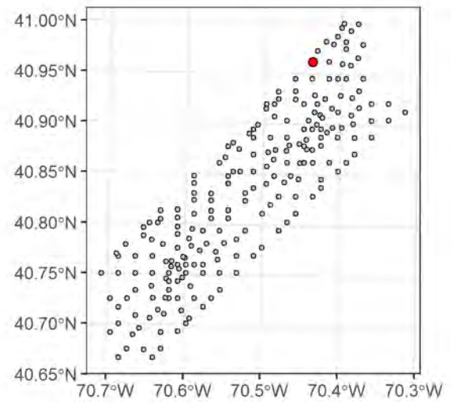
Figure F-695: IAC-175-A-PV

Sediment Profile Image



Figure F-696: IAC-175-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 17:28
Station (Replicate):	IAC-175 (2 of 2)
Depth (m):	-41.7
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	1.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows, faint crab tracks

Plan-View Image



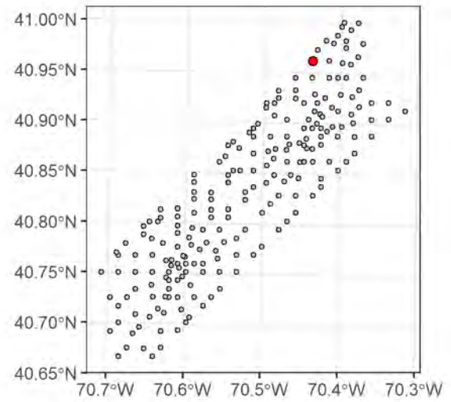
Figure F-697: IAC-175-C-PV

Sediment Profile Image



Figure F-698: IAC-175-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 17:32
Station (Replicate):	IAC-175 (1 of 2)
Depth (m):	-41.8
Prism Penetration (cm):	12.5
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tube clusters, large and small burrows

Plan-View Image



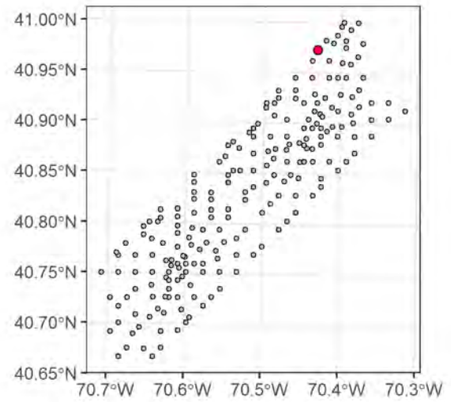
Figure F-699: IAC-176-A-PV

Sediment Profile Image



Figure F-700: IAC-176-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 16:53
Station (Replicate):	IAC-176 (2 of 2)
Depth (m):	-41.4
Prism Penetration (cm):	9.3
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 paguroidea, 3 shrimp, 2 Echinarachnius parma, 1 large crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small burrows

Plan-View Image

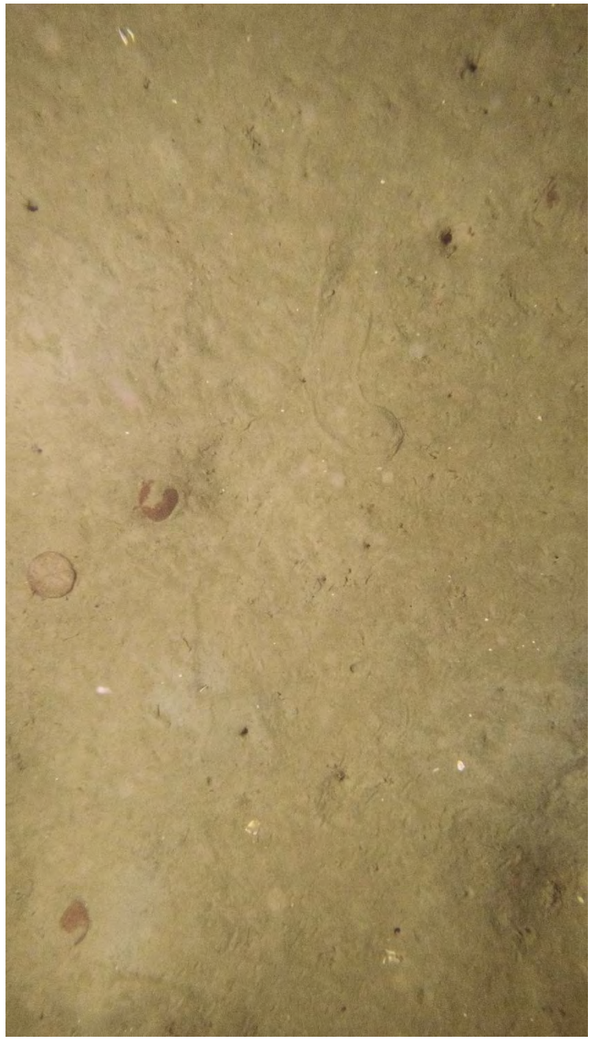


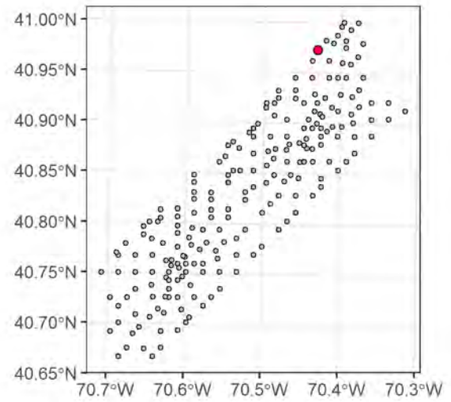
Figure F-701: IAC-176-C-PV

Sediment Profile Image



Figure F-702: IAC-176-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 16:56
Station (Replicate):	IAC-176 (1 of 2)
Depth (m):	-41.4
Prism Penetration (cm):	9.8
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	3 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows

Plan-View Image



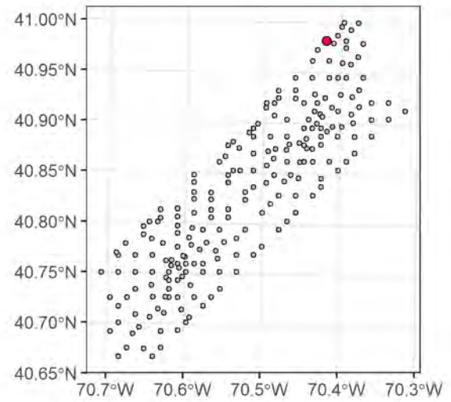
Figure F-703: IAC-177-A-PV

Sediment Profile Image



Figure F-704: IAC-177-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 09:07
Station (Replicate):	IAC-177 (2 of 2)
Depth (m):	-40.7
Prism Penetration (cm):	11.8
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows

Plan-View Image



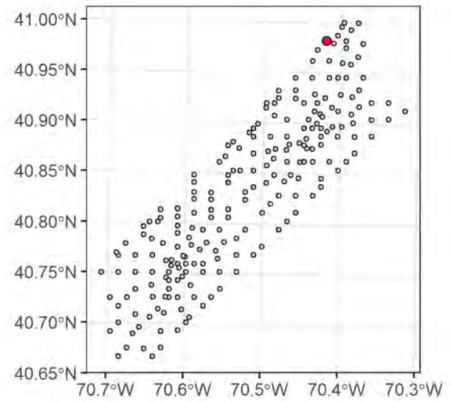
Figure F-705: IAC-177-C-PV

Sediment Profile Image



Figure F-706: IAC-177-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 09:12
Station (Replicate):	IAC-177 (1 of 2)
Depth (m):	-40.3
Prism Penetration (cm):	10.5
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea, 4 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows

Plan-View Image



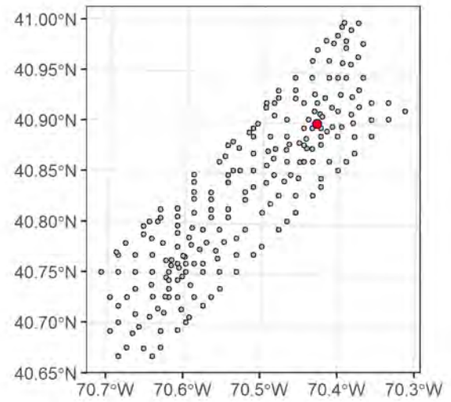
Figure F-707: IAC-178-B-PV

Sediment Profile Image



Figure F-708: IAC-178-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 07:12
Station (Replicate):	IAC-178 (2 of 2)
Depth (m):	-45.8
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	2.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



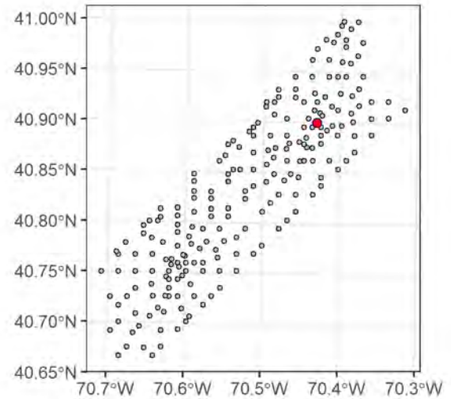
Figure F-709: IAC-178-A-PV

Sediment Profile Image



Figure F-710: IAC-178-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 07:17
Station (Replicate):	IAC-178 (1 of 2)
Depth (m):	-45.8
Prism Penetration (cm):	15.4
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



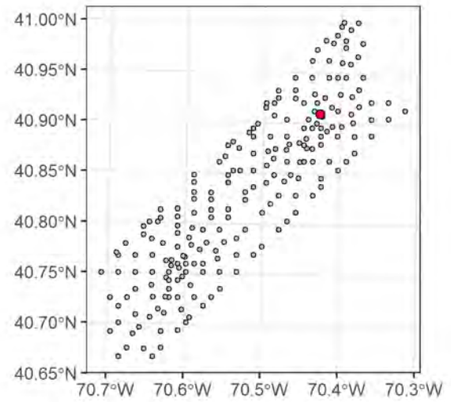
Figure F-711: IAC-179-B-PV

Sediment Profile Image



Figure F-712: IAC-179-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 13:47
Station (Replicate):	IAC-179 (2 of 2)
Depth (m):	-44.6
Prism Penetration (cm):	13.7
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



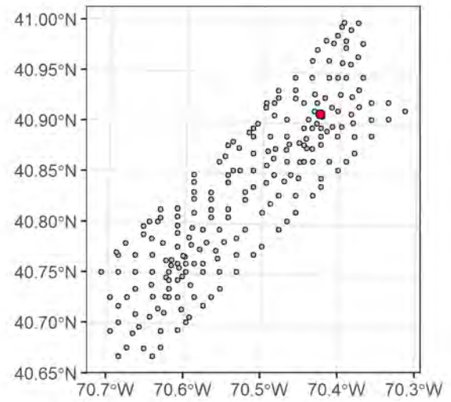
Figure F-713: IAC-179-A-PV

Sediment Profile Image



Figure F-714: IAC-179-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 13:51
Station (Replicate):	IAC-179 (1 of 2)
Depth (m):	-44.5
Prism Penetration (cm):	14.7
aRPD Mean Depth (cm):	6.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



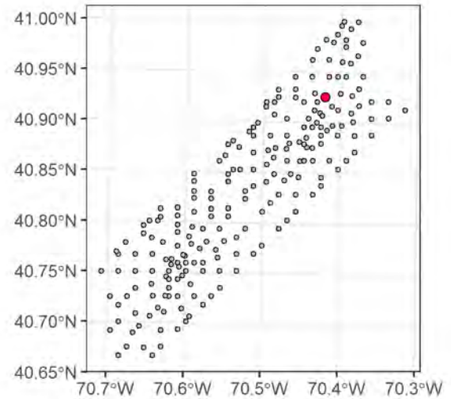
Figure F-715: IAC-180-A-PV

Sediment Profile Image



Figure F-716: IAC-180-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 01:55
Station (Replicate):	IAC-180 (2 of 2)
Depth (m):	-43.5
Prism Penetration (cm):	11.9
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



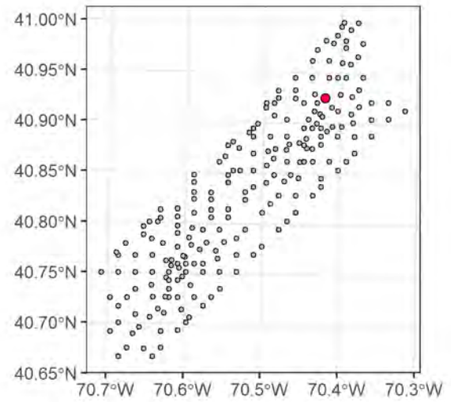
Figure F-717: IAC-180-B-PV

Sediment Profile Image



Figure F-718: IAC-180-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 02:07
Station (Replicate):	IAC-180 (1 of 2)
Depth (m):	-43.5
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, large and small burrows

Plan-View Image



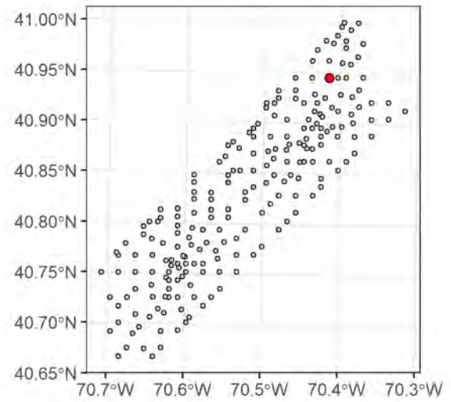
Figure F-719: IAC-181-A-PV

Sediment Profile Image



Figure F-720: IAC-181-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 20:07
Station (Replicate):	IAC-181 (2 of 2)
Depth (m):	-41.9
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea 1 skate (Raja), buried
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



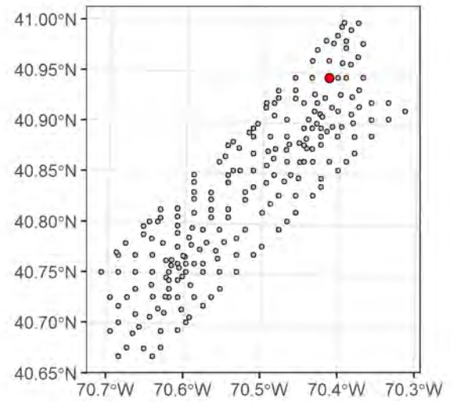
Figure F-721: IAC-181-C-PV

Sediment Profile Image



Figure F-722: IAC-181-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 20:12
Station (Replicate):	IAC-181 (1 of 2)
Depth (m):	-41.8
Prism Penetration (cm):	14.4
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



Figure F-723: IAC-182-A-PV

Sediment Profile Image

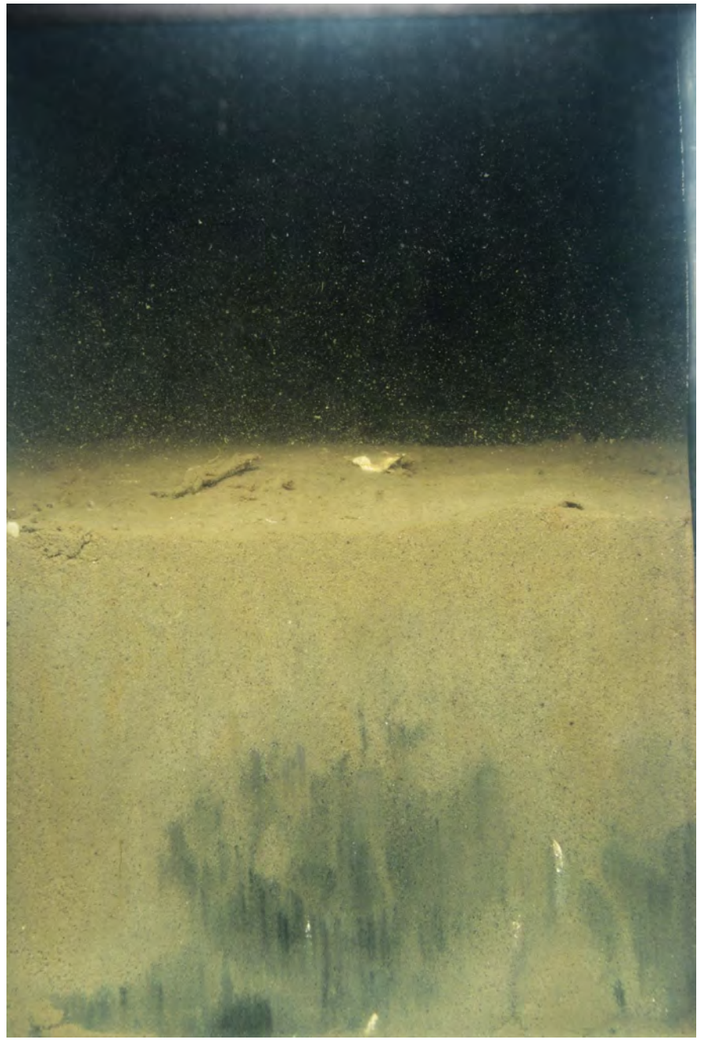
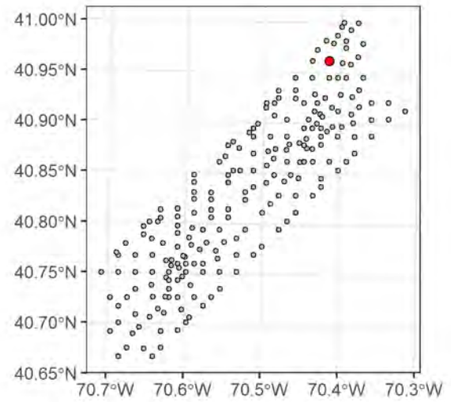


Figure F-724: IAC-182-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 16:03
Station (Replicate):	IAC-182 (2 of 2)
Depth (m):	-41.6
Prism Penetration (cm):	10.7
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows, faint tracks

Plan-View Image



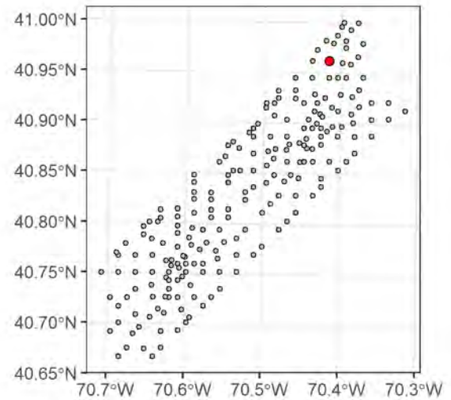
Figure F-725: IAC-182-C-PV

Sediment Profile Image



Figure F-726: IAC-182-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 16:07
Station (Replicate):	IAC-182 (1 of 2)
Depth (m):	-41.6
Prism Penetration (cm):	7.5
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 paguroidea, 1 scallop
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows, 1 naticid egg case, one large bivalve (dead)

Plan-View Image



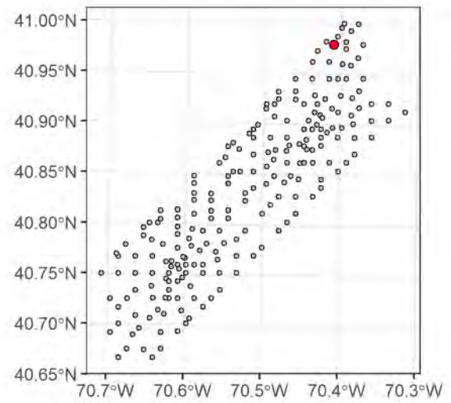
Figure F-727: IAC-183-B-PV

Sediment Profile Image



Figure F-728: IAC-183-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 09:53
Station (Replicate):	IAC-183 (2 of 2)
Depth (m):	-40
Prism Penetration (cm):	9.5
aRPD Mean Depth (cm):	3.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea, 2 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small burrows, faint tracks

Plan-View Image



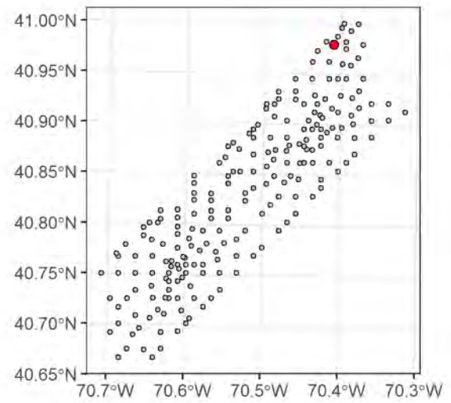
Figure F-729: IAC-183-C-PV

Sediment Profile Image



Figure F-730: IAC-183-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 09:58
Station (Replicate):	IAC-183 (1 of 2)
Depth (m):	-40
Prism Penetration (cm):	11.1
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 sea slugs, 2 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small burrows, faint tracks

Plan-View Image



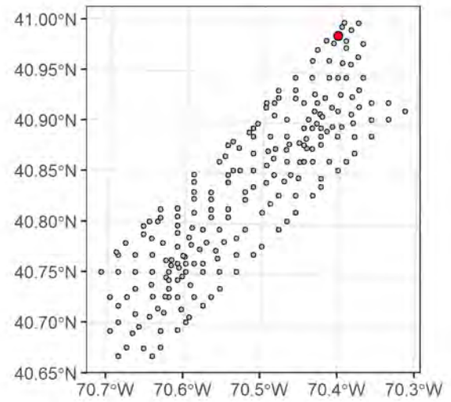
Figure F-731: IAC-184-B-PV

Sediment Profile Image



Figure F-732: IAC-184-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 08:29
Station (Replicate):	IAC-184 (2 of 2)
Depth (m):	-39.2
Prism Penetration (cm):	4.3
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	10 paguroidea, 8 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small burrows, faint tracks, 4 large empty Mercenaria valves

Plan-View Image



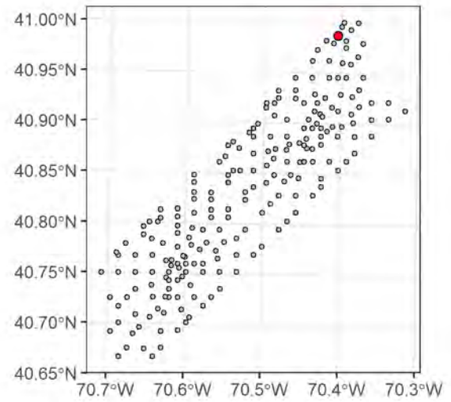
Figure F-733: IAC-184-C-PV

Sediment Profile Image



Figure F-734: IAC-184-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 08:38
Station (Replicate):	IAC-184 (1 of 2)
Depth (m):	-39.2
Prism Penetration (cm):	4
aRPD Mean Depth (cm):	1.4
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	7
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1387 E. parma, 5 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows, bottom paved with E. parma

Plan-View Image

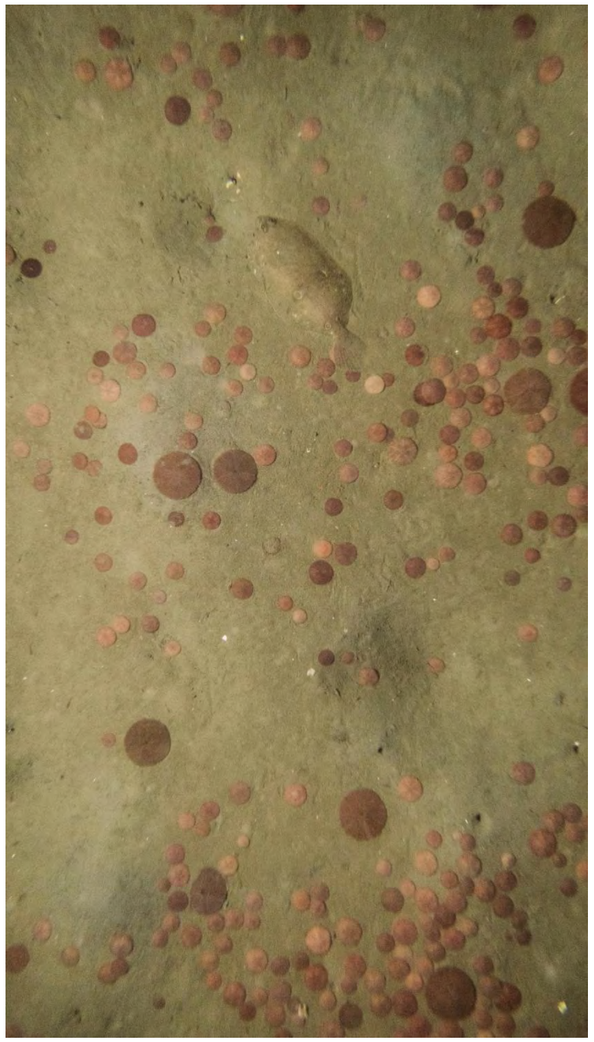


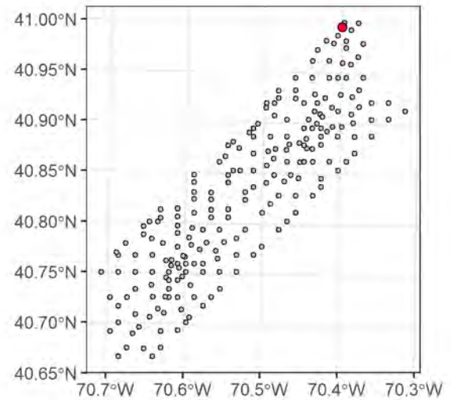
Figure F-735: IAC-185-C-PV

Sediment Profile Image



Figure F-736: IAC-185-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 07:51
Station (Replicate):	IAC-185 (2 of 2)
Depth (m):	-39.8
Prism Penetration (cm):	11.9
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	265 E. parma 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows

Plan-View Image

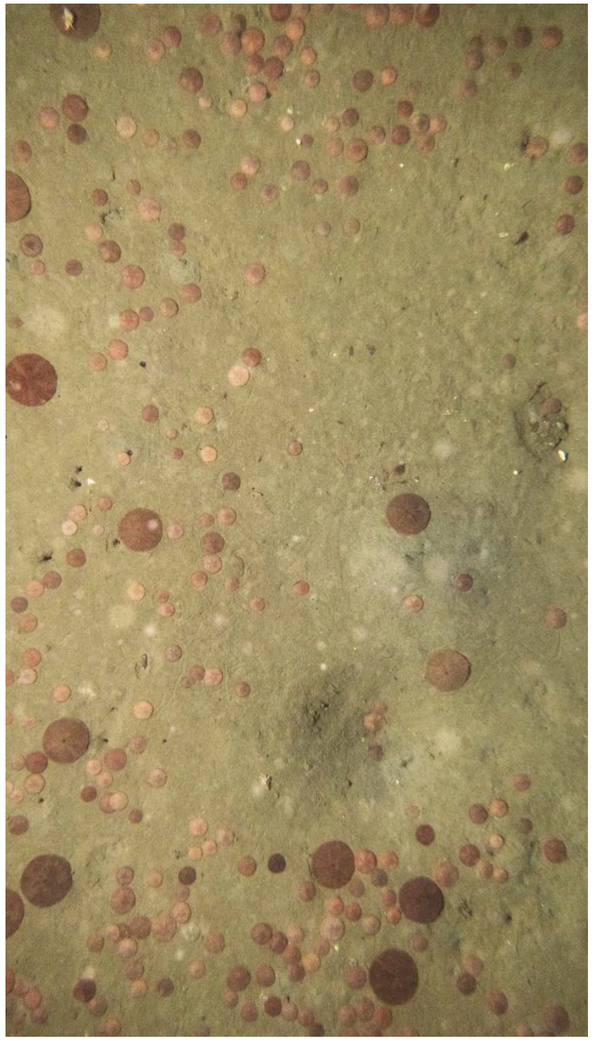


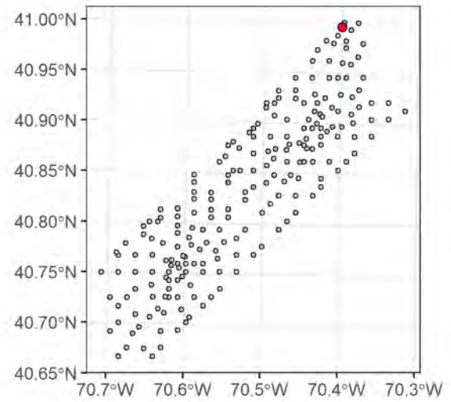
Figure F-737: IAC-185-B-PV

Sediment Profile Image



Figure F-738: IAC-185-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 07:55
Station (Replicate):	IAC-185 (1 of 2)
Depth (m):	-39.7
Prism Penetration (cm):	8.7
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	239 E. parma, 2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows

Plan-View Image

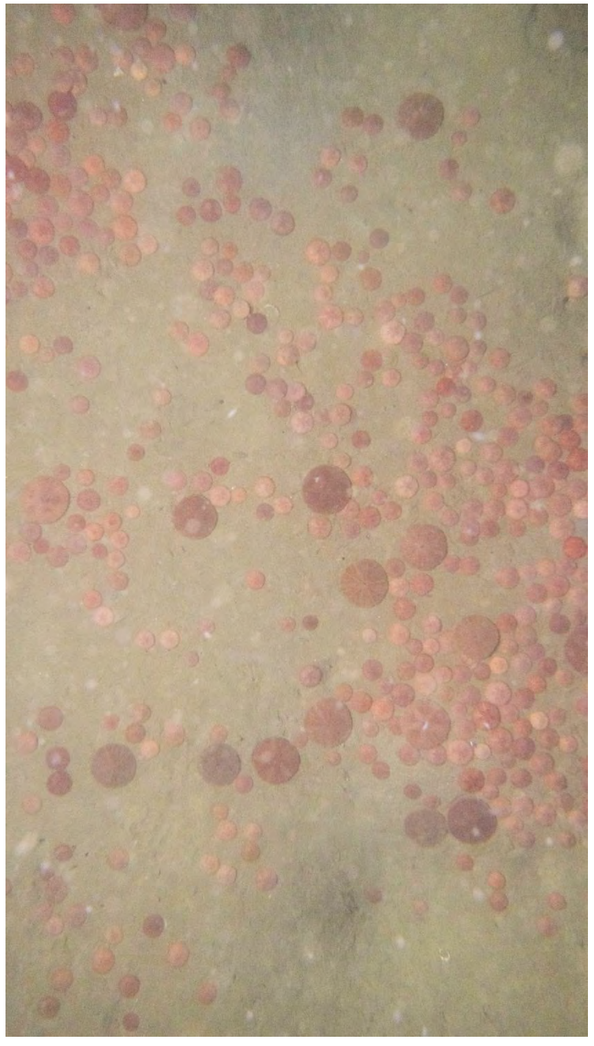


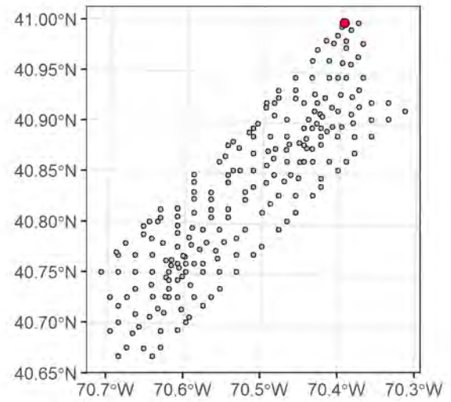
Figure F-739: IAC-186-A-PV

Sediment Profile Image



Figure F-740: IAC-186-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 05:08
Station (Replicate):	IAC-186 (2 of 2)
Depth (m):	-39.6
Prism Penetration (cm):	10.4
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	376 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows

Plan-View Image

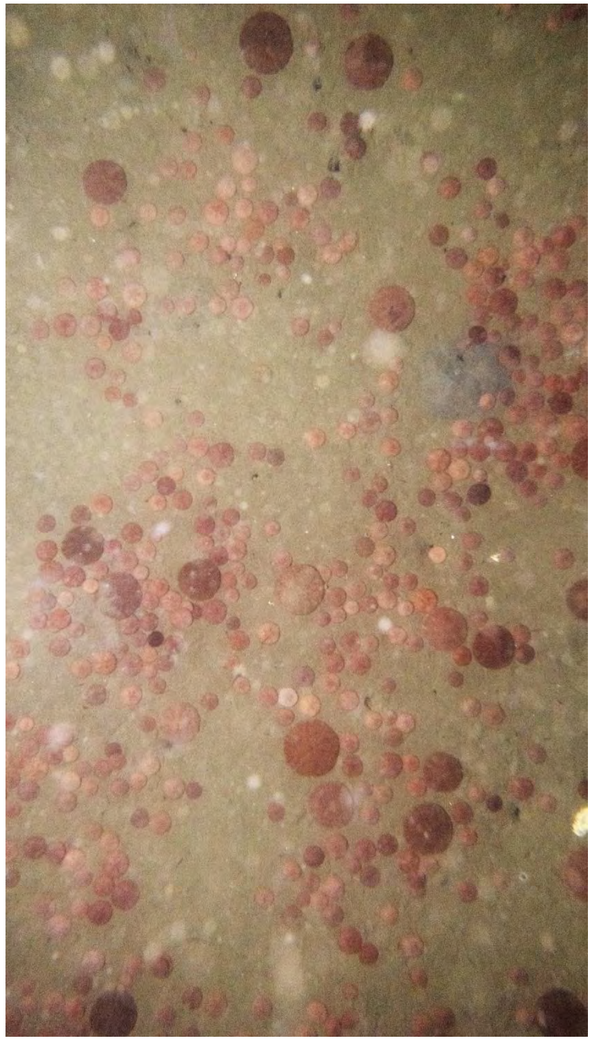


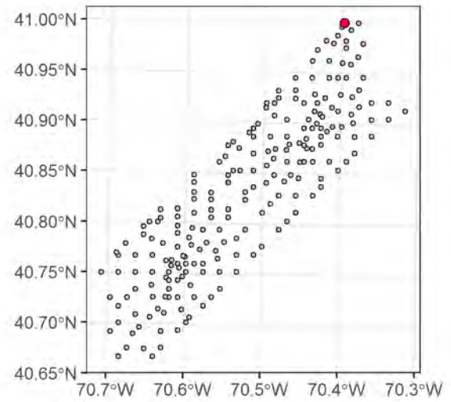
Figure F-741: IAC-186-B-PV

Sediment Profile Image



Figure F-742: IAC-186-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 05:19
Station (Replicate):	IAC-186 (1 of 2)
Depth (m):	-39.7
Prism Penetration (cm):	10.2
aRPD Mean Depth (cm):	1.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	6
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	378 E. parma
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows

Plan-View Image

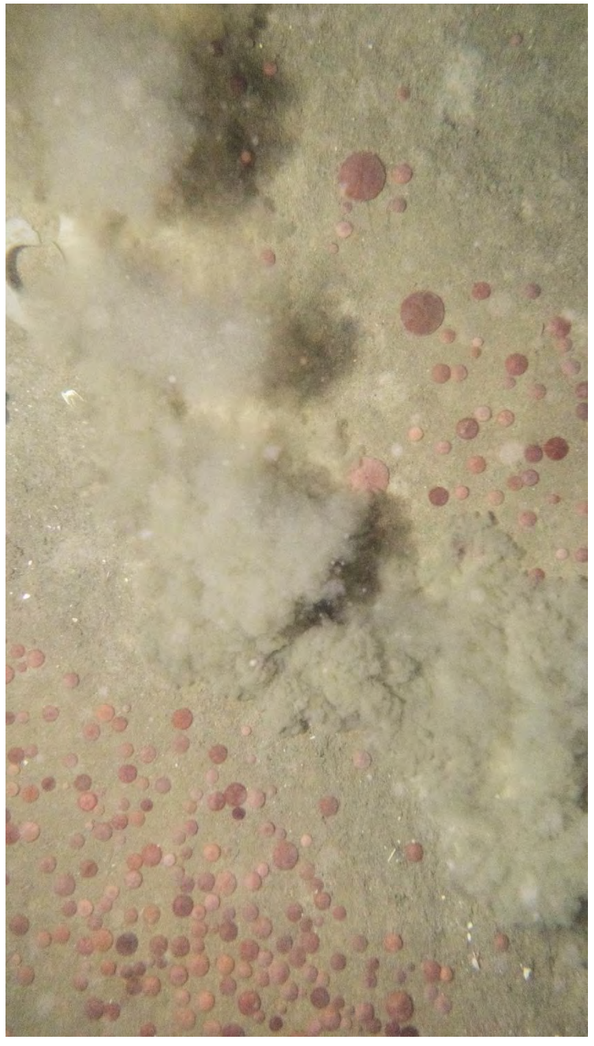


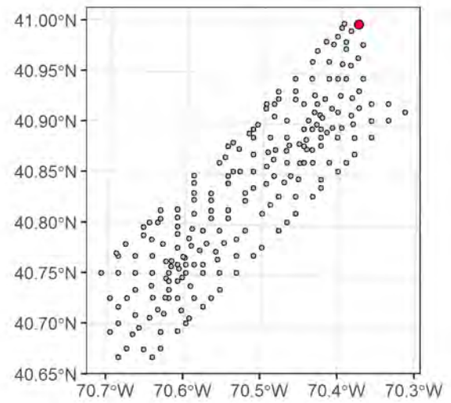
Figure F-743: IAC-187-A-PV

Sediment Profile Image



Figure F-744: IAC-187-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 06:34
Station (Replicate):	IAC-187 (2 of 2)
Depth (m):	-37.8
Prism Penetration (cm):	4.5
aRPD Mean Depth (cm):	1.5
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I
OSI:	3
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	210 E. parma, 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	one Naticidae egg case, cloud of suspended sediment obscuring roughly 25% of photo

Plan-View Image

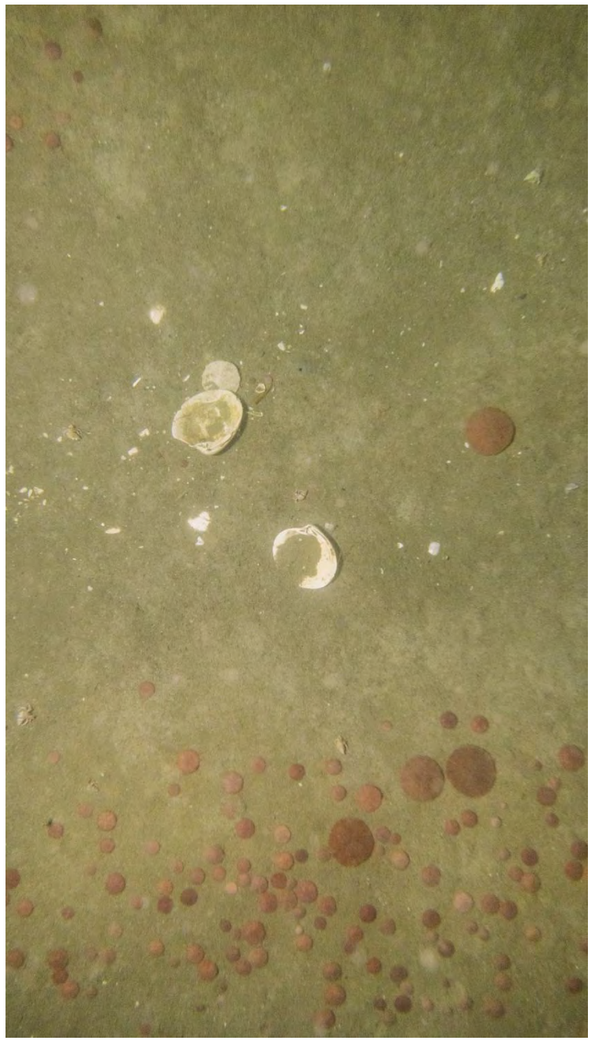


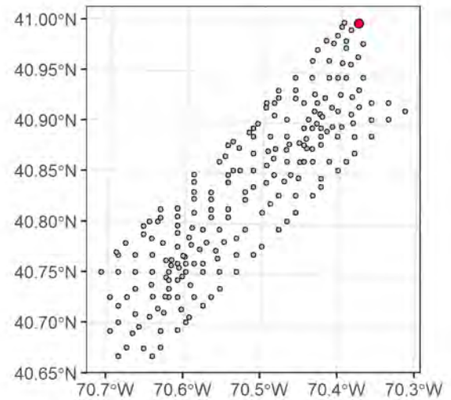
Figure F-745: IAC-187-B-PV

Sediment Profile Image



Figure F-746: IAC-187-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 06:43
Station (Replicate):	IAC-187 (1 of 2)
Depth (m):	-40.7
Prism Penetration (cm):	4.6
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	2 to 1
Infaunal Successional Stage:	I
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	134 E. parma, 7 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	2 large Mercenaria valves (dead)

Plan-View Image

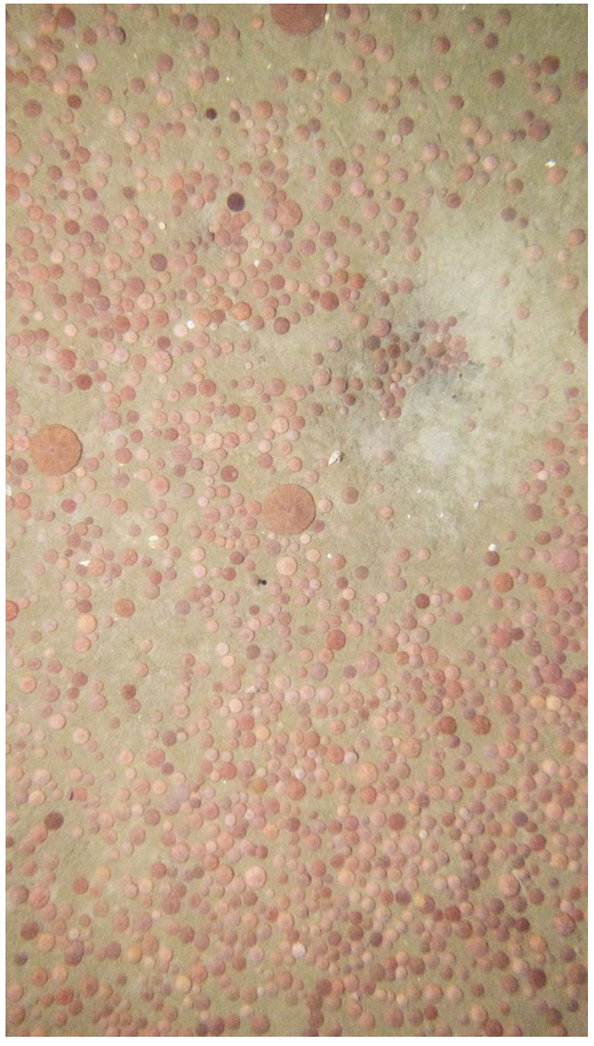


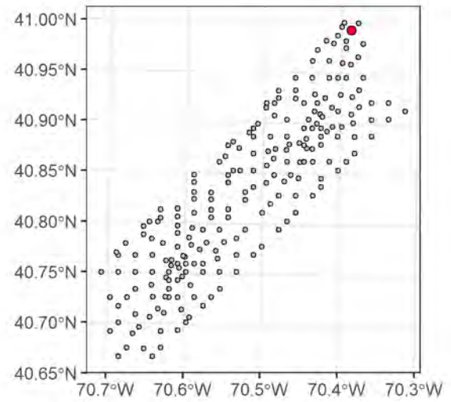
Figure F-747: IAC-188-A-PV

Sediment Profile Image



Figure F-748: IAC-188-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 07:13
Station (Replicate):	IAC-188 (2 of 2)
Depth (m):	-37.6
Prism Penetration (cm):	3.7
aRPD Mean Depth (cm):	1.3
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	II
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1219 E. parma, 3 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows, bottom paved with E. parma

Plan-View Image

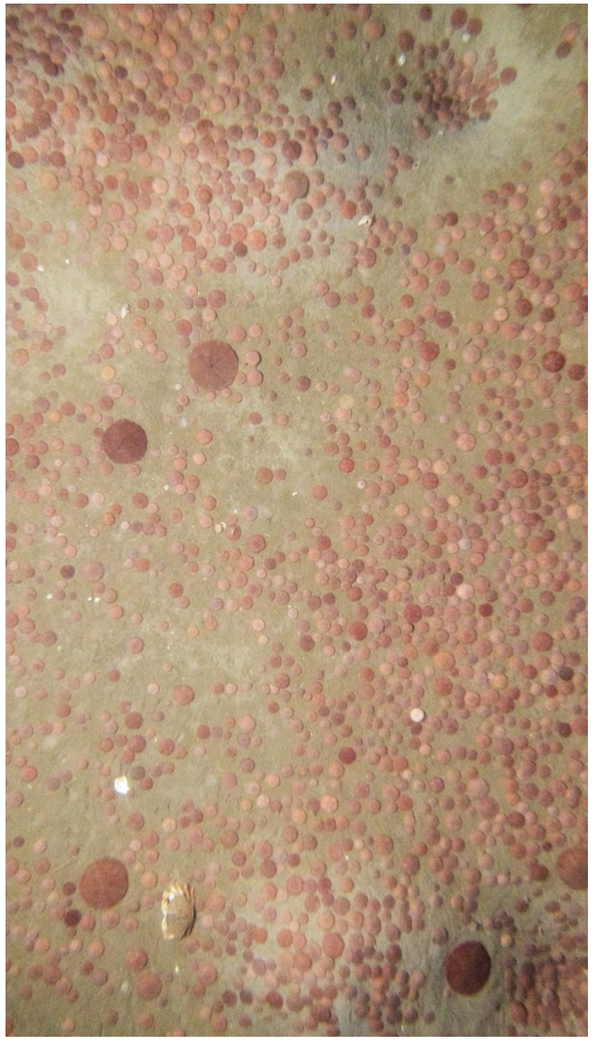


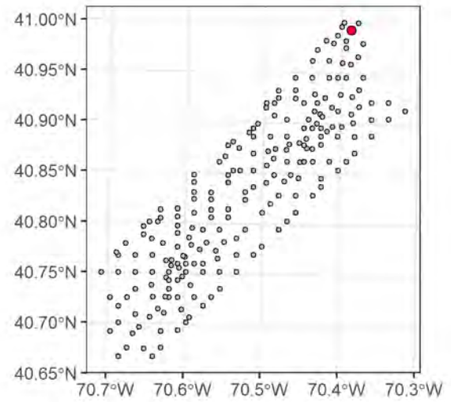
Figure F-749: IAC-188-B-PV

Sediment Profile Image



Figure F-750: IAC-188-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 07:18
Station (Replicate):	IAC-188 (1 of 2)
Depth (m):	-37.5
Prism Penetration (cm):	6
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I
OSI:	4
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1245 E. parma, 2 paguroidea, 1 Cancer irroratus
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	bottom paved with E. parma

Plan-View Image



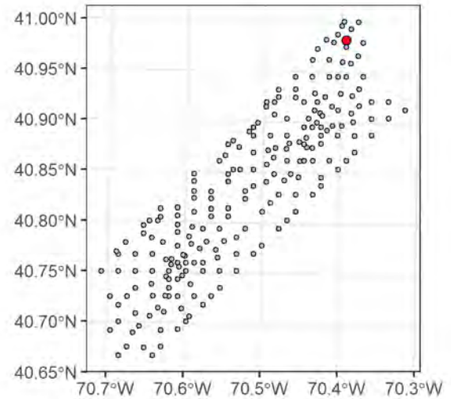
Figure F-751: IAC-189-A-PV

Sediment Profile Image



Figure F-752: IAC-189-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 10:37
Station (Replicate):	IAC-189 (2 of 2)
Depth (m):	-39.3
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 E. parma, 2 small crabs
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few small burrows

Plan-View Image



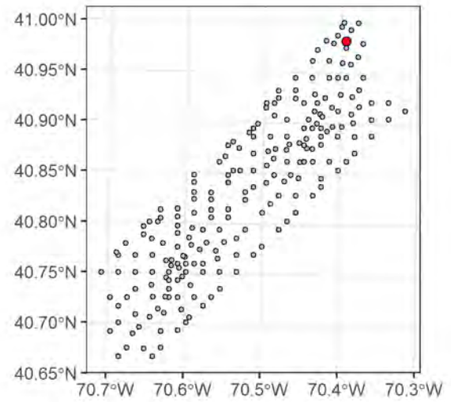
Figure F-753: IAC-189-B-PV

Sediment Profile Image



Figure F-754: IAC-189-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 10:41
Station (Replicate):	IAC-189 (1 of 2)
Depth (m):	-39.2
Prism Penetration (cm):	12.5
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small burrows, faint tracks

Plan-View Image



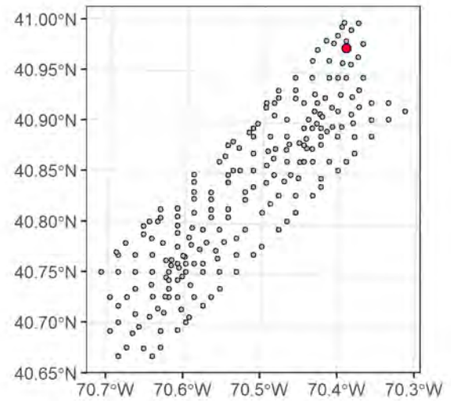
Figure F-755: IAC-190-A-PV

Sediment Profile Image



Figure F-756: IAC-190-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 11:15
Station (Replicate):	IAC-190 (2 of 2)
Depth (m):	-40.4
Prism Penetration (cm):	13.9
aRPD Mean Depth (cm):	5.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	small burrows, microbial mat?

Plan-View Image



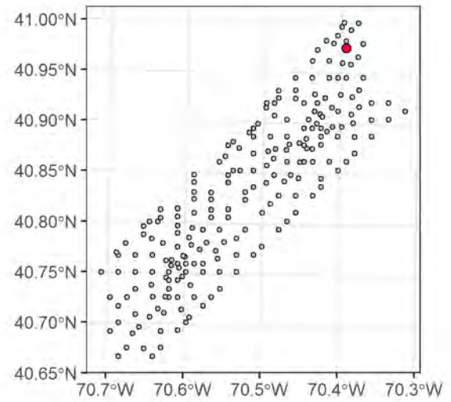
Figure F-757: IAC-190-B-PV

Sediment Profile Image



Figure F-758: IAC-190-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 11:20
Station (Replicate):	IAC-190 (1 of 2)
Depth (m):	-40.2
Prism Penetration (cm):	12.9
aRPD Mean Depth (cm):	5.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	small burrows, faint tracks

Plan-View Image

NO PV IMAGE ACQUIRED

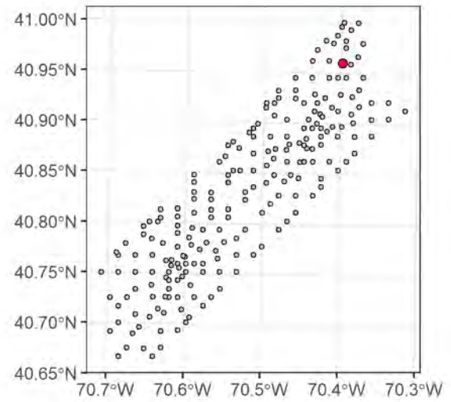
Figure F-759: IAC-191-A-PV

Sediment Profile Image



Figure F-760: IAC-191-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 15:13
Station (Replicate):	IAC-191 (2 of 2)
Depth (m):	-41.4
Prism Penetration (cm):	12.2
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



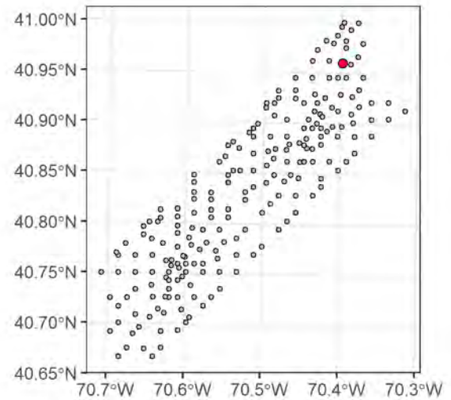
Figure F-761: IAC-191-B-PV

Sediment Profile Image



Figure F-762: IAC-191-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 15:21
Station (Replicate):	IAC-191 (1 of 2)
Depth (m):	-41.5
Prism Penetration (cm):	13.3
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image

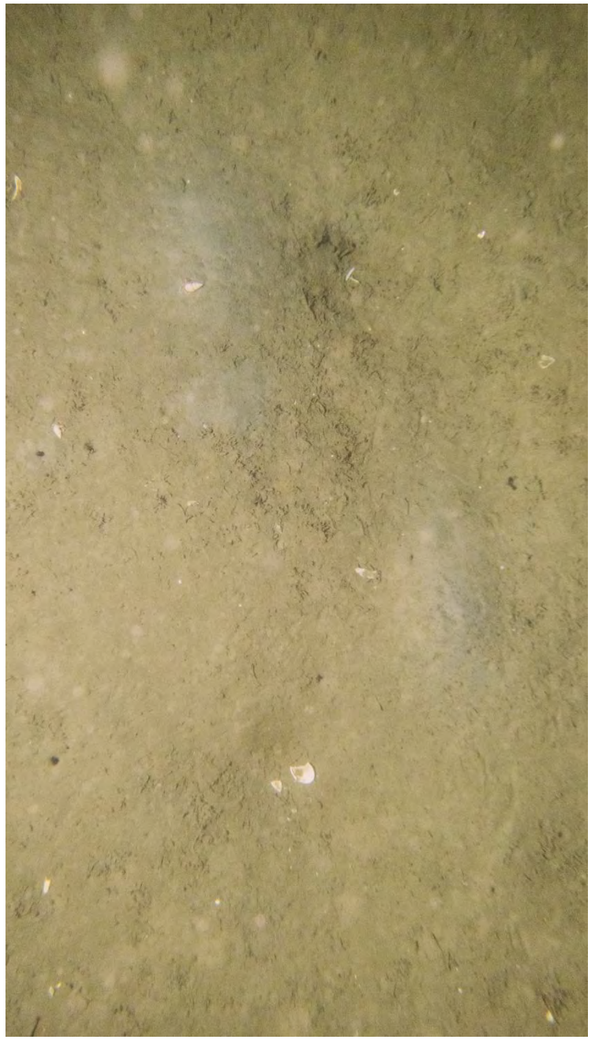


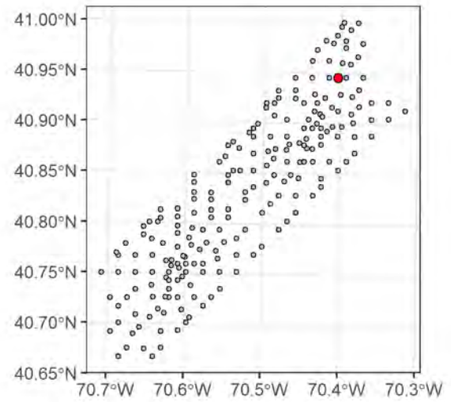
Figure F-763: IAC-192-B-PV

Sediment Profile Image



Figure F-764: IAC-192-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 20:54
Station (Replicate):	IAC-192 (2 of 2)
Depth (m):	-41.6
Prism Penetration (cm):	12.5
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	3 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



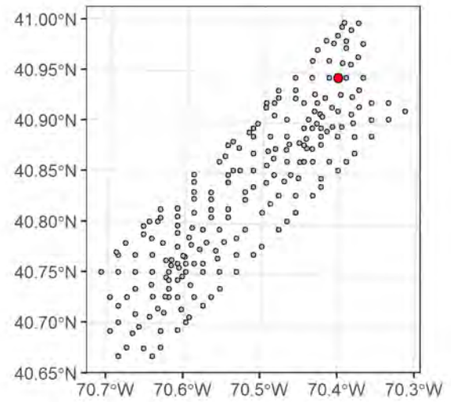
Figure F-765: IAC-192-A-PV

Sediment Profile Image



Figure F-766: IAC-192-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 20:59
Station (Replicate):	IAC-192 (1 of 2)
Depth (m):	1.3
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 burrowing anemone 1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



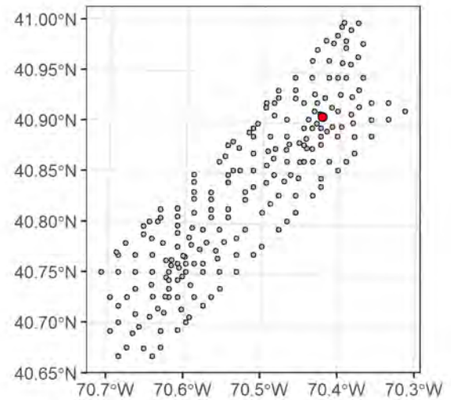
Figure F-767: IAC-193-A-PV

Sediment Profile Image



Figure F-768: IAC-193-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 14:16
Station (Replicate):	IAC-193 (2 of 2)
Depth (m):	-45
Prism Penetration (cm):	10.5
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image

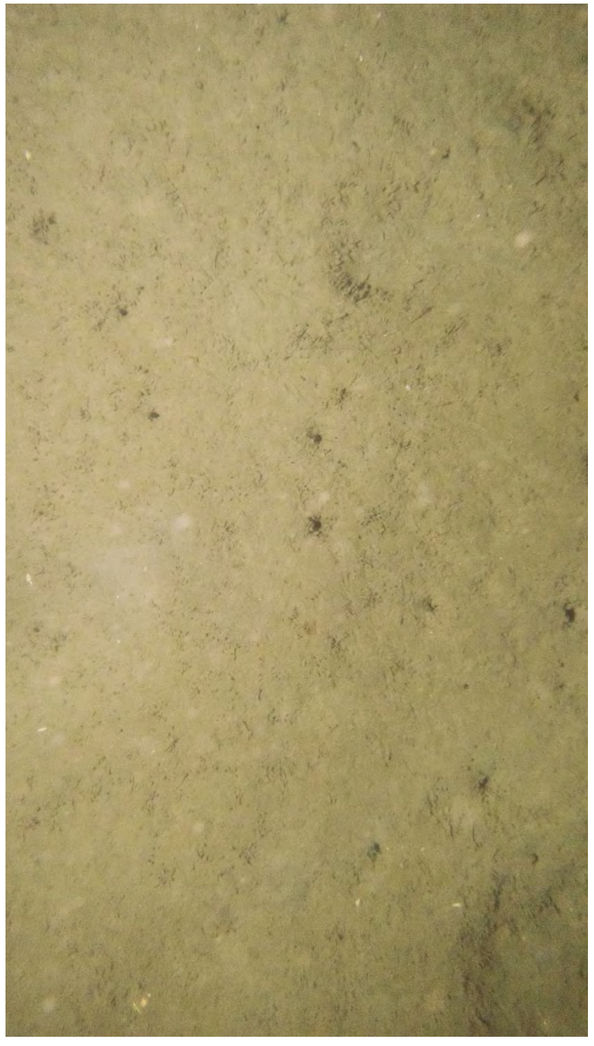


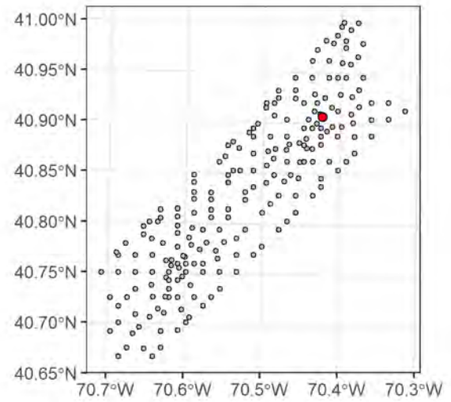
Figure F-769: IAC-193-B-PV

Sediment Profile Image



Figure F-770: IAC-193-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 14:25
Station (Replicate):	IAC-193 (1 of 2)
Depth (m):	-45.2
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 shrimp
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



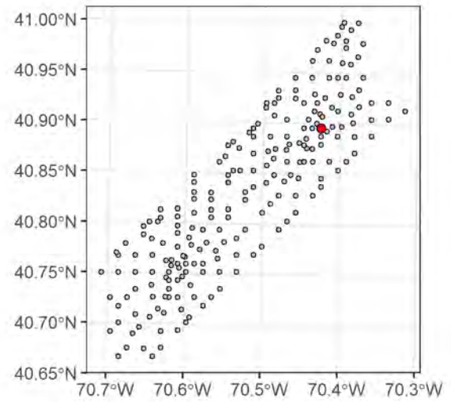
Figure F-771: IAC-194-A-PV

Sediment Profile Image



Figure F-772: IAC-194-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 06:26
Station (Replicate):	IAC-194 (2 of 2)
Depth (m):	-46.1
Prism Penetration (cm):	17
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, 1 gastropod egg case

Plan-View Image

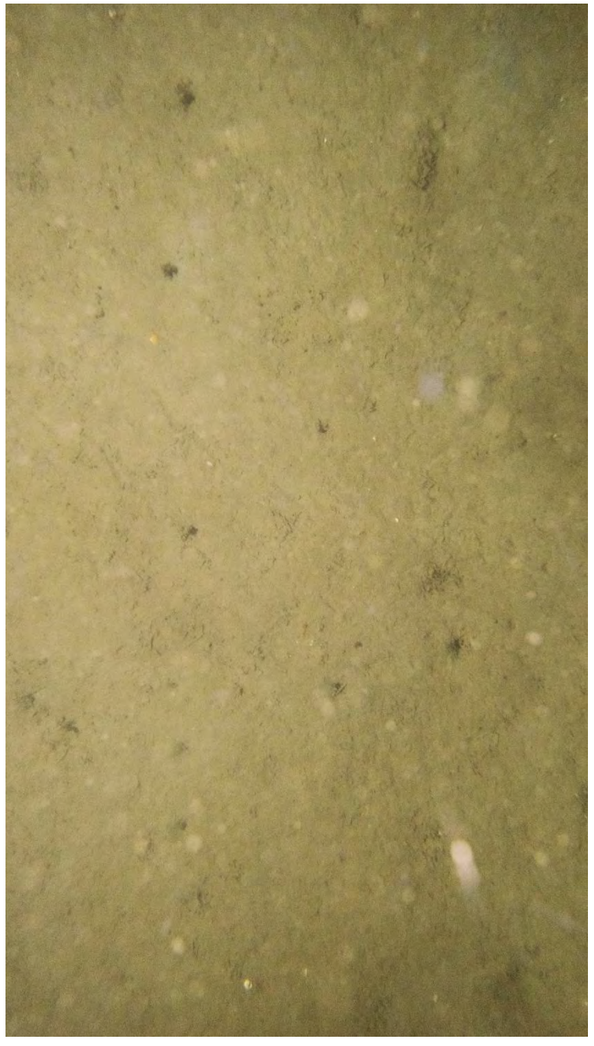


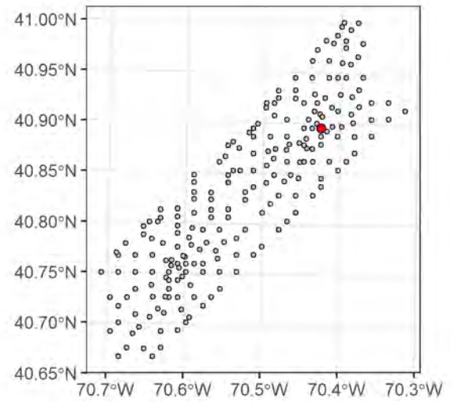
Figure F-773: IAC-194-C-PV

Sediment Profile Image



Figure F-774: IAC-194-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 06:30
Station (Replicate):	IAC-194 (1 of 2)
Depth (m):	-46.1
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



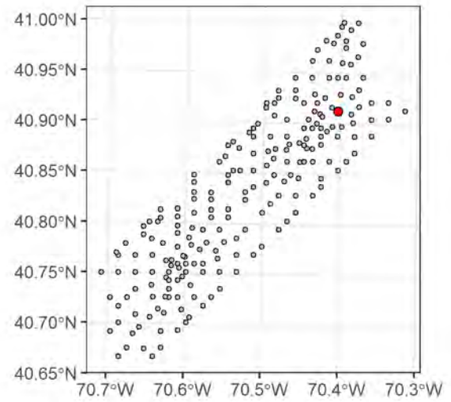
Figure F-775: IAC-195-B-PV

Sediment Profile Image



Figure F-776: IAC-195-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 15:40
Station (Replicate):	IAC-195 (2 of 2)
Depth (m):	-43.5
Prism Penetration (cm):	14.6
aRPD Mean Depth (cm):	2.5
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



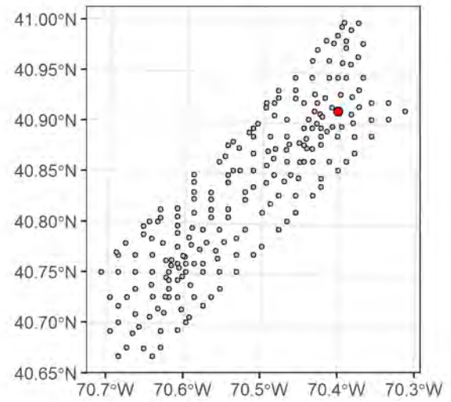
Figure F-777: IAC-195-A-PV

Sediment Profile Image



Figure F-778: IAC-195-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 15:44
Station (Replicate):	IAC-195 (1 of 2)
Depth (m):	-43.4
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



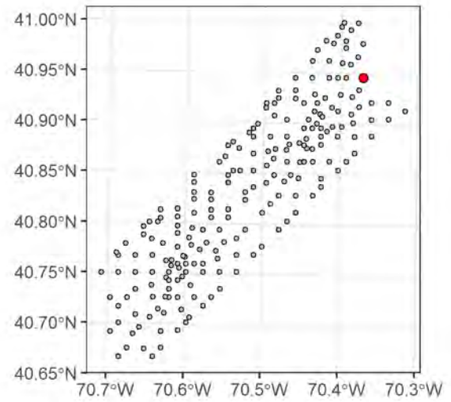
Figure F-779: IAC-196-A-PV

Sediment Profile Image



Figure F-780: IAC-196-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 22:30
Station (Replicate):	IAC-196 (2 of 2)
Depth (m):	-40.8
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	4.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



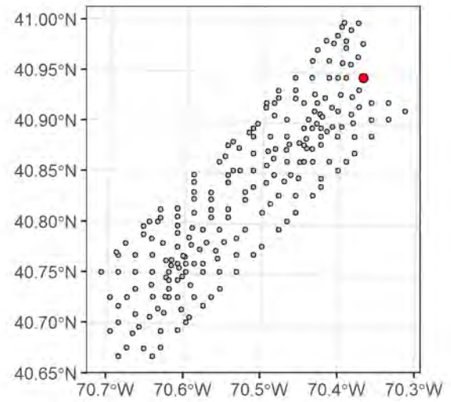
Figure F-781: IAC-196-B-PV

Sediment Profile Image



Figure F-782: IAC-196-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 22:40
Station (Replicate):	IAC-196 (1 of 2)
Depth (m):	-41
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	5.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 Triglidae
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



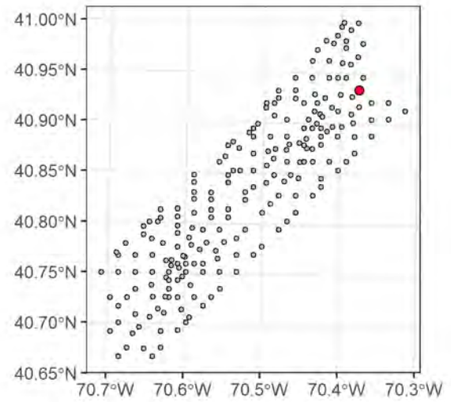
Figure F-783: IAC-197-B-PV

Sediment Profile Image



Figure F-784: IAC-197-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 23:23
Station (Replicate):	IAC-197 (2 of 2)
Depth (m):	-41.3
Prism Penetration (cm):	14.1
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



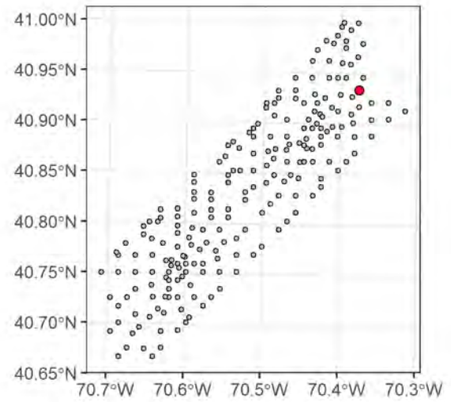
Figure F-785: IAC-197-A-PV

Sediment Profile Image



Figure F-786: IAC-197-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 23:27
Station (Replicate):	IAC-197 (1 of 2)
Depth (m):	-41.3
Prism Penetration (cm):	15.3
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



Figure F-787: IAC-198-A-PV

Sediment Profile Image

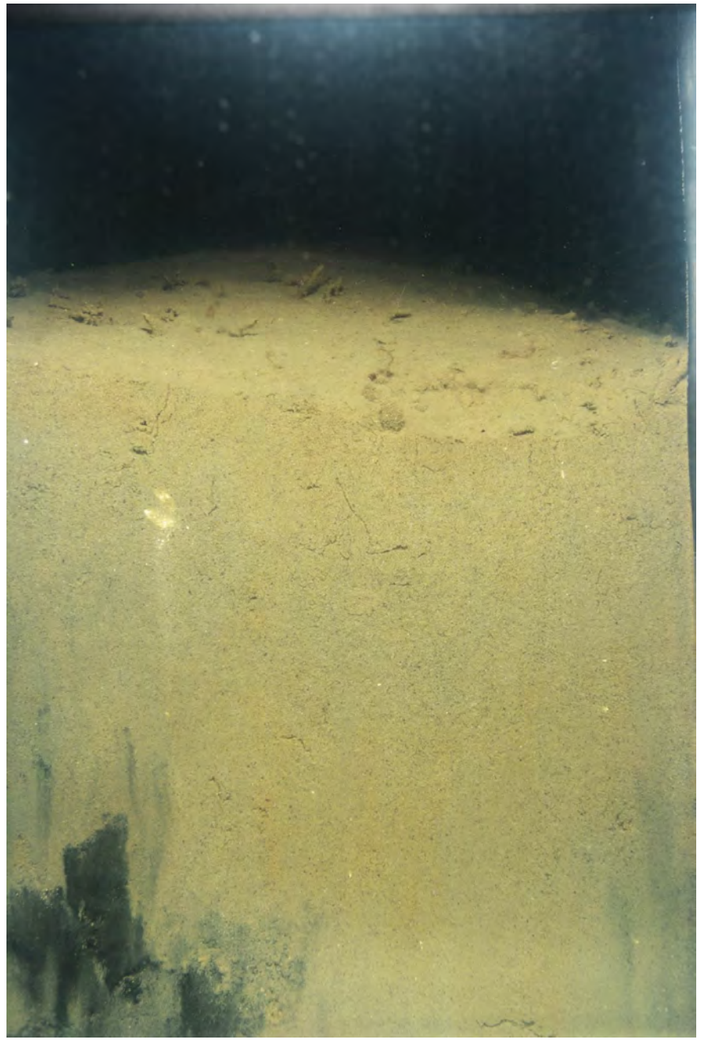
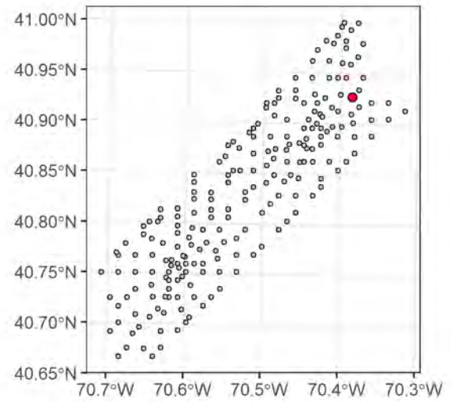


Figure F-788: IAC-198-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 00:22
Station (Replicate):	IAC-198 (2 of 2)
Depth (m):	-41.7
Prism Penetration (cm):	13.3
aRPD Mean Depth (cm):	7.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	7 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, small burrows

Plan-View Image



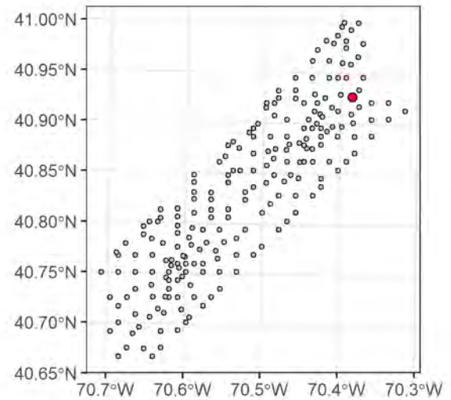
Figure F-789: IAC-198-B-PV

Sediment Profile Image



Figure F-790: IAC-198-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 00:32
Station (Replicate):	IAC-198 (1 of 2)
Depth (m):	-41.8
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	4.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	8 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, small burrows

Plan-View Image

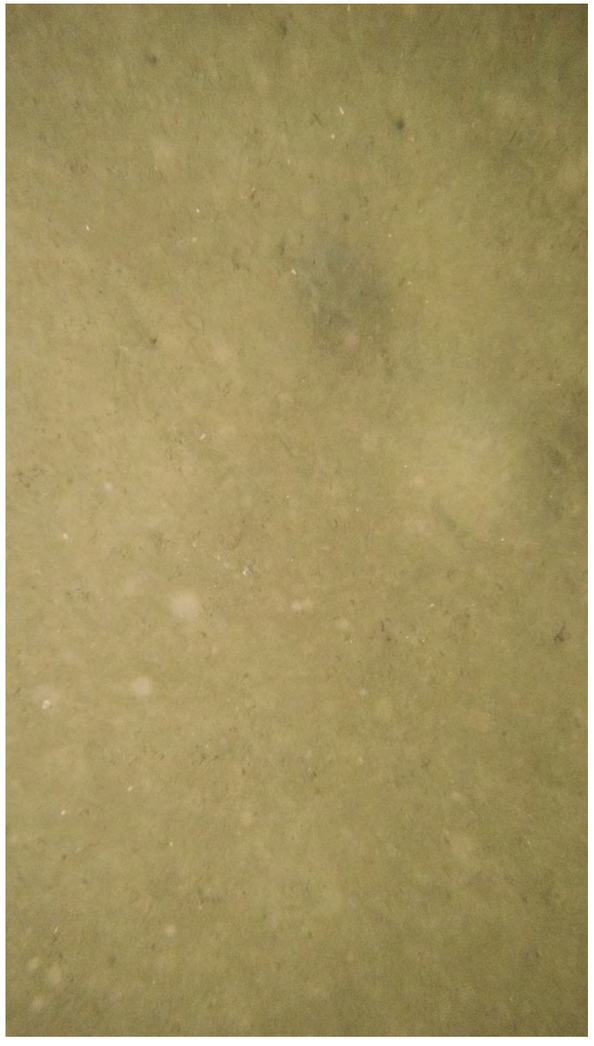


Figure F-791: IAC-199-A-PV

Sediment Profile Image

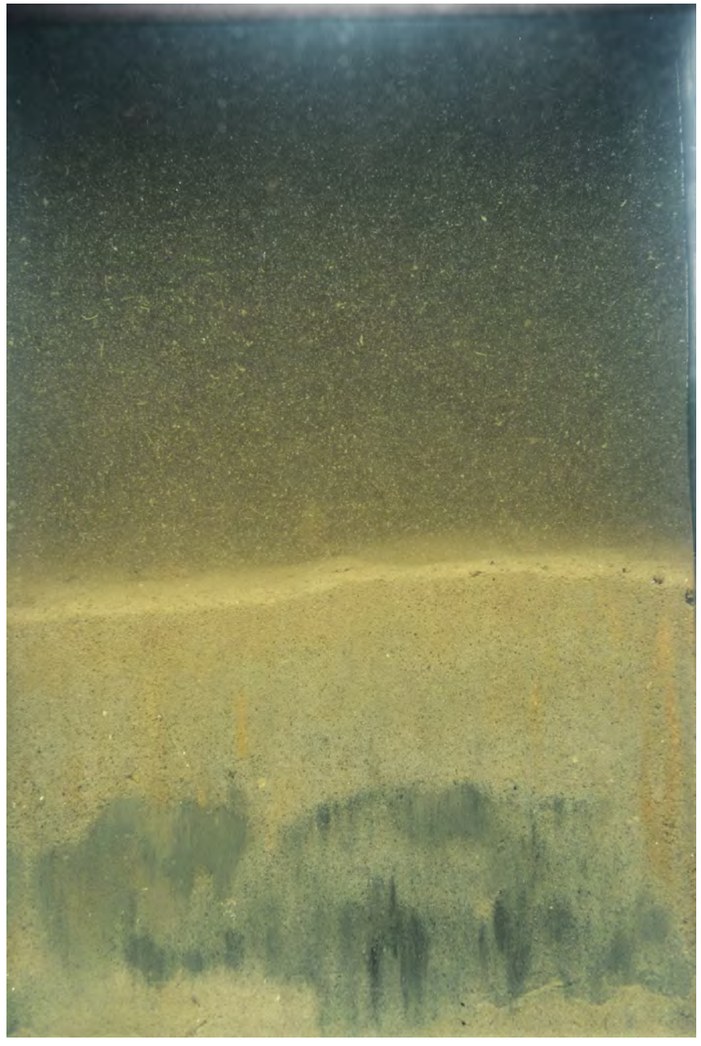
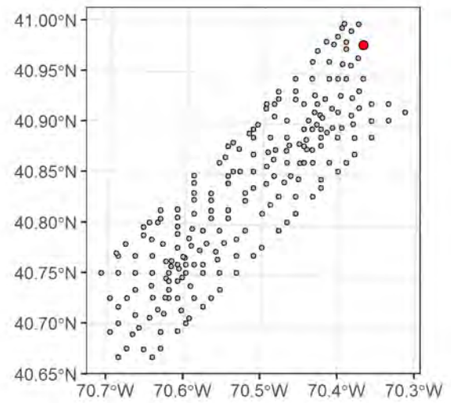


Figure F-792: IAC-199-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 12:58
Station (Replicate):	IAC-199 (2 of 2)
Depth (m):	-38.8
Prism Penetration (cm):	9.3
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	large and small burrows, focus issues

Plan-View Image



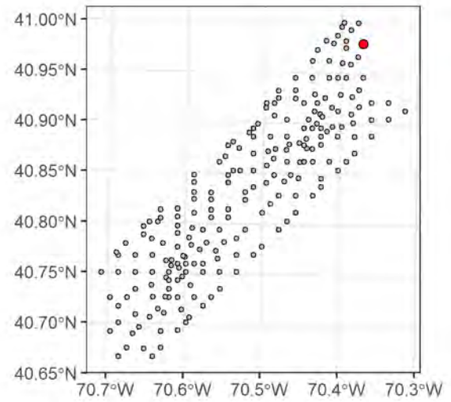
Figure F-793: IAC-199-B-PV

Sediment Profile Image



Figure F-794: IAC-199-B-SPI

Location



Attributes

Date Time (EST):	08/02/21 13:03
Station (Replicate):	IAC-199 (1 of 2)
Depth (m):	-38.9
Prism Penetration (cm):	8.8
aRPD Mean Depth (cm):	2.7
Grain Size Major Mode (ϕ):	3 to 2
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows

Plan-View Image

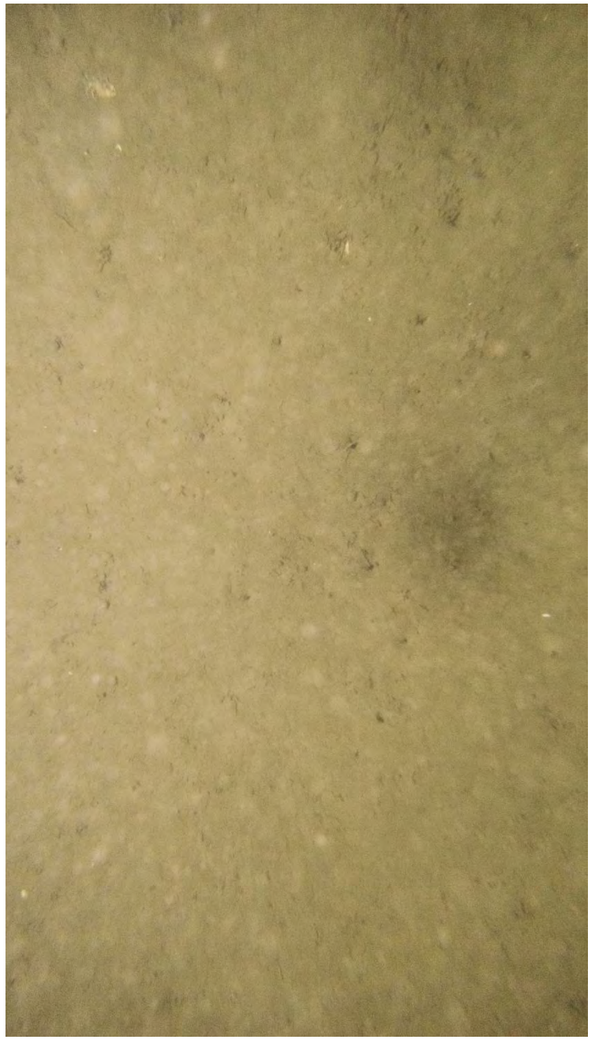


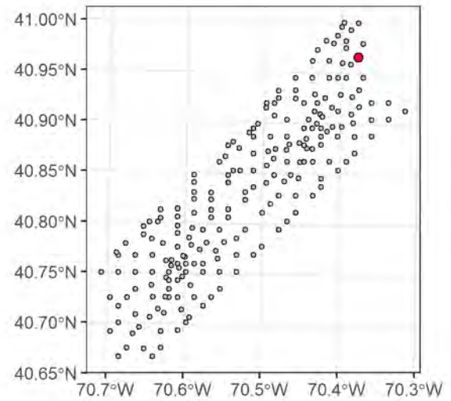
Figure F-795: IAC-200-A-PV

Sediment Profile Image



Figure F-796: IAC-200-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 13:49
Station (Replicate):	IAC-200 (2 of 2)
Depth (m):	-41
Prism Penetration (cm):	15.5
aRPD Mean Depth (cm):	1.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	large and small burrows, focus issues

Plan-View Image

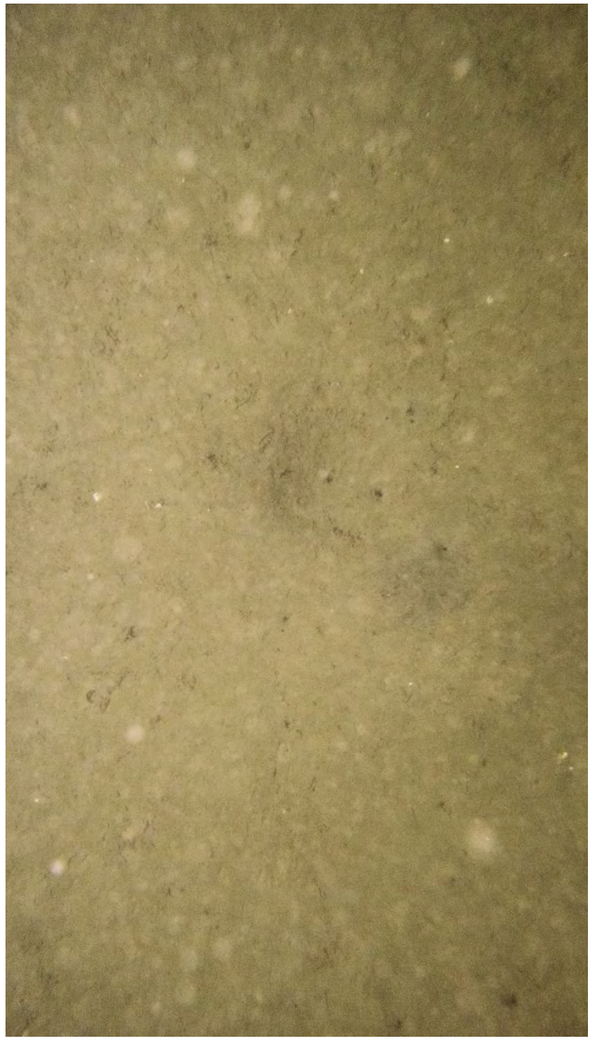


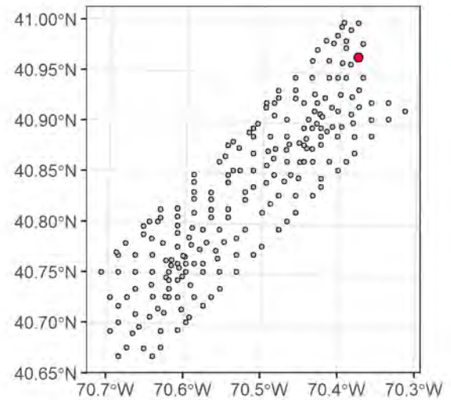
Figure F-797: IAC-200-B-PV

Sediment Profile Image



Figure F-798: IAC-200-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 13:56
Station (Replicate):	IAC-200 (1 of 2)
Depth (m):	-40.8
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, large and small burrows, 1 naticid egg case, view obscured by suspended particles

Plan-View Image



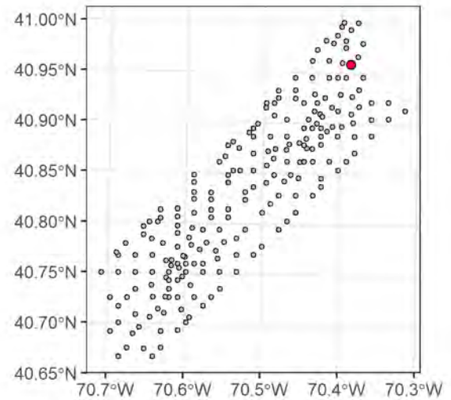
Figure F-799: IAC-201-A-PV

Sediment Profile Image



Figure F-800: IAC-201-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 14:31
Station (Replicate):	IAC-201 (2 of 2)
Depth (m):	-41.8
Prism Penetration (cm):	12.3
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, 1 naticid egg case, view obscured by suspended particles

Plan-View Image



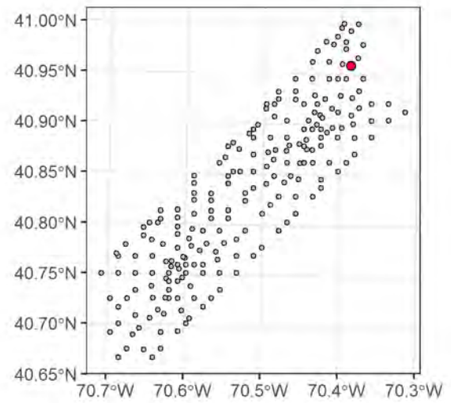
Figure F-801: IAC-201-B-PV

Sediment Profile Image



Figure F-802: IAC-201-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 14:39
Station (Replicate):	IAC-201 (1 of 2)
Depth (m):	-41.7
Prism Penetration (cm):	13.8
aRPD Mean Depth (cm):	1.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, view obscured by suspended particles

Plan-View Image



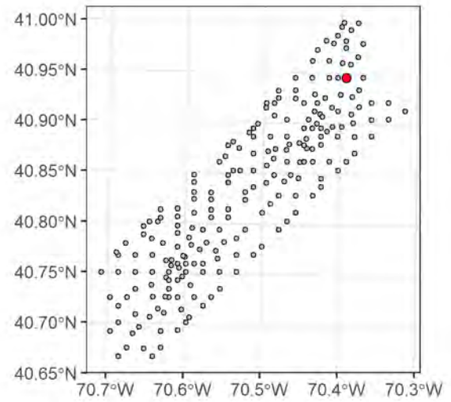
Figure F-803: IAC-202-B-PV

Sediment Profile Image



Figure F-804: IAC-202-A-SPI

Location



Attributes

Date Time (EST):	08/02/21 21:36
Station (Replicate):	IAC-202 (2 of 2)
Depth (m):	-40
Prism Penetration (cm):	8.2
aRPD Mean Depth (cm):	2.3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I
OSI:	5
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	2 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, view obscured by suspended particles

Plan-View Image



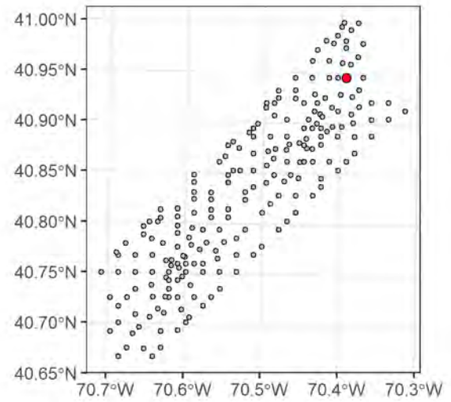
Figure F-805: IAC-202-C-PV

Sediment Profile Image



Figure F-806: IAC-202-C-SPI

Location



Attributes

Date Time (EST):	08/02/21 21:46
Station (Replicate):	IAC-202 (1 of 2)
Depth (m):	-40
Prism Penetration (cm):	7.4
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows, 1 naticid egg case, view obscured by suspended particles

Plan-View Image



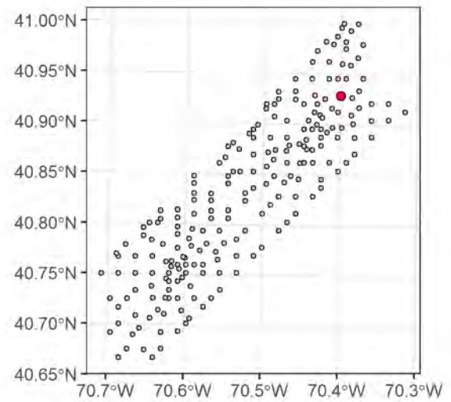
Figure F-807: IAC-203-A-PV

Sediment Profile Image



Figure F-808: IAC-203-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 01:04
Station (Replicate):	IAC-203 (2 of 2)
Depth (m):	-41.6
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	3.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows

Plan-View Image



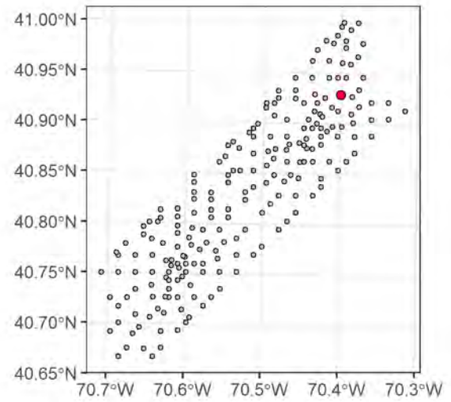
Figure F-809: IAC-203-B-PV

Sediment Profile Image



Figure F-810: IAC-203-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 01:17
Station (Replicate):	IAC-203 (1 of 2)
Depth (m):	-41.5
Prism Penetration (cm):	12
aRPD Mean Depth (cm):	3
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, large and small burrows

Plan-View Image



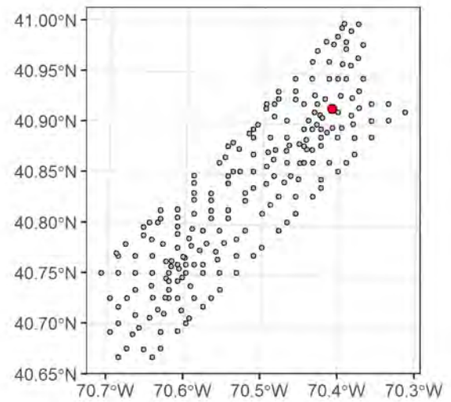
Figure F-811: IAC-204-A-PV

Sediment Profile Image



Figure F-812: IAC-204-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 14:57
Station (Replicate):	IAC-204 (2 of 2)
Depth (m):	-43.7
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	3.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, large and small burrows

Plan-View Image



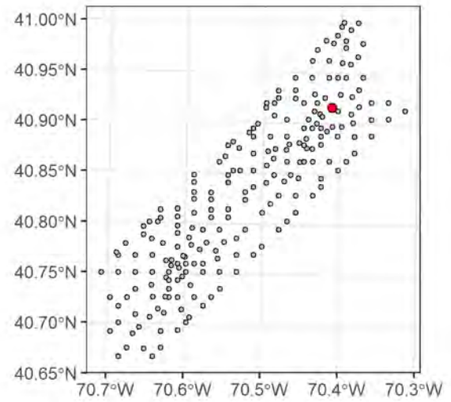
Figure F-813: IAC-204-C-PV

Sediment Profile Image



Figure F-814: IAC-204-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 15:02
Station (Replicate):	IAC-204 (1 of 2)
Depth (m):	-43.7
Prism Penetration (cm):	14.8
aRPD Mean Depth (cm):	2.1
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, large and small burrows, 1 dead crab

Plan-View Image

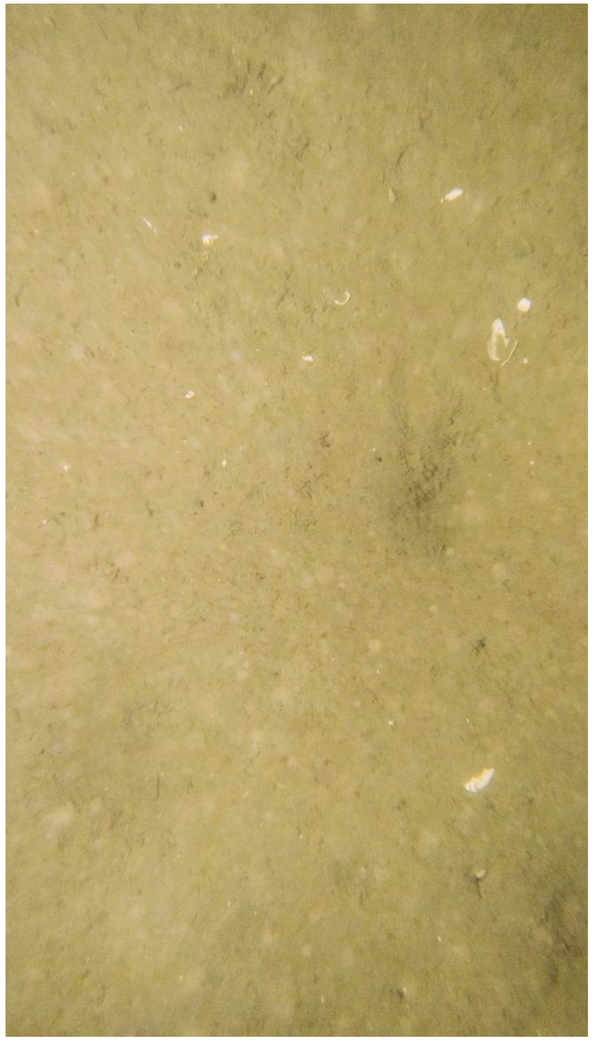


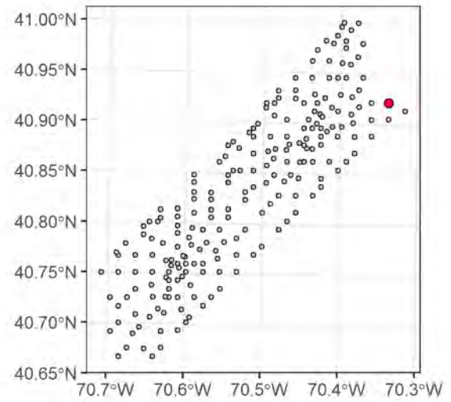
Figure F-815: IAC-205-C-PV

Sediment Profile Image



Figure F-816: IAC-205-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 19:52
Station (Replicate):	IAC-205 (2 of 2)
Depth (m):	-40.2
Prism Penetration (cm):	13.1
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, small burrows, view obscured by suspended particles

Plan-View Image

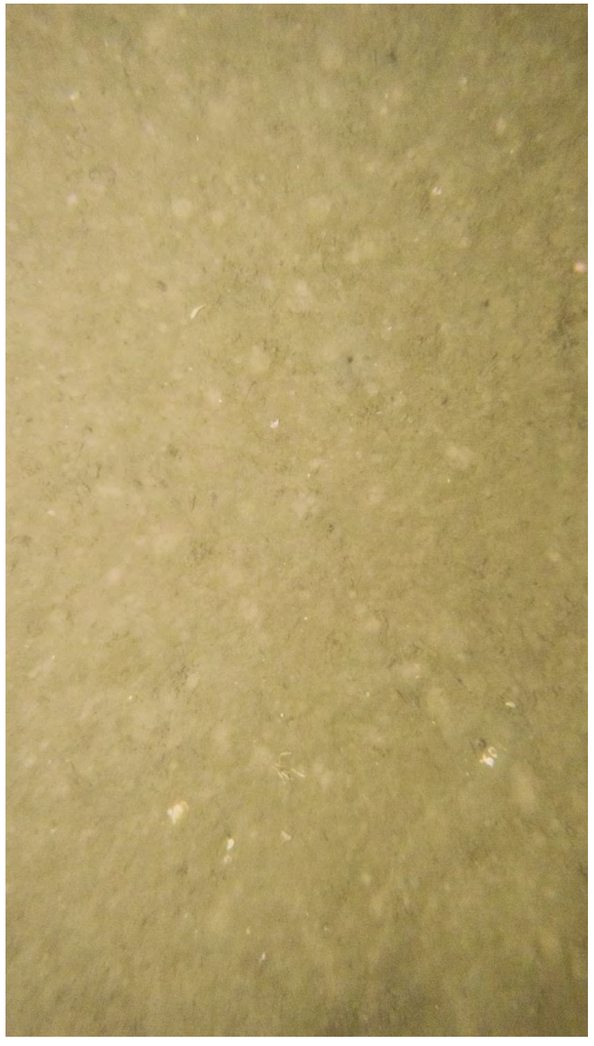


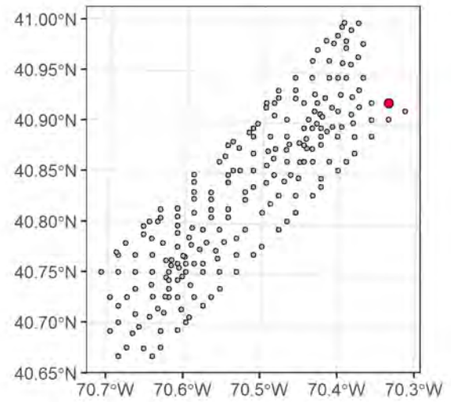
Figure F-817: IAC-205-B-PV

Sediment Profile Image



Figure F-818: IAC-205-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 19:57
Station (Replicate):	IAC-205 (1 of 2)
Depth (m):	-40.2
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tubes, large and small burrows, view obscured by suspended particles

Plan-View Image

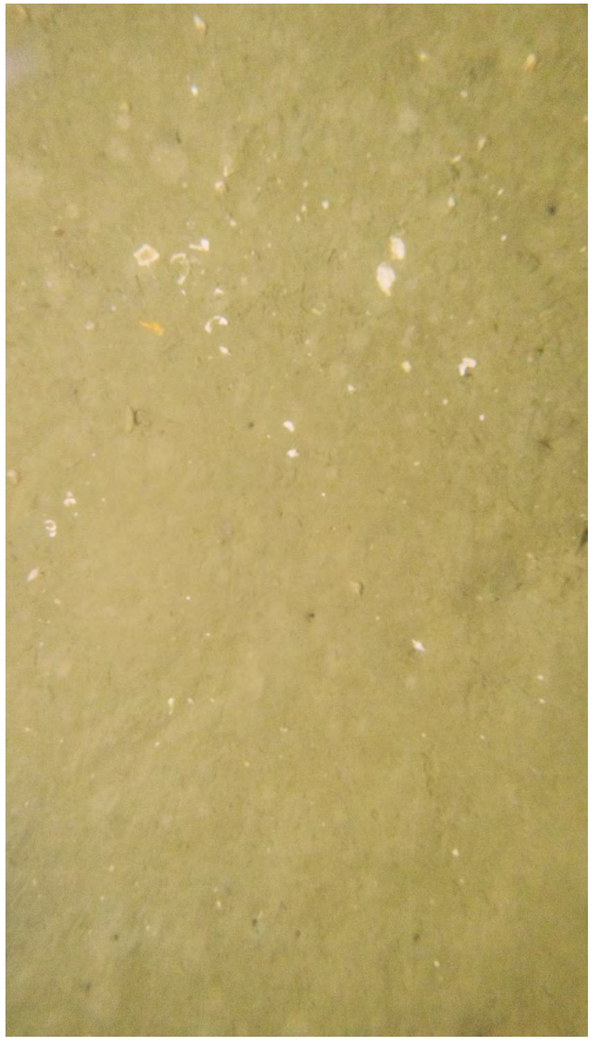


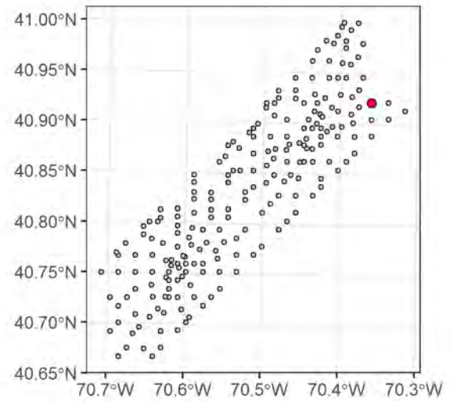
Figure F-819: IAC-206-A-PV

Sediment Profile Image



Figure F-820: IAC-206-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 19:05
Station (Replicate):	IAC-206 (2 of 2)
Depth (m):	-41
Prism Penetration (cm):	13.5
aRPD Mean Depth (cm):	5.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	yellow sponge, 8 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, small burrows, crab tracks, shell hash, small yellow sponge

Plan-View Image



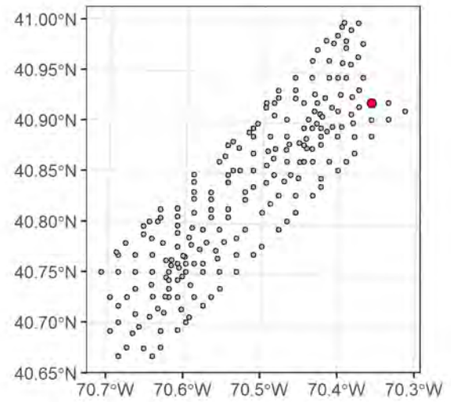
Figure F-821: IAC-206-B-PV

Sediment Profile Image



Figure F-822: IAC-206-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 19:14
Station (Replicate):	IAC-206 (1 of 2)
Depth (m):	-40.8
Prism Penetration (cm):	9.6
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, small burrows, view obscured by suspended particles

Plan-View Image



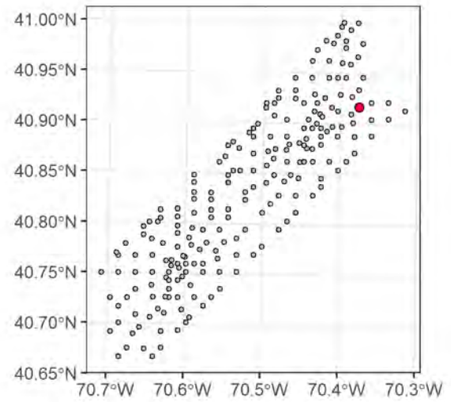
Figure F-823: IAC-207-A-PV

Sediment Profile Image



Figure F-824: IAC-207-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 17:29
Station (Replicate):	IAC-207 (2 of 2)
Depth (m):	-42
Prism Penetration (cm):	11.4
aRPD Mean Depth (cm):	3.1
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, small burrows

Plan-View Image



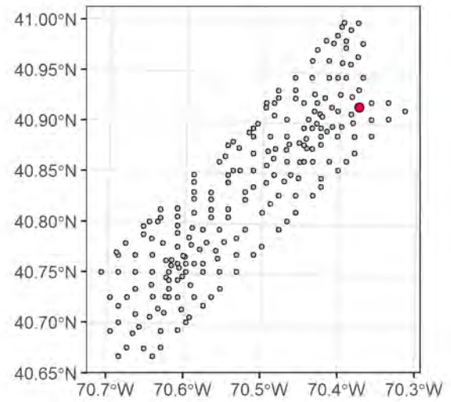
Figure F-825: IAC-207-C-PV

Sediment Profile Image



Figure F-826: IAC-207-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 17:33
Station (Replicate):	IAC-207 (1 of 2)
Depth (m):	-41.9
Prism Penetration (cm):	12.4
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	5 paguroidea 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, small burrows

Plan-View Image



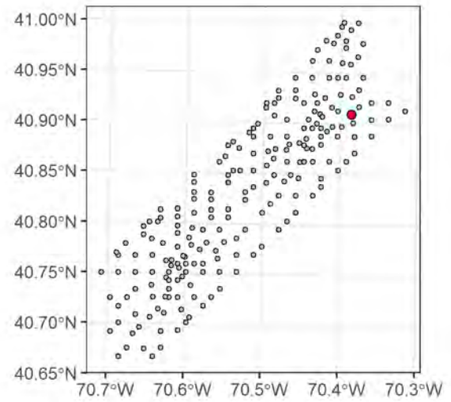
Figure F-827: IAC-208-A-PV

Sediment Profile Image



Figure F-828: IAC-208-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 16:53
Station (Replicate):	IAC-208 (2 of 2)
Depth (m):	-43
Prism Penetration (cm):	16.1
aRPD Mean Depth (cm):	6.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



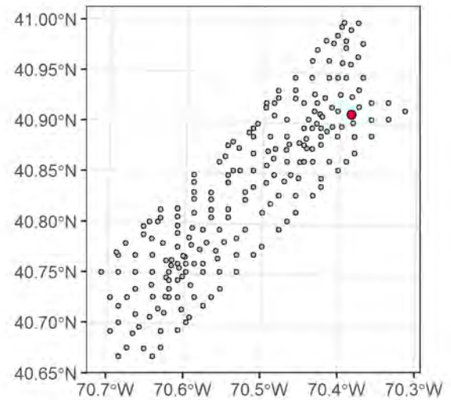
Figure F-829: IAC-208-C-PV

Sediment Profile Image



Figure F-830: IAC-208-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 17:03
Station (Replicate):	IAC-208 (1 of 2)
Depth (m):	-43.2
Prism Penetration (cm):	12.1
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	8 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows, one glove

Plan-View Image



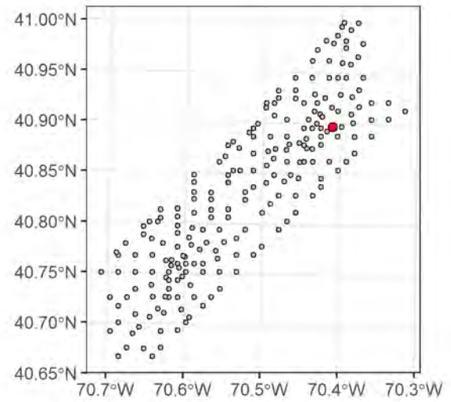
Figure F-831: IAC-209-B-PV

Sediment Profile Image



Figure F-832: IAC-209-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 04:00
Station (Replicate):	IAC-209 (2 of 2)
Depth (m):	-45.4
Prism Penetration (cm):	14.9
aRPD Mean Depth (cm):	2.8
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 medium crab
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image



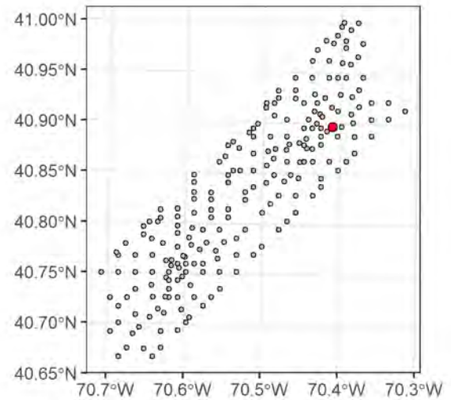
Figure F-833: IAC-209-A-PV

Sediment Profile Image



Figure F-834: IAC-209-C-SPI

Location



Attributes

Date Time (EST):	08/04/21 04:05
Station (Replicate):	IAC-209 (1 of 2)
Depth (m):	-45.5
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	4.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	135 medium bivalves (estimated)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tubes, large and small burrows

Plan-View Image

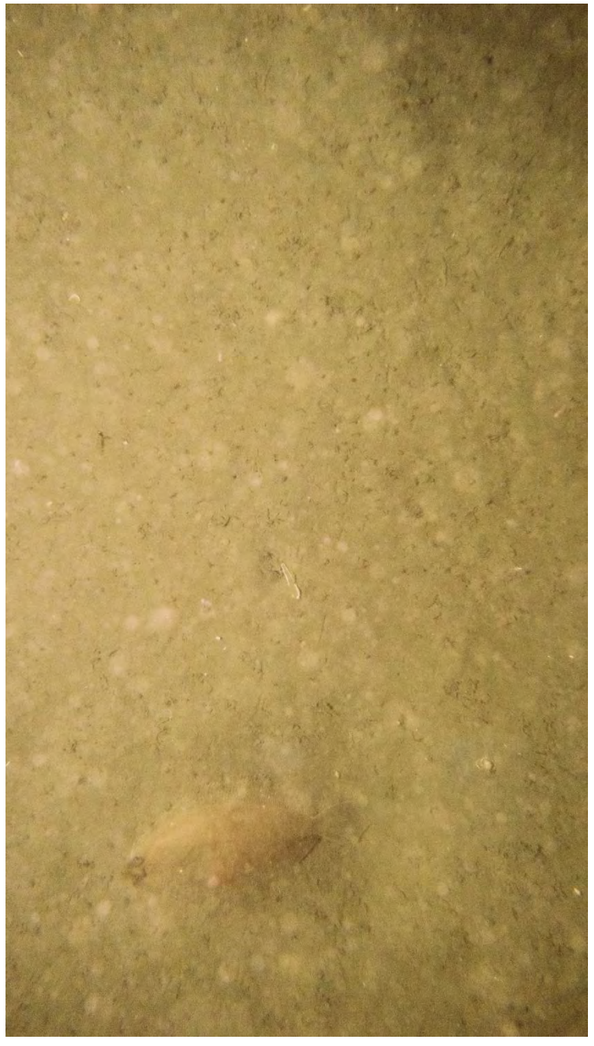


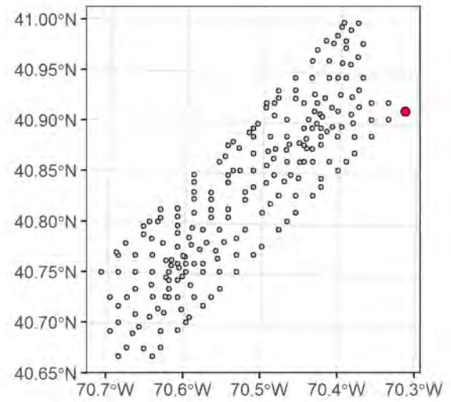
Figure F-835: IAC-210-A-PV

Sediment Profile Image



Figure F-836: IAC-210-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 20:44
Station (Replicate):	IAC-210 (2 of 2)
Depth (m):	-39.8
Prism Penetration (cm):	12.8
aRPD Mean Depth (cm):	4.5
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea 1 Pleuronectidae (Paralichthys dentatus?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, small burrows, view obscured by suspended particles

Plan-View Image



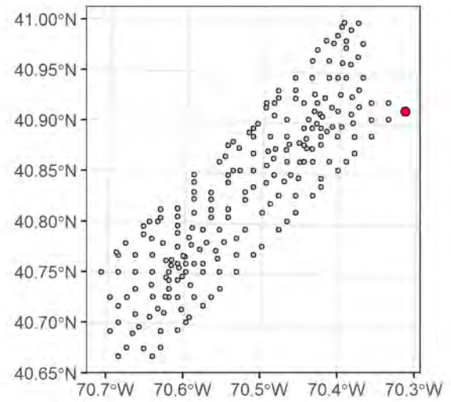
Figure F-837: IAC-210-B-PV

Sediment Profile Image



Figure F-838: IAC-210-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 20:53
Station (Replicate):	IAC-210 (1 of 2)
Depth (m):	-39.7
Prism Penetration (cm):	10.1
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, small burrows, view obscured by suspended particles

Plan-View Image



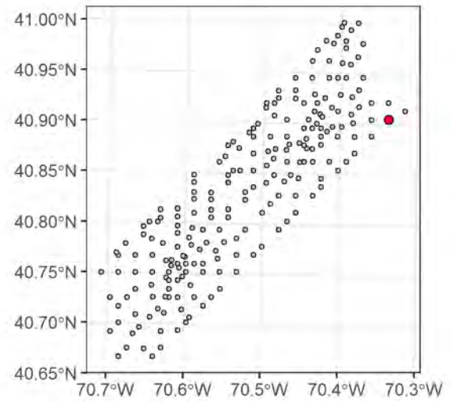
Figure F-839: IAC-211-A-PV

Sediment Profile Image



Figure F-840: IAC-211-A-SPI

Location



Attributes

Date Time (EST):	08/03/21 21:36
Station (Replicate):	IAC-211 (2 of 2)
Depth (m):	-41.1
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	3.4
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, small burrows

Plan-View Image



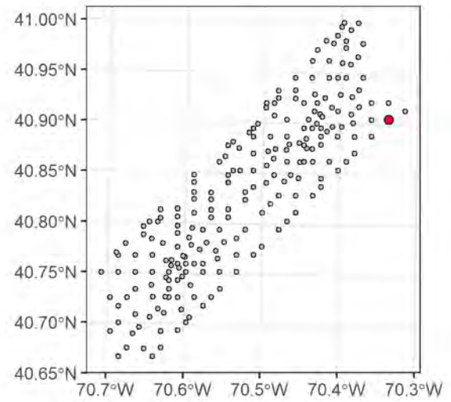
Figure F-841: IAC-211-C-PV

Sediment Profile Image



Figure F-842: IAC-211-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 21:44
Station (Replicate):	IAC-211 (1 of 2)
Depth (m):	-41.1
Prism Penetration (cm):	15.9
aRPD Mean Depth (cm):	5.9
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod and polychaete tubes, large and small burrows

Plan-View Image

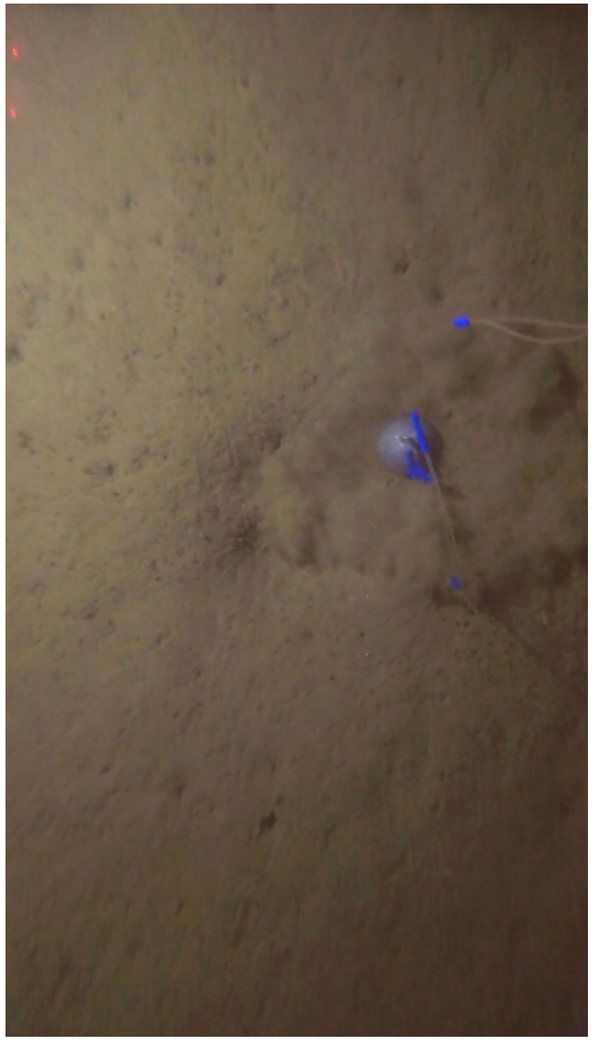


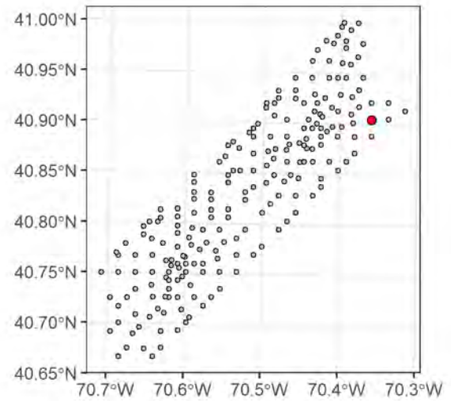
Figure F-843: IAC-212-F-PV

Sediment Profile Image



Figure F-844: IAC-212-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 22:28
Station (Replicate):	IAC-212 (2 of 2)
Depth (m):	-41.8
Prism Penetration (cm):	14.3
aRPD Mean Depth (cm):	5.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred fauna
Co-Occurring Biotic Subclass:	None
Comments:	small burrows. Light and focus issues prevent better analysis

Plan-View Image

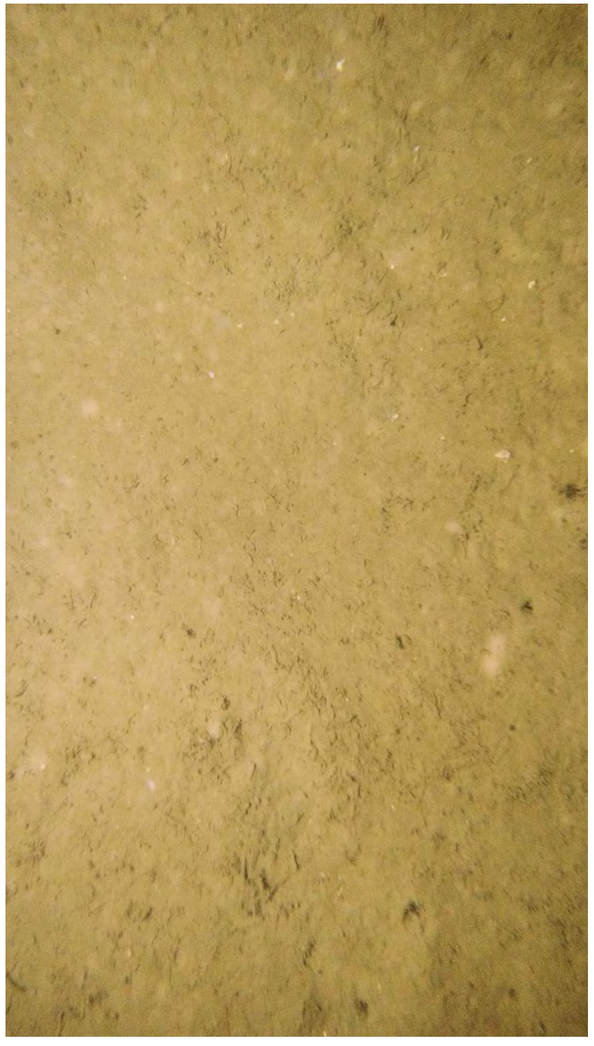


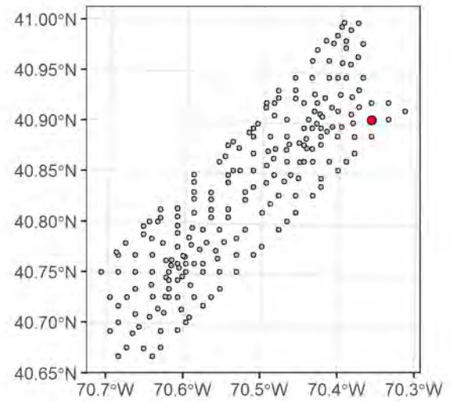
Figure F-845: IAC-212-E-PV

Sediment Profile Image



Figure F-846: IAC-212-E-SPI

Location



Attributes

Date Time (EST):	08/03/21 23:15
Station (Replicate):	IAC-212 (1 of 2)
Depth (m):	-41.9
Prism Penetration (cm):	15
aRPD Mean Depth (cm):	6.2
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod and polychaete tubes, large and small burrows

Plan-View Image



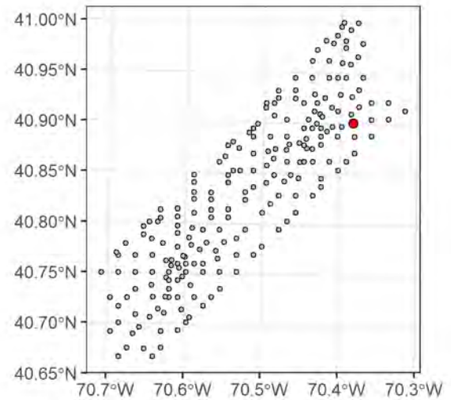
Figure F-847: IAC-213-B-PV

Sediment Profile Image



Figure F-848: IAC-213-B-SPI

Location



Attributes

Date Time (EST):	08/03/21 16:23
Station (Replicate):	IAC-213 (2 of 2)
Depth (m):	-43.9
Prism Penetration (cm):	13.2
aRPD Mean Depth (cm):	3.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	3 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod and polychaete tubes, large and small burrows

Plan-View Image



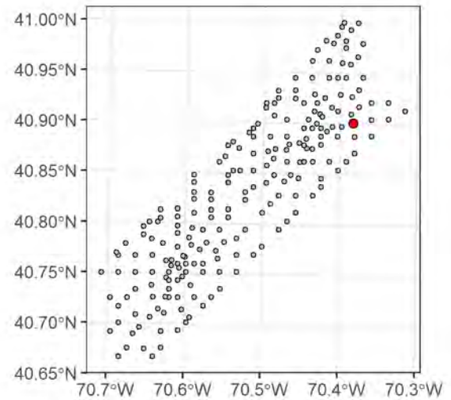
Figure F-849: IAC-213-C-PV

Sediment Profile Image



Figure F-850: IAC-213-C-SPI

Location



Attributes

Date Time (EST):	08/03/21 16:26
Station (Replicate):	IAC-213 (1 of 2)
Depth (m):	-43.9
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	100 medium bivalves (estimated)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



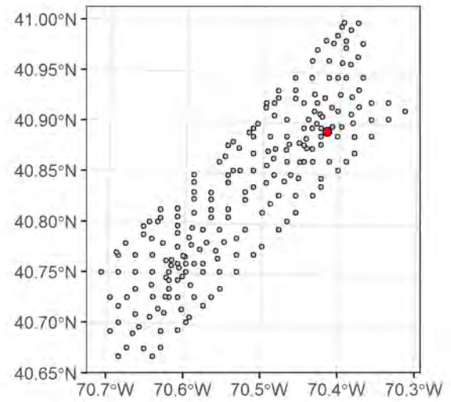
Figure F-851: IAC-214-C-PV

Sediment Profile Image



Figure F-852: IAC-214-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 04:37
Station (Replicate):	IAC-214 (2 of 2)
Depth (m):	-46
Prism Penetration (cm):	14
aRPD Mean Depth (cm):	6.7
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	I on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 paguroidea
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



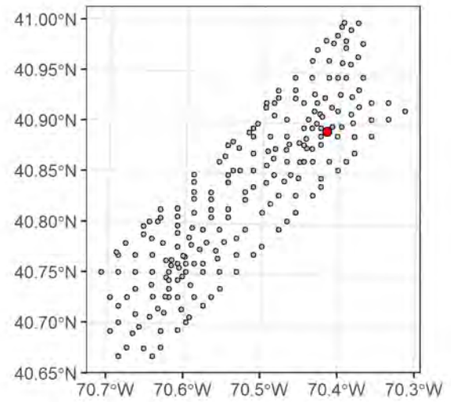
Figure F-853: IAC-214-B-PV

Sediment Profile Image



Figure F-854: IAC-214-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 04:42
Station (Replicate):	IAC-214 (1 of 2)
Depth (m):	-45.9
Prism Penetration (cm):	11.8
aRPD Mean Depth (cm):	3.7
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	few amphipod tubes, large and small burrows, 5 gastropod egg cases

Plan-View Image



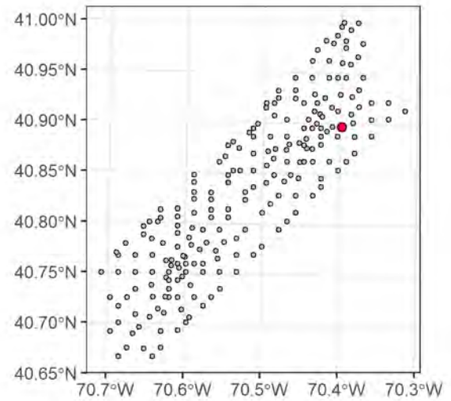
Figure F-855: IAC-215-C-PV

Sediment Profile Image



Figure F-856: IAC-215-A-SPI

Location



Attributes

Date Time (EST):	08/04/21 03:09
Station (Replicate):	IAC-215 (2 of 2)
Depth (m):	-45.1
Prism Penetration (cm):	16
aRPD Mean Depth (cm):	2.6
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	40 medium bivalves (estimated)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



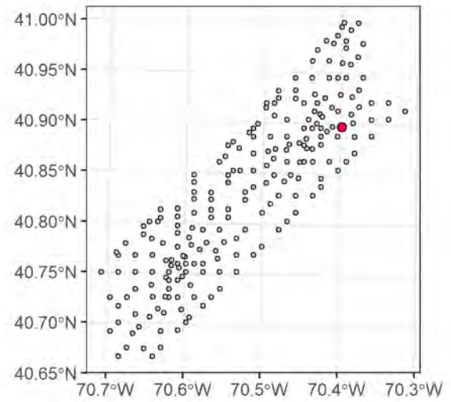
Figure F-857: IAC-215-B-PV

Sediment Profile Image



Figure F-858: IAC-215-B-SPI

Location



Attributes

Date Time (EST):	08/04/21 03:15
Station (Replicate):	IAC-215 (1 of 2)
Depth (m):	-45.2
Prism Penetration (cm):	16.3
aRPD Mean Depth (cm):	3.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	400 medium bivalves (estimated)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	few amphipod tubes, large and small burrows

Plan-View Image



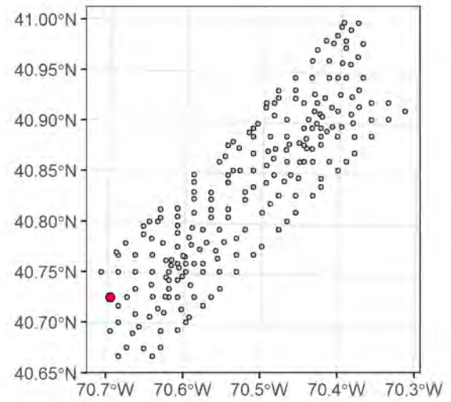
Figure F-859: IAC-216-A-PV

Sediment Profile Image



Figure F-860: IAC-216-A-SPI

Location



Attributes

Date Time (EST):	08/11/21 12:44
Station (Replicate):	IAC-216 (2 of 2)
Depth (m):	-58.8
Prism Penetration (cm):	13.4
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	hydroids 10 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



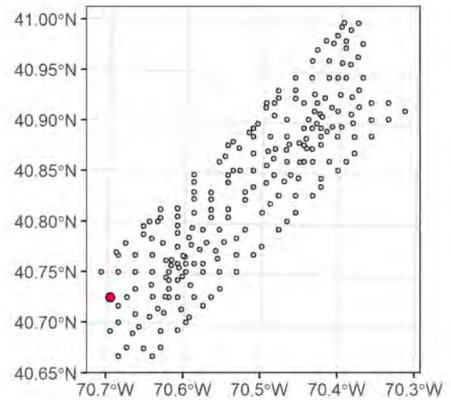
Figure F-861: IAC-216-B-PV

Sediment Profile Image



Figure F-862: IAC-216-C-SPI

Location



Attributes

Date Time (EST):	08/11/21 12:55
Station (Replicate):	IAC-216 (1 of 2)
Depth (m):	-58.9
Prism Penetration (cm):	16.2
aRPD Mean Depth (cm):	3.3
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	10
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	10 burrowing sea stars (Astropecten?)
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image

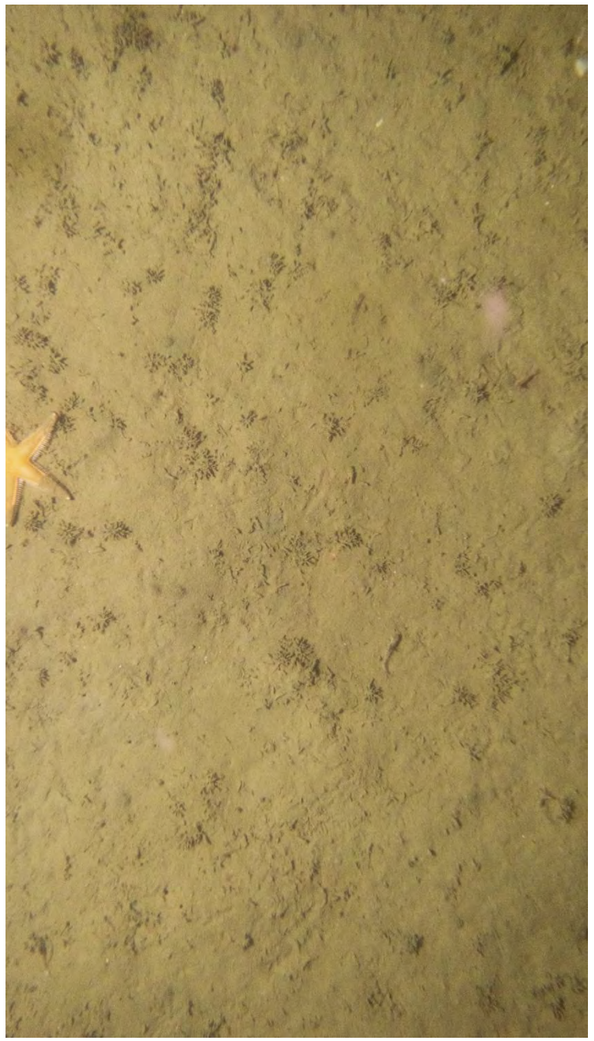


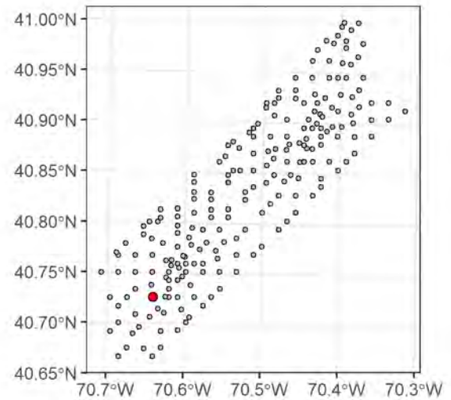
Figure F-863: IAC-217-B-PV

Sediment Profile Image



Figure F-864: IAC-217-A-SPI

Location



Attributes

Date Time (EST):	08/13/21 04:44
Station (Replicate):	IAC-217 (2 of 2)
Depth (m):	-56.8
Prism Penetration (cm):	16.4
aRPD Mean Depth (cm):	2.2
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II
OSI:	8
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



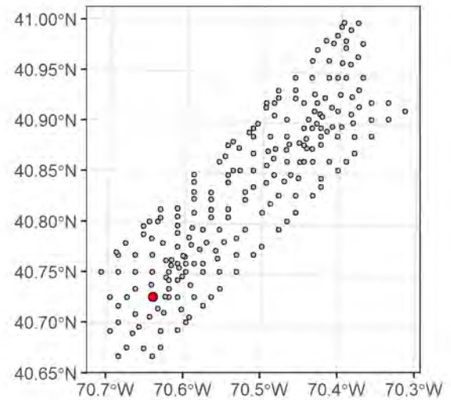
Figure F-865: IAC-217-C-PV

Sediment Profile Image



Figure F-866: IAC-217-C-SPI

Location



Attributes

Date Time (EST):	08/13/21 05:03
Station (Replicate):	IAC-217 (1 of 2)
Depth (m):	-56.8
Prism Penetration (cm):	16.5
aRPD Mean Depth (cm):	2.9
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	I on III
OSI:	9
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Sandy Mud
Type of Common Taxa:	None
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

Plan-View Image



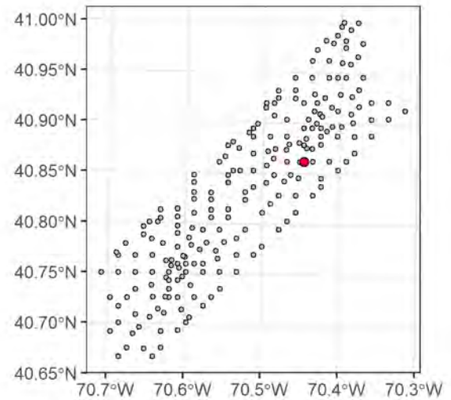
Figure F-867: IAC-218-C-PV

Sediment Profile Image



Figure F-868: IAC-218-A-SPI

Location



Attributes

Date Time (EST):	08/07/21 21:17
Station (Replicate):	IAC-218 (2 of 2)
Depth (m):	-50
Prism Penetration (cm):	15.1
aRPD Mean Depth (cm):	4
Grain Size Major Mode (ϕ):	>4
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	None
Biotic Subclass:	Inferred Fauna
Co-Occurring Biotic Subclass:	None
Comments:	amphipod tube clusters, small burrows, 1 gastropod egg case

Plan-View Image

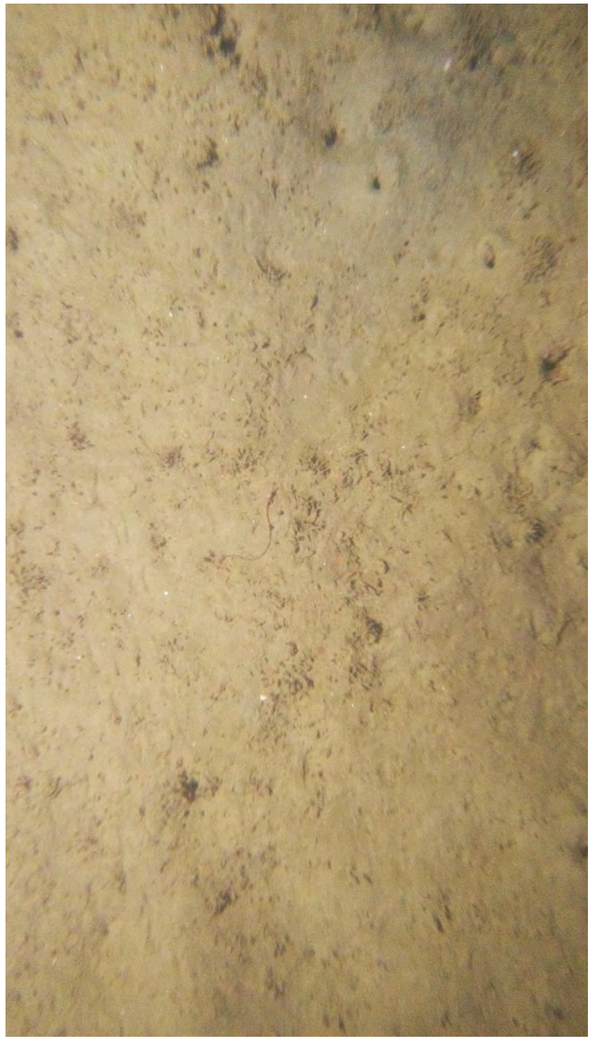


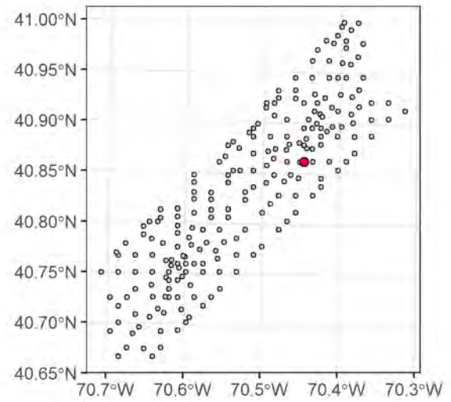
Figure F-869: IAC-218-B-PV

Sediment Profile Image



Figure F-870: IAC-218-B-SPI

Location



Attributes

Date Time (EST):	08/07/21 21:21
Station (Replicate):	IAC-218 (1 of 2)
Depth (m):	-50.2
Prism Penetration (cm):	14.2
aRPD Mean Depth (cm):	6.8
Grain Size Major Mode (ϕ):	4 to 3
Infaunal Successional Stage:	II on III
OSI:	11
CMECS Subclass:	Fine Unconsolidated Substrate
CMECS Group:	Muddy Sand
Type of Common Taxa:	1 fish
Biotic Subclass:	Soft Sediment Fauna
Co-Occurring Biotic Subclass:	Inferred Fauna
Comments:	amphipod tube clusters, small burrows

ATTACHMENT E | FIELD SAMPLING LOG

Attachment E Field Sampling Log

Drop Camera									Grab									Grab Mounted Camera
Station	Date	Start X	Start Y	Time Start	End X	End Y	Time Stop	Notes / Observations	X	Y	Bottom Touchdown Time	Grab Penetration > or = 7cm?	aRPD depth (mm)	Color (Munsell chart)	Texture	Odor	Surficial Features	Notes / Observations
WTG-001	2021-07-23	382,698.79	4,540,242.95	2:13	382,687.69	4,540,182.82	2:20	Flat sand bottom, many sand dollars, skates, Jonah crabs (*Cancer borealis*), sponge, hermit crab, Red hake (*Urophycis chuss*), shell fragments	382,690.57	4,540,183.39	2:37:35	> 7 cm	36	light brownish gray 10 YR 6/3	muddy sand	None	Flat sand, sand dollars, gastropod	Sand bottom with many sand dollars and shell fragments
WTG-002	2021-07-17	384,606.86	4,540,257.00	20:22	384,532.76	4,540,173.28	20:35	Compact substrate, soft bottom substrate, productive assemblages, amphipods and copepods, sand dollars, crabs, sponges, various fish taxa	384,547.83	4,540,179.78	22:39:21	> 7 cm	60	10 YR 8/2	sand	None	Sand dollars	Soft bottom substrate with many sand dollars
WTG-003	2021-07-18	380,874.67	4,538,388.66	0:56	380,831.19	4,538,317.35	1:02	Soft bottom substrate, bioturbation as burrows, winter skate (*Leucoraja ocellata*)	380,844.52	4,538,329.68	2:42:54	> 7 cm	55	dark gray 10 YR 4/1	muddy sand, some clay	None	Flat sand	Sand substrate
WTG-004	2021-07-23	382,689.94	4,538,391.80	0:51	382,677.34	4,538,325.95	0:57	Flat sand bottom, many sand dollars, crab, red hake, silver hake, merluccid hake, winter skate, sponges, many invertebrates in water column, shell fragments, hermit crabs, depressions	382,684.78	4,538,319.78	1:06:06	> 7 cm	48	light brownish gray 10 YR 6/2	muddy sand	None	Flat sand	Soft sand bottom with shell fragment
WTG-005	2021-07-18	384,570.04	4,538,388.07	8:49	384,524.58	4,538,293.55	8:56	Flat sand bottom, bioturbation as mounds, sand ripples, little skate (*Leucoraja erinacea*), hermit crabs, phycid hakes (Phycidae), sponges	384,544.43	4,538,330.87	9:12:25	> 7 cm	50	grayish brown 10 YR 5/2	sand with some silt	None	Flat sand with sand dollar on surface	Sand bottom.
WTG-006	2021-07-23	379,044.05	4,536,508.89	3:58	378,985.97	4,536,482.16	4:04	Flat sand bottom, sand dollars, isolated shell fragments, butterfish (feeding in light, many invertebrates in water column, hermit crabs, Red hake, butterfish (Peprilus triacanthus), Jonah crab, burrows, sponge,	378,993.52	4,536,481.92	1- 04:16:50 2 - 04:25:21	> 7 cm	37	light brownish gray 10 YR 6/2	muddy sand	None	Flat sand with sand dollars	1st drop - Soft sand bottom, hermit crabs, burrows 2nd drop - Soft sand, fish, sand dollars, polychaete & amphipod tubes, hermit crabs
WTG-007	2021-08-02	380,837.31	4,536,521.91	3:35	380,869.90	4,536,465.19	3:41	Flat soft substrate, scallop, many sand dollars and trails, many invertebrates in water column, phycid, hermit crabs, heavy snow/turbid water, Jonah crab, squid, skate (Rajidae), debris	380,855.04	4,536,470.84	3:51:29	> 7 cm	65	grayish brown 10 YR 5/2	sandy mud	None	None	Soft substrate, sand dollars, polychaete & amphipod tubes
WTG-008	2021-07-18	382,715.21	4,536,542.08	3:27	382,675.45	4,536,433.04	3:34	Sand bottom, bioturbation as mounds, trails, and burrows, unidentified skate, squid, scallop, and silver hake	382,692.11	4,536,479.66	3:55:25	> 7 cm	65	grayish brown 10 YR 5/2	muddy sand	None	Flat, small burrows, organic material, polychaete & amphipod tubes	Sand bottom, polychaete & amphipod tubes,
WTG-009	2021-08-02	384,497.22	4,536,488.06	0:35	384,558.28	4,536,459.03	0:32	Flat soft substrate, many invertebrates in water column, turbid water, little skate, depressions, cerianthids, sponge, butterfish, hermit crabs. Note - this sample was split versus doing so at WTG-030.	384,554.76	4,536,469.68	0:51:37	> 7 cm	24	brown 10 YR 5/3	muddy sand	None	polychaete & amphipod tubes	Soft substrate, hermit crab, flatfish, polychaete & amphipod tubes
WTG-010	2021-08-01	378,953.77	4,534,651.59	18:54	379,000.63	4,534,594.54	19:02	Fine sand and silt, flat, polychaete & amphipod tubes, hermit crabs, Jonah crabs	378,999.99	4,534,636.64	19:13:15	> 7 cm	50	grayish brown 10 YR 5/2	fine sand/mud	None	None	Soft substrate, polychaete & amphipod tubes
WTG-011	2021-07-18	380,862.09	4,534,687.00	5:31	380,830.60	4,534,599.85	5:38	Soft sand bottom, bioturbation as burrows, trail, and mounds, many invertebrates in water column, sponges, Jonah crabs, red hake, silver hake, little skate	380,841.01	4,534,625.50	6:42:00	> 7 cm	45	grayish brown 10 YR 5/2	fine muddy sand	None	Flat, some polychaete & amphipod tubes, shell hash, gastropods	Soft sand bottom
WTG-012	2021-08-02	382,673.86	4,534,673.32	2:06	382,715.23	4,534,626.80	2:12	Flat soft substrate, turbid water, many invertebrates in water column, some depressions/mounds, hermit crabs, polychaete & amphipod tubes, dead crab (?), sponge, butterfish	382,707.34	4,534,623.60	2:21:32	> 7 cm	60	brown 10 YR 5/3	muddy sand with organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-013	2021-08-01	384,514.71	4,534,655.34	22:58	384,570.10	4,534,634.85	23:05	Flat sand and mud, bioturbation, polychaete & amphipod tubes, hake, Jonah crab, sea stars	384,535.70	4,534,617.73	23:16:36	> 7 cm	65	light brownish gray 10 YR 6/2	Sand/mud	None	None	Soft substrate, some polychaete & amphipod tubes
WTG-014	2021-08-01	377,159.63	4,534,667.62	17:10	377,150.84	4,534,597.53	17:18	Fine sand and mud, flat, bioturbation, sparse polychaete & amphipod tubes, shrimp, hermit crab, Jonah crab, and thorny skate (*Amblyraja radiata*)	377,126.53	4,534,631.29	17:31:45	> 7 cm	45	light brownish gray 10 YR 6/2	fine sand/mud	None	None	Soft substrate, some polychaete & amphipod tubes
WTG-015	2021-07-23	379,039.97	4,532,799.95	6:10	378,982.52	4,532,780.81	6:16	Flat sand bottom, many invertebrates in water column, red hake at start of transect, burrow, mounds, Jonah crab, fish, polychaete & amphipod tubes, phycid hake	378,990.14	4,532,776.28	6:26:01	> 7 cm	85	gray 10 YR 5/1	muddy sand	Fishy smell	polychaete & amphipod tubes, small depressions	Soft sand substrate, polychaete & amphipod tubes
WTG-016	2021-08-01	380,797.70	4,532,784.91	20:19	380,858.23	4,532,756.95	20:27	Flat sand/mud, polychaete & amphipod tubes, shrimp, sponge, cerianthid, hermit crab, hake	380,846.57	4,532,787.95	20:37:18	> 7 cm	50	light brownish gray 10 YR 6/2	fine sand/mud	Faint organic smell	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-017	2021-07-22	382,708.18	4,532,836.74	22:52	382,706.92	4,532,753.55	23:02	Soft bottom, muddy substrate with red hake, large hydroid, many invertebrates in water column, Jonah crab, depressions	382,699.34	4,532,788.05	23:12:51	> 7 cm	50	light brownish gray 10 YR 6/2	fine sand and silt	None	None	Soft substrate, some polychaete & amphipod tubes; hermit crab
WTG-018	2021-08-01	384,502.89	4,532,773.41	21:48	384,559.30	4,532,758.96	21:55	Fine sand and mud, flat, polychaete & amphipod tubes, hermit crabs, hake (Phycidae), sponge	384,545.43	4,532,788.13	22:05:48	> 7 cm	40	light brownish gray 10 YR 6/2	sand and mud	None	polychaete & amphipod tubes	Soft substrate, some polychaete & amphipod tubes
WTG-019	2021-08-01	377,103.49	4,532,796.50	15:53	377,151.26	4,532,747.73	16:01	Flat, silty sand, polychaete & amphipod tubes, sponge, hermit crab, Jonah crab	377,147.51	4,532,788.18	16:11:34	> 7 cm	50	light brownish gray 10 YR 6/2	fine sand and mud	None	None	Soft substrate, some polychaete & amphipod tubes
WTG-020	2021-07-18	375,310.89	4,532,833.39	13:14	375,265.92	4,532,748.87	13:21	Soft bottom habitat, surficial silt layer, Jonah crab, large sponge with terminal large oscula, many linear tracts in substrate potentially from trawling - vessel near site,	375,287.15	4,532,776.44	13:41:44	> 7 cm	None	gray 10 YR 6/1	fine muddy sand	None	Shell hash, polychaete & amphipod tubes, organic debris	Soft substrate, some polychaete & amphipod tubes
WTG-021	2021-07-18	379,017.84	4,530,980.87	15:22	378,964.45	4,530,875.65	15:31	Soft bottom habitat, bioturbation, multiple fish taxa, little skate, unidentified phycid hake, Jonah crab, sponge	378,990.31	4,530,923.83	15:47:27	> 7 cm	None	grayish brown 10 YR 5/2	fine muddy sand	None	organic material, polychaete & amphipod tubes	Soft substrate, some polychaete & amphipod tubes
WTG-022	2021-08-01	380,812.27	4,530,891.61	10:48	380,838.10	4,530,959.43	10:55	Flat, soft substrate, flatfish , red hake, skate (unidentified), shrimp, many depressions in seafloor	380,841.33	4,530,936.54	11:05:48	> 7 cm	73	grayish brown 10 YR 5/2	muddy sand with organic debris	None	polychaete & amphipod tubes, gastropod	Soft substrate, polychaete & amphipod tubes
WTG-023	2021-08-02	382,714.25	4,530,944.04	9:26	382,694.67	4,530,883.06	9:33	Flat, soft substrate, shrimp, red hake, bucket lid, Jonah crab	382,694.93	4,530,910.30	9:42:01	> 7 cm	90	grayish brown 10 YR 5/2	muddy sand with organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-024	2021-08-01	384,588.11	4,530,937.90	8:03	384,528.40	4,530,888.70	8:11	Flat, soft substrate, Jonah crab, hermit crab, bioturbation as mounds, hake, turbid water	384,538.68	4,530,911.17	08:21;13	> 7 cm	30	grayish brown 10 YR 5/2	muddy sand	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-025	2021-07-18	386,437.27	4,530,982.23	17:43	386,385.46	4,530,903.12	17:50	Soft bottom habitat, Jonah crab, relatively abundant red hakes, unidentified flatfish, bioturbation as burrows,	386,399.32	4,530,923.74	18:47:45	> 7 cm	None	gray 10 YR 6/1	fine muddy sand	None	mollusk, polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-026	2021-08-01	388,272.27	4,530,963.84	6:28	388,245.30	4,530,843.46	6:37	Flat soft substrate, skate, red hake, Jonah crab, turbid water, Note - heavy vessel pitch - increased speed to 0.5 kt	388,249.83	4,530,909.90	6:49:47	> 7 cm	28	grayish brown 10 YR 5/2	sandy mud	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, skate swimming by
WTG-027	2021-07-18	390,131.47	4,530,978.26	20:04	390,071.13	4,530,881.51	20:12	Soft bottom habitat, bioturbation, skates, Jonah crabs, squid in water column, a group of hermit crabs	390,101.14	4,530,922.62	20:25:35	> 7 cm	None	light brownish gray 10 YR 6/2	fine muddy sand	None	polychaete & amphipod tubes, organic material, shell hash	Soft substrate, polychaete & amphipod tubes
WTG-028	2021-08-01	377,139.63	4,530,890.25	12:30	377,154.29	4,530,932.48	12:40	Bioturbation, soft substrate, small shallow depressions, olychaete & amphipod tubes, hermit crab	377,139.78	4,530,922.37	12:52:30	> 7 cm	50	brown 10 YR 5/3	mud/sand	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-029	2021-07-23	375,235.08	4,530,862.17	13:40	375,270.96	4,530,936.21	13:50	Soft bottom habitat, muddy substrate with old trawl marks, bioturbation, Jonah crab, skate	375,282.59	4,530,907.75	14:03:54	> 7 cm	80	Light Brownish Gray 10yr 6/2	muddy fine sand	None	gastropod	Soft substrate, polychaete & amphipod tubes
WTG-030	2021-08-01	373,398.09	4,530,900.30	14:10	373,439.55	4,530,970.45	14:21	Silty sand and mud, flat, bioturbation, sparse polychaete & amphipod tubes, shrimp, Jonah crab, hermit crabs. Note - did not split.	373,431.37	4,530,911.52	14:34:08	> 7 cm	50	grayish brown 10 YR 5/2	mud/sand	None	Smooth	Soft Substrate
WTG-031	2021-07-31	378,963.95	4,529,026.07	22:09	379,006.68	4,529,073.79	22:17	Silty mud, flat, bioturbation, abundant hermit crabs, butterfish, Jonah crab, phycid hake, polychaete & amphipod tubes	378,981.08	4,529,060.92	22:27:18	> 7 cm	50	gray 10 YR 5/1	muddy sand	None	Smooth, sandy	Soft substrate
WTG-032	2021-07-23	380,896.86	4,529,097.97	7:46	380,834.35	4,529,078.59	7:52	Flat sand substrate, burrows, polychaete & amphipod tubes, curled egg masses, red hake in depression, hermit crab	380,843.79	4,529,074.60	8:01:45	> 7 cm	82	brown 10 YR 5/3	muddy sand with organic debris	None	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes
WTG-033	2021-07-19	382,710.35	4,529,130.71	1:42	382,659.60	4,528,996.37	1:50	Soft sand substrate, crabs, sponge, several fish, scallop shell, Note - heavy pitch due to sea state	382,692.41	4,529,073.76	2:04:06	> 7 cm	None	grayish brown 10 YR 5/2	muddy silt	None	polychaete & amphipod tubes, gastropod	Sand
WTG-034	2021-07-19	384,573.29	4,529,122.69	0:10	384,512.49	4,529,025.80	0:17	Soft sand bottom, many invertebrates in water column, silver hake, red hake, crabs	384,543.91	4,529,072.70	0:31:00	> 7 cm	70	grayish brown 10 YR 5/2	soft muddy silt with some sand	Earth, anoxic	polychaete & amphipod tubes	Soft substrate

Attachment E Field Sampling Log

Drop Camera									Grab									Grab Mounted Camera
Station	Date	Start X	Start Y	Time Start	End X	End Y	Time Stop	Notes / Observations	X	Y	Bottom Touchdown Time	Grab Penetration > or = 7cm?	aRPD depth (mm)	Color (Munsell chart)	Texture	Odor	Surficial Features	Notes / Observations
WTG-035	2021-08-01	386,410.31	4,529,116.48	4:41	386,376.89	4,529,058.38	4:47	Flat soft substrate, many invertebrates in water column, hermit crabs, polychaete & amphipod tubes, shrimp, Jonah crab, gadiform fish, thorny skate	386,388.31	4,529,062.30	4:55:31	> 7 cm	70	Pale Brown 10yr 6/3	sandy mud with buried shell fragments	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, many invertebrates in water column
WTG-036	2021-07-22	388,251.31	4,529,138.72	20:54	388,251.42	4,529,052.86	21:04	Soft bottom habitat, muddy substrate with subtle depressions, whelk egg cases, red hake, Jonah crab, winter skate	388,251.44	4,529,071.53	21:13:54	> 7 cm	100	grayish brown 10 YR 5/2	muddy fine sand	None	None	Soft substrate
WTG-037	2021-07-23	377,145.82	4,529,003.05	11:32	377,143.95	4,529,072.44	11:38	Flat soft substrate, polychaetae tubes, multiple depressions on seafloor, Jonah crab, hermit crab, sponge, shrimp, gastropod, swimming scallop (11:36:45), sand flounder, red hake	377,138.92	4,529,069.51	11:47:43	> 7 cm	66	Pale Brown 10yr 6/3	muddy fine sand	none	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes
WTG-038	2021-07-31	375,323.38	4,529,050.13	20:28	375,254.21	4,529,062.53	20:36	Flat silty mud, bioturbation, shrimp, polychaete & amphipod tubes, Jonah crabs, winter skate, squid	375,298.70	4,529,079.28	20:49:27	> 7 cm	60	grayish brown 10 YR 5/2	mud/silt	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-039	2021-07-23	373,479.44	4,529,114.06	15:23	373,410.07	4,529,067.15	15:33	Soft bottom habitat: relatively devoid of visible biota	373,433.85	4,529,071.20	15:45:39	> 7 cm	80	Light Brownish Gray 10yr 6/2	muddy fine sand	none	nothing significant	Soft substrate, some polychaete & amphipod tubes
WTG-040	2021-07-19	379,018.65	4,527,280.20	4:04	378,953.54	4,527,164.40	4:12	soft sand bottom, many invertebrates in water column, shell hash, butterfish, crabs, small ridge of sediment	378,991.26	4,527,219.66	4:26:06	> 7 cm	77	grayish brown 10 YR 5/2	sandy mud with some clay (>8 cm)	None	polychaete & amphipod tubes	Soft sediment
WTG-041	2021-08-01	380,795.13	4,527,207.38	23:34	380,866.48	4,527,209.02	23:45	flat silty sand substrate, hake, Jonah crab, polychaete & amphipod tubes, fourspot flounder	380,830.51	4,527,220.51	23:55:45	> 7 cm	50	gray 10 YR 6/1	smooth silty mud	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, many invertebrates in water column
WTG-042	2021-07-22	382,724.64	4,527,281.89	18:58	382,684.04	4,527,212.45	19:08	soft bottom habitat, muddy substrate, red hake, Jonah crab, hermit crab, sea robin, sea stars (*Asterias rubens*)	382,696.40	4,527,219.51	19:19:15	> 7 cm	110	gray 10 YR 6/1	muddy fine sand	None	None	Soft substrate, some polychaete & amphipod tubes
WTG-043	2021-08-01	384,544.69	4,527,279.03	1:44	384,560.00	4,527,217.79	1:51	Flat soft substrate, many invertebrates in water column, polychaete & amphipod tubes, egg masses, squid, red hake, winter skate with attached debris, Jonah, hermit crab, unk holothuroid	384,556.94	4,527,210.39	1 - 02:00:03 2 - 02:07:29	> 7 cm	45	Pale Brown 10yr 6/3	mud with organic debris	None	polychaete & amphipod tubes	1 - soft sand, polychaete & amphipod tubes and unk tunicate or holothuroid 2 - soft sand
WTG-044	2021-08-01	386,403.78	4,527,269.57	3:19	386,389.94	4,527,202.93	3:25	Flat soft substrate, turbid water column, many invertebrates in water column, red hake, Jonah crabs, hermit crabs, skate,	386,397.02	4,527,219.95	3:34:09	> 7 cm	42	Pale Brown 10yr 6/3	sandy mud with organic debris	Mild anoxic	polychaete & amphipod tubes, spheroid tunicates	Soft substrate, polychaete & amphipod tubes, hermit crabs
WTG-045	2021-07-23	377,199.16	4,527,239.71	9:17	377,139.16	4,527,218.67	9:24	Flat soft substrate, polychaeate tubes, many pockmarks on seafloor, Jonah crab, many burrows fish, red hake, hermit crab	377,142.05	4,527,223.79	1- 09:33:47 2 - 09:46:07	> 7 cm	90	Pale Brown 10yr 6/3	muddy sand with some clay deep	None	polychaete & amphipod tubes	1 - Sand substrate, polychaete & amphipod tubes 2 - Sand substrate, polychaete & amphipod tubes, shrimp (?)
WTG-046	2021-07-31	375,327.36	4,527,192.21	17:30	375,276.38	4,527,204.18	17:39	Silty mud, flat, bioturbation, polychaete & amphipod tubes, red hake, Jonah crab, shrimp	375,298.06	4,527,216.68	17:55:31	> 7 cm	80	Light Brownish Gray 10yr 6/2	mud/silt	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, large amphipod
WTG-047	2021-07-19	373,469.66	4,527,271.26	8:48	373,369.97	4,527,135.25	8:57	Soft sand bottom, fish, bioturbation as burrows, crab, sea star	373,434.25	4,527,220.45	9:08:23	> 7 cm	68	dark grayish brown 10 YR 4/2	sandy mud with some clay deep	Decomposing organic material	polychaete & amphipod tubes	Soft sediment, burrows, polychaete & amphipod tubes
WTG-048	2021-07-19	371,615.75	4,527,270.14	10:20	371,540.19	4,527,168.35	10:28	Soft sand bottom, red hake, bioturbation as burrows, crab, sea star -heav y pitch from sea state	371,580.78	4,527,220.44	10:40:17	> 7 cm	None	dark grayish brown 10 YR 4/2	muddy sand	Decomposing organic material	polychaete & amphipod tubes, burrows	Soft bottom, burrows, crab, polychaete & amphipod tubes
WTG-049	2021-07-19	369,761.65	4,527,276.83	11:52	369,694.54	4,527,164.10	12:00	Soft sand substrate, flat, some burrows, red hake, sea star, crabs, skate	369,729.67	4,527,221.06	12:23:21	> 7 cm	None	dark grayish brown 10 YR 4/2	sandy mud	None	organic material and amphipods	Soft bottom habitat
WTG-050	2021-07-31	379,043.71	4,525,370.01	11:35	378,978.25	4,525,348.32	11:42	Flat soft substrate, polychaete & amphipod tubes, squid, shrimps, sea stars, red hake, silver hake, hermit crab, Jonah crab, crab remains, fish in a burrow	378,982.88	4,525,354.22	11:53:08	> 7 cm	60	Light Brownish Gray 10yr 6/2	mud with organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, pink shrimp following impact
WTG-051	2021-07-22	380,871.07	4,525,428.70	17:05	380,800.26	4,525,320.04	17:14	Soft bottom habitat, muddy substrate with whelk egg cases, flounder, Jonah crab, red hake	380,841.89	4,525,370.28	17:26:54	> 7 cm	110	Light Brownish Gray 10yr 6/2	muddy	None	None	Soft substrate, polychaete & amphipod tubes
WTG-052	2021-07-31	382,641.31	4,525,365.13	9:56	382,734.66	4,525,348.58	10:04	Flat soft substrate, polychaete & amphipod tubes, shrimp, flatfish	382,707.76	4,525,364.85	10:16:17	> 7 cm	59	Light Brownish Gray 10yr 6/2	mud with organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, pink shrimp
WTG-053	2021-07-18	384,582.78	4,525,419.22	22:16	384,515.46	4,525,326.63	22:24	Soft bottom habitat, multiple hake, Jonah crab, many invertebrates in water column	384,543.34	4,525,368.50	22:36:12	> 7 cm	None	Light Brownish Gray 10yr 6/2	fine muddy sand with organics	None	organic material, polychaete & amphipod tubes, gastropods, shell hash	Soft substrate, polychaete & amphipod tubes; fish top corner slightly out of frame potentially red hake.
WTG-054	2021-07-19	377,160.24	4,525,428.08	5:54	377,124.05	4,525,326.77	6:01	Soft bottom habitat, crabs, skate, red hake	377,138.68	4,525,366.43	1- 06:48:32 2 - 06:57:04	> 7 cm	123	dark gray 10 YR 4/1	sandy mud, some clay deep	Earthy, rotten smell	polychaete & amphipod tubes, organic materials	1 - Soft substrate, polychaete & amphipod tubes 2 - TSoft substrate, polychaete & amphipod tubes
WTG-055	2021-07-31	375,332.28	4,525,359.55	13:37	375,284.07	4,525,349.61	13:46	Silty sand and mud, flat, bioturbation, red hake, flatfish, shrimp, Jonah crab, sea star	375,299.42	4,525,363.93	13:58:54	> 7 cm	50	Light Brownish Gray 10yr 6/2	mud/silt	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, shrimp
WTG-056	2021-07-23	373,482.01	4,525,409.24	17:06	373,392.20	4,525,332.31	17:14	Soft bottom habitat, muddy substrate with sea stars, Jonah crab, sand flounder	373,435.16	4,525,368.00	17:28:34	> 7 cm	50	Pale Brown 10 yr. 6/3	muddy fine sand	none	nothing significant	Soft substrate, polychaete & amphipod tubes
WTG-057	2021-07-31	371,623.69	4,525,357.12	15:19	371,575.24	4,525,352.08	15:28	Flat silty sand and mud, bioturbation, polychaete & amphipod tubes, hake, shrimp, Jonah crab, hermit crab, gastropod egg case cluster, sea star, flatfish	371,595.84	4,525,377.71	16:04:14	> 7 cm	50	Light Brownish Gray 10yr 6/2	mud/silt	none	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-058	2021-07-19	369,757.08	4,525,423.32	13:28	369,716.13	4,525,354.06	13:33	Soft bottom habitat, small depressions, sea star, Jonah crabs, flounder, hake	369,728.93	4,525,369.50	13:51:29	> 7 cm	None	gray 10 YR 5/1	muddy sand	earthy smell	None	Soft substrate, polychaete & amphipod tubes
WTG-059	2021-07-22	378,957.42	4,523,475.87	13:11	379,006.66	4,523,533.10	13:21	Soft bottom habitat, muddy substrate with limited regional biota	378,986.05	4,523,512.01	13:37:39	> 7 cm	None	gray 10 YR 5/1	muddy	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-060	2021-07-31	380,842.77	4,523,476.90	7:52	380,864.17	4,523,553.22	8:01	Soft flat substrate, bioturbation as burrows and trail, shrimp, gadid, Jonah crab, very turbid water column, red hake, flatfish, hermit crab	380,849.23	4,523,528.61	8:11:16	> 7 cm	58	Light Brownish Gray 10yr 6/2	mud with organic debris	None	polychaete & amphipod tubes	Soft substrate with polychaete & amphipod tubes
WTG-061	2021-07-22	382,698.05	4,523,451.99	15:36	382,690.97	4,523,541.49	15:46	Soft bottom habitat, muddy substrate, typical regional biota	382,690.48	4,523,515.52	16:01:37	> 7 cm	80	gray 10 YR 6/1	muddy	None	polychaete & amphipod tubes	Soft substrate
WTG-062	2021-07-29	377,121.27	4,523,556.94	20:23	377,133.11	4,523,483.93	20:32	Soft flat substrate, small shallow depressions, gadid fish in burrows, polychaete & amphipod tubes, burrows, crab slightly out of frame, flounder, Jonah crab	377,150.06	4,523,521.15	20:44:43	> 7 cm	60	Light Brownish Gray 10yr 6/2	silty mud	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-063	2021-07-29	375,266.90	4,523,563.09	18:40	375,276.26	4,523,498.47	18:48	soft substrate with burrows/small shallow depressions, Jonah crabs, sea stars, red hakes,	375,272.86	4,523,519.96	19:07:41	> 7 cm	70	grayish brown 10 YR 5/2	mud/sand	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-064	2021-07-29	373,408.89	4,523,550.31	16:58	373,435.58	4,523,477.52	17:07	Sand/silt flat substrate, polychaete & amphipod tubes, shrimp, hake, flatfish,	373,447.27	4,523,524.18	17:18:16	> 7 cm	70	grayish brown 10 YR 5/2	mud/sand	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-065	2021-07-23	371,618.99	4,523,569.49	19:02	371,555.79	4,523,510.42	19:12	Soft bottom habitat, muddy substrate with flounder , hake, sea stars, Jonah crabs, shrimp	371,581.58	4,523,531.21	19:22:57	> 7 cm	110	Pale Brown 10yr 6/3	muddy fine sand	None	TOC/GS overfull; infauna ok	Soft substrate, polychaete & amphipod tubes
WTG-066	2021-07-19	369,767.68	4,523,575.64	15:53	369,719.26	4,523,498.56	16:00	Soft bottom habitat, xanthid crabs, red hake sea star flounder , bioturbation (depressions and burrows). Second camera tow - refer to logbook - 16:40 - 16:47.	369,731.89	4,523,515.83	17:09:00	> 7 cm	None	gray 10 YR 5/1	sandy mud	None	None	Soft substrate
WTG-067	2021-07-19	367,937.71	4,523,547.52	19:07	367,852.98	4,523,497.88	19:13	Soft bottom habitat, sandy substrate, sea stars, red hake, Jonah crab	367,879.46	4,523,514.05	19:30:02	> 7 cm	None	very pale brown 10 YR 8/3	sandy	None	Sandy smooth features	Soft substrate
WTG-068	2021-07-19	366,079.18	4,523,548.91	21:24	365,964.25	4,523,471.27	21:34	Soft bottom habitat, sandy substrate, butterfish Jonah crab, hake, flounder, squid, sponge, winter skate	366,026.60	4,523,514.72	21:44:44	> 7 cm	None	very pale brown 10 YR 8/3	sandy	None	smooth sand with many grunion-like (sand lance?)	Soft sand bottom
WTG-069	2021-07-31	379,012.39	4,521,625.45	4:09	378,989.48	4,521,690.89	4:16	Flat soft substrate, polychaete & amphipod tubes, flatfish, Jonah crab, many shrimp, gadid fish, red hake eating hake,	378,985.35	4,521,674.89	4:26:36	> 7 cm	38	brown 10 YR 5/3	muddy clay	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, pink shrimp
WTG-070	2021-07-31	380,851.33	4,521,620.89	6:19	380,844.55	4,521,711.29	6:29	Flat soft substrate, polychaete & amphipod tubes, red hake, Jonah crabs, shrimps, hermit crab	380,840.96	4,521,676.02	6:40:57	> 7 cm	33	grayish brown 10 YR 5/2	muddy clay with organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-071	2021-07-22	377,148.13	4,521,602.57	11:25	377,136.21	4,521,673.48	11:30	Soft sand substrate, polychaete & amphipod tubes, several Jonah crabs, fish (hake? Cod?) gadid in burrow, several shrimps	377,136.03	4,521,659.82	11:43:25	> 7 cm	40	brown 10 YR 5/3	muddy clay with some sand	None	polychaete & amphipod tubes	Soft substrate
WTG-072	2021-07-22	375,302.44	4,521,595.00	9:48	375,289.13	4,521,685.30	9:57	Flat sand bottom, sand flounder, Jonah crab, several small shrimp, isolated depressions in substrate, unknown fish	375,285.97	4,521,662.02	10:08:31	> 7 cm	30	brown 10 YR 5/3	sandy mud with some clay and organic debris	None	polychaete & amphipod tubes	Soft sand bottom

Attachment E Field Sampling Log

Drop Camera									Grab									Grab Mounted Camera
Station	Date	Start X	Start Y	Time Start	End X	End Y	Time Stop	Notes / Observations	X	Y	Bottom Touchdown Time	Grab Penetration > or = 7cm?	aRPD depth (mm)	Color (Munsell chart)	Texture	Odor	Surficial Features	Notes / Observations
WTG-073	2021-07-29	373,444.17	4,521,697.66	15:12	373,459.67	4,521,620.42	15:21	Sand and silt, hake, small pits and polychaete & amphipod tubes, Jonah crab, sea stars	373,419.45	4,521,666.77	15:35:34	> 7 cm	70	grayish brown 10 YR 5/2	silt/mud	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-074	2021-07-20	371,629.99	4,521,706.86	3:36	371,524.78	4,521,623.29	3:34	Soft sand substrate, many invertebrates in water column, some depressions but relatively flat, Jonah crabs, sea star, a few fish	371,581.56	4,521,664.80	3:56:13	> 7 cm	None	gray 10 YR 6/1	sandy mud with some clay	None	polychaete & amphipod tubes, gastropod	Soft sand bottom
WTG-075	2021-07-23	369,775.93	4,521,717.31	20:31	369,714.69	4,521,666.62	20:41	Soft bottom habitat, muddy substrate with red and silver hakes, sea robin, Jonah crab, hermit crab, winter skate	369,745.06	4,521,672.79	20:52:46	> 7 cm	70	Pale Brown 10yr 6/3	muddy silty sand	none	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-076	2021-07-20	367,918.56	4,521,712.33	1:52	367,831.45	4,521,614.37	1:59	Soft sand bottom, sponges, polychaete & amphipod tubes, crabs, hake (?), small shrimp, small xanthid (?) crabs, fecal mounds, sea stars	367,878.31	4,521,666.88	2:12:02	> 7 cm	None	brown 10 YR 5/3	muddy sand	None	polychaete & amphipod tubes	Soft sand bottom
WTG-077	2021-07-20	366,084.29	4,521,691.47	23:40	366,080.23	4,521,688.73	23:46	Soft bottom habitat, Jonah crabs, large sand waves, sea stars, many invertebrates in water column, hake, hermit crabs, sponge, butterfish, scallop	366,029.55	4,521,662.03	1 - 23:59:43 2 - 00:41:00	> 7 cm	None	yellowish brown 10 YR 5/4	sand with small clumps of clay/mud	None	flat and sandy	1 - Sand bottom 2 - Sand bottom
WTG-078	2021-07-20	379,019.20	4,519,872.20	7:06	378,965.07	4,519,759.51	7:13	Flat sand bottom, polychaete & amphipod tubes, crabs, fish	378,989.44	4,519,810.28	7:23:27	> 7 cm	71	grayish brown 10 YR 5/2	muddy clay with sand layer surface	None	polychaete & amphipod tubes	Sand bottom, polychaete & amphipod tubes,
WTG-079	2021-07-29	377,180.13	4,519,844.83	5:58	377,105.35	4,519,809.43	6:09	Flat soft substrate, polychaete & amphipod tubes, Jonah crabs, shrimps, qadid in the burrow, many burrows, flatfish, winter skate	377,124.08	4,519,809.20	6:28:36	> 7 cm	34	gray 10 YR 6/1	mud with organic debris	Mild anoxic	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-080	2021-07-29	375,331.50	4,519,776.83	7:34	375,269.19	4,519,802.81	7:40	Flat sand substrate, polychaete & amphipod tubes, red hake, Jonah crabs, shrimp, egg masses, flatfish	375,270.58	4,519,808.04	7:57:26	> 7 cm	34	Light Brownish Gray 10yr 6/2	mud with organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, pink shrimp
WTG-081	2021-07-20	373,457.79	4,519,874.69	5:15	373,415.22	4,519,762.82	5:24	Flat sand substrate, polychaete & amphipod tubes, red hake, Jonah crabs, shrimp, sea stars, small flounder, many invertebrates in water column, crabs (2 attached to each other)	373,433.66	4,519,811.94	5:35:10	> 7 cm	45	brown 10 YR 5/3	sandy mud with some clay deep	None	polychaete & amphipod tubes	Soft sand bottom
WTG-082	2021-07-29	371,576.77	4,519,836.87	13:50	371,615.17	4,519,790.43	13:59	Flat sand substrate, polychaete & amphipod tubes, red hake, fourspot flounder, Jonah crabs, shrimp, sea stars	371,594.17	4,519,802.55	14:14:06	> 7 cm	40	grayish brown 10 YR 5/2	sandy mud	Mild anoxic	polychaete & amphipod tubes	Soft sand
WTG-083	2021-07-20	369,761.04	4,519,870.70	14:32	369,706.32	4,519,788.21	14:42	Flat sand bottom, crabs, phycid hake, Jonah crab, hermit crab, subtle substrate depressions	369,730.94	4,519,812.09	14:42:03	> 7 cm	None	olive gray 5Y 5/2	mud	none	polychaete & amphipod tubes	Soft substrate
WTG-084	2021-07-20	367,915.05	4,519,867.22	16:19	367,855.57	4,519,785.74	16:28	Flat sand bottom, crabs, flounder, organic material	367,880.97	4,519,812.48	16:41:52	> 7 cm	None	gray 10 YR 6/1	muddy with some clay	none	None	Soft bottom, polychaete & amphipod tubes
WTG-085	2021-07-20	366,065.43	4,519,866.87	18:30	366,017.89	4,519,795.86	18:40	flat soft substrate with linear mound formations; typical biota	366,028.30	4,519,809.98	18:54:13	> 7 cm	None	light brownish gray 10YR 6/2	sandy mud	none	None	Soft bottom, polychaete & amphipod tubes; possible red hake swims at top of frame after grab lands.
WTG-086	2021-07-24	364,136.26	4,519,757.87	3:40	364,181.43	4,519,805.19	3:48	flat, soft sand; flounder, crabs, squid, sea stars shrimp, hake, lizardfish (?), Jonah crab	364,160.04	4,519,800.49	4:23:59	> 7 cm	67	brown 10 YR 5/3	muddy sand with some clay	None	polychaete & amphipod tubes	Sand bottom, multiple shrimp, cerianthid, polychaete & amphipod tubes
WTG-087	2021-07-20	362,359.98	4,519,863.71	20:20	362,310.53	4,519,791.82	20:30	soft substrate with burrows and depressions; crabs, gastropod egg case, cerianthid anemone, hermit crab, Jonah crab	362,323.67	4,519,811.39	20:43:04	> 7 cm	None	lt. brownish gray 10 YR 6/2	mud	none	None	Soft bottom, polychaete & amphipod tubes
WTG-088	2021-07-22	377,152.85	4,517,897.93	8:12	377,142.01	4,517,962.47	8:19	flat sand substrate; polychaete & amphipod tubes; Jonah crab; small pink shrimp	377,140.45	4,517,958.26	8:28:18	> 7 cm	24	brown 10YR 5/3	sandy mud with organic debris	none	polychaete & amphipod tubes	Soft bottom, polychaete & amphipod tubes
WTG-089	2021-07-29	375,305.18	4,517,999.48	4:15	375,255.90	4,517,936.42	4:22	flat, soft substrate; polychaete & amphipod tubes, Jonah crab, shrimp, red hake, egg mass?, flounder, egg purse, many invertebrates in water column	375,274.86	4,517,948.90	4:32:58	> 7 cm	45	light brownish gray 10 YR 6/2	mud and clay	mild anoxic	polychaete & amphipod tubes	Soft bottom, polychaete & amphipod tubes
WTG-090	2021-07-20	373,458.59	4,518,021.96	10:23	373,408.71	4,517,901.24	10:32	soft sand bottom, polychaete & amphipod tubes, winter skate, turbid water, hake, small shrimp, many invertebrates in water column	373,437.16	4,517,960.21	10:45:21	> 7 cm	95	brown 10 YR 4/3	muddy clay with surficial sand	None	polychaete & amphipod tubes, burrows	Soft sand substrate, polychaete & amphipod tubes
WTG-091	2021-07-29	371,553.73	4,517,993.99	1:03	371,599.33	4,517,927.17	1:10	flat soft substrate, polychaete & amphipod tubes, sea star, hermit crab, Jonah crab, many invertebrates in water column, red hake, flounder	371,592.44	4,517,947.25	1:23:52	> 7 cm	44	light brownish gray 10 YR 6/2	mud with clay	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-092	2021-07-23	369,674.73	4,517,990.69	22:11	369,756.39	4,517,957.33	22:21	soft bottom habitat, muddy substrate, many invertebrates in water column, Jonah crab, unk anemone, sand flounders	369,715.48	4,517,962.13	22:33:04	> 7 cm	60	light brownish gray 10 YR 6/2	mud	None	polychaete & amphipod tubes	Soft substrate; crab off to the side as the grab lands
WTG-093	2021-07-28	367,829.29	4,517,965.63	23:11	367,876.46	4,517,947.76	23:20	soft bottom habitat, muddy substrate, flounder, skate, hake, shrimp, sea star, gastropods, derelict trawl net (?) at 23:18:20	367,870.22	4,517,949.51	1-23:31:01 2-23:37:50	> 7 cm	65	gray 10 YR 6/1	muddy sand	None	None	1-soft substrate, polychaete & amphipod tubes 2-soft substrate, polychaete & amphipod tubes
WTG-094	2021-07-24	366,021.76	4,517,894.01	2:06	366,008.92	4,517,958.78	2:12	flat sand substrate, burrows, polychaete & amphipod tubes, shell fragments, Jonah crab, hermit crab, heavy snow, winter skate (02:11:40), lobster (02:12:15)	366,034.00	4,517,952.06	2:47:50	> 7 cm	75	light brownish gray 10 YR 6/2	muddy sand with some clay	None	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes
WTG-095	2021-07-21	364,205.36	4,518,011.14	2:37	364,151.52	4,517,940.03	2:44	Soft sand substrate, many invertebrates in water column, polychaete & amphipod tubes, Jonah crab, butterfish, hermit crabs, isolated depressions	364,173.32	4,517,959.88	2:53:49	> 7 cm	80	light brownish gray 10 YR 6/2	muddy clay with some sand	None	polychaete & amphipod tubes	Soft bottom, polychaete & amphipod tubes
WTG-096	2021-07-28	362,251.92	4,517,954.61	7:54	362,335.71	4,517,953.68	8:02	flat soft substrate, shrimp, hermit crabs, many cerianthids, Jonah crab, flatfish, biota trails on seafloor	362,320.30	4,517,958.18	8:13:59	> 7 cm	40	light brownish gray 10 YR 6/2	sandy mud	None	one large burrow	Soft substrate, polychaete & amphipod tubes
WTG-097	2021-07-20	360,503.30	4,518,009.44	21:56	360,452.61	4,517,943.63	22:06	muddy substrate with organic material, many invertebrates in water column, cerianthid, flounder, Jonah crab	360,471.45	4,517,959.00	22:18:02	> 7 cm	None	light brownish gray 10 YR 6/2	fine muddy sand	None	None	soft substrate, polychaete & amphipod tubes
WTG-098	2021-07-20	375,318.23	4,516,163.13	8:53	375,248.28	4,516,046.35	9:01	soft sand substrate, polychaete & amphipod tubes, small shrimps, red hake, and Jonah crabs	375,285.07	4,516,108.50	9:12:27	> 7 cm	64	brown 10 YR 5/3	muddy clay with surficial sand	None	polychaete & amphipod tubes	Soft bottom, polychaete & amphipod tubes
WTG-099	2021-07-29	373,440.39	4,516,150.91	2:38	373,423.32	4,516,088.98	2:44	flat soft substrate, polychaete & amphipod tubes, crab in burrow, red hake, silver hake, cerianthids, shrimp, hermit crab, several sand flounders	373,433.10	4,516,092.71	2:53:19	> 7 cm	44	light brownish gray 10 YR 6/2	sandy mud with clay	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, shell fragments
WTG-100	2021-07-28	371,571.98	4,516,079.91	19:47	371,601.47	4,516,120.65	19:56	Soft bottom habitat, muddy substrate, shrimp, polychaete & amphipod tubes, Jonah crab, burrow	371,572.50	4,516,098.99	20:12:03	> 7 cm	40	light brownish gray 10 YR 6/2	muddy fine sand	None	None	Crab scurries out of way of grab prior to landing; soft substrate
WTG-101	2021-07-20	369,765.31	4,516,160.78	12:33	369,709.33	4,516,084.90	12:40	Soft bottom habitat, muddy substrate, Jonah crab, hake, flounder, hermit crab	369,728.72	4,516,106.75	12:58:22	> 7 cm	TBD	light brownish gray 10 YR 6/2	sandy mud	None	None	soft bottom
WTG-102	2021-07-28	367,844.64	4,516,111.24	21:41	367,889.59	4,516,124.46	21:49	Soft bottom habitat, shrimp, sand flounder, man-made debris	367,869.02	4,516,099.29	22:01:59	> 7 cm	50	very pale brown 10 YR 7/3	muddy fine sand	None	None	soft bottom
WTG-103	2021-07-23	366,076.20	4,516,138.30	23:47	366,021.37	4,516,076.86	23:57	Soft bottom habitat, butterfish, crabs, hake, man-made debris	366,024.51	4,516,094.18	1:01:33	> 7 cm	67	grayish brown 10 YR 5/2	muddy sand with some clay	None	polychaete & amphipod tubes	soft sand bottom, polychaete & amphipod tubes, shrimp
WTG-104	2021-07-21	364,208.60	4,516,163.29	2:37	364,167.65	4,516,108.63	2:44	many invertebrates in water column, siphonophores, soft sand bottom, polychaete & amphipod tubes, bioturbation as possible feeding area, butterfish, isolated depressions, hermit crab, fish, Jonah crab	364,173.73	4,516,108.02	4:29:00	> 7 cm	20	dark grayish brown 10 YR 4/2	muddy clay	None	polychaete & amphipod tubes	soft bottom
WTG-105	2021-07-24	362,330.20	4,516,116.36	5:33	362,216.01	4,516,161.28	5:43	heavy snow, flat sand bottom, fish, hermit crabs, Jonah crabs	362,324.18	4,516,094.04	6:59:03	> 7 cm	38	light brownish gray 10 YR 6/2	muddy clay with some sand	None	non-cohesive soft surface	Sand bottom
WTG-106	2021-07-28	360,441.34	4,516,040.09	5:30	360,481.90	4,516,108.64	5:38	Flat soft substrate, many invertebrates in water column, flatfishes, depressions, Jonah crab, cerianthids, silver hake, organic debris, burrows and tracks, red hake, several fish in burrows	360,478.21	4,516,117.48	5:47:27	> 7 cm	40	light brownish gray 10 YR 6/2	mud	None	None	Soft substrate
WTG-107	2021-07-20	358,652.15	4,516,158.04	18:30	358,598.35	4,516,089.55	18:40	Soft bottom habitat, large linear mound formations, red hake, clam, Jonah crab, sea star, hermit crabs, sea star (*Asterias rubens*), flounder	358,615.59	4,516,109.75	1 - 23:56:26 2 - 00:48:36	> 7 cm	82	pale brown 10 YR 6/3	muddy clay with some sand	None	polychaete & amphipod tubes	Soft sediment
WTG-108	2021-07-22	373,434.82	4,514,187.28	6:28	373,423.78	4,514,251.36	6:35	Flat sand substrate, polychaete & amphipod tubes, hermit crab, some recessed areas possibly burrows	373,420.85	4,514,251.56	6:45:26	> 7 cm	32	light brownish gray 10 YR 6/2	muddy clay and sand	None	polychaete & amphipod tubes, large gastropod	Soft sediment
WTG-109	2021-07-28	371,553.27	4,514,234.49	18:23	371,575.83	4,514,273.76	18:31	Soft bottom habitat, muddy substrate, polychaete & amphipod tubes, shrimp, Jonah crab, flounder, debris	371,576.75	4,514,240.37	18:43:31	> 7 cm	50	light gray 10YR 7/2	mud	None	bivalve (Nueula sp?)	soft bottom, polychaete & amphipod tubes, shrimp
WTG-110	2021-07-29	369,706.90	4,514,285.23	14:49	369,721.59	4,514,242.66	14:57	Soft bottom habitat, muddy substrate, shrimp, Jonah crab, debris, flounder, burrows	369,716.77	4,514,265.31	15:11:17	> 7 cm	45	light gray 10YR 7/2	mud	None	polychaete & amphipod tubes	soft bottom, polychaete & amphipod tubes

Attachment E Field Sampling Log

Drop Camera									Grab									Grab Mounted Camera
Station	Date	Start X	Start Y	Time Start	End X	End Y	Time Stop	Notes / Observations	X	Y	Bottom Touchdown Time	Grab Penetration > or = 7cm?	aRPD depth (mm)	Color (Munsell chart)	Texture	Odor	Surficial Features	Notes / Observations
WTG-111	2021-07-22	367,898.77	4,514,192.96	2:58	367,886.36	4,514,273.28	3:07	Flat sand substrate, Jonah crab, many invertebrates in water column, gadid in burrow, other fishes	367,881.44	4,514,267.48	3:16:49	> 7 cm	70	light brownish gray 10 YR 6/2	muddy clay and sand	None	polychaete & amphipod tubes, organic debris	soft substrate, burrows, organic detritus
WTG-112	2021-07-28	366,013.89	4,514,322.55	13:02	366,014.46	4,514,272.90	13:11	Soft bottom habitat, muddy substrate, Jonah crab, shrimps, sand flounder, man-made debris	366,030.43	4,514,272.51	13:23:46	> 7 cm	55	light brownish gray 10 YR 6/2	mud	None	None	soft bottom, polychaete & amphipod tubes
WTG-113	2021-07-28	364,136.61	4,514,307.09	11:03	364,169.84	4,514,236.69	11:12	Flat soft substrate, turbid water, flatfish, bioturbation, small holothuroids, hermit crab, small red shrimp 2nd vid - 11:15 -11:23	364,177.89	4,514,242.69	11:30:05	> 7 cm	None	light brownish gray 10 YR 6/2	mud and organic material	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-114	2021-07-28	362,256.73	4,514,263.17	9:37	362,328.94	4,514,222.90	9:45	Flat soft bottom, turbid water, flatfish, bioturbation as tracks, small holothuroids, hermit crabs, small red shrimps	362,332.57	4,514,249.78	9:59:32	> 7 cm	15	light brownish gray 10 YR 6/2	mud	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-115	2021-07-24	360,406.33	4,514,274.03	7:50	360,484.02	4,514,236.60	7:58	Flat sand substrate, heavy snow, strong current, burrows, polychaete & amphipod tubes, cerianthids, fishes, many flounder, Jonah crabs	360,453.86	4,514,253.41	8:30:23	> 7 cm	56	Pale Brown 10 yr. 6/3	muddy clay with sand layer surface	Earthy, anoxic	polychaete & amphipod tubes	Sand bottom, polychaete & amphipod tubes
WTG-116	2021-07-28	358,579.47	4,514,214.71	2:48	358,624.28	4,514,286.82	2:56	flat soft substrate, many invertebrates in water column, polychaete & amphipod tubes, Jonah crab, shrimps, flatfish, bioturbation as burrows and trails, cerianthids	358,616.26	4,514,268.50	3:07:25	> 7 cm	48	gray 10 YR 5/1	muddy clay	None	None	Soft substrate, many invertebrates in water column, polychaete & amphipod tubes
WTG-117	2021-07-27	356,803.97	4,514,280.86	21:44	356,779.64	4,514,242.89	21:52	Soft bottom habitat, muddy substrate, gadiform fish, red hake, many invertebrates in water column, burrows, cerianthids	356,782.39	4,514,256.53	22:03:12	> 7 cm	45	Pale Brown 10 yr. 6/3	mud	None	None	soft bottom
WTG-118	2021-07-28	371,549.04	4,512,372.58	16:32	371,565.77	4,512,406.07	16:41	Soft bottom habitat, muddy substrate, hake, shrimps, Jonah crab in burrow	371,580.02	4,512,388.47	16:56:01	> 7 cm	50	light gray 10YR 7/2	mud	None	None	soft bottom, polychaete & amphipod tubes
WTG-119	2021-07-22	369,737.60	4,512,340.81	4:31	369,725.79	4,512,423.19	4:39	Soft sand/flat seafloor, many invertebrates in water column, Jonah crab, aluminum can, flounder, squid (?)	369,730.44	4,512,404.35	4:49:04	> 7 cm	50	grayish brown 10 YR 5/2	muddy clay and sand with organic debris	None	polychaete & amphipod tubes	Soft bottom, polychaete & amphipod tubes, cable
WTG-120	2021-07-27	367,910.13	4,512,422.58	4:10	367,852.23	4,512,343.83	4:20	Flat soft substrate, many invertebrates in water column, polychaete & amphipod tubes, Jonah crabs, sand flounders,silver hake, butterfish	367,879.86	4,512,390.08	4:33:47	> 7 cm	40	brown 10 YR 5/3	muddy clay and sand with organic debris	None	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes, shrimp, shell fragments
WTG-121	2021-07-27	366,021.22	4,512,368.74	6:03	366,058.49	4,512,405.79	6:09	Flat soft substrate, polychaete & amphipod tubes, many invertebrates in water column, Jonah crab, large depression, small crabs, egg masses	366,039.60	4,512,409.40	6:25:05	> 7 cm	49	grayish brown 10 YR 5/2	sandy mud with clay and organic debris	None	polychaete & amphipod tubes	soft sand bottom, polychaete & amphipod tubes, shrimp
WTG-122	2021-07-21	364,171.90	4,512,404.99	10:09	364,112.36	4,512,330.09	10:19	Soft sand substrate, polychaete & amphipod tubes, burrows, Jonah crab, a small fish, many invertebrates in water column, heavy snow. Note - large swell	364,173.48	4,512,404.47	10:32:33	> 7 cm	55	grayish brown 10 YR 5/2	muddy clay and organic debris	None	polychaete & amphipod tubes	soft bottom substrate, polychaete & amphipod tubes
WTG-123	2021-07-21	362,348.00	4,512,467.02	8:09	362,310.43	4,512,405.42	8:16	flat soft sand substrate, Jonah crab, flounder, organic debris (possible tree limb), polychaete & amphipod tubes	362,312.37	4,512,395.25	8:27:15	> 7 cm	45	light brownish gray 10 YR 6/2	muddy clay with some sand	None	polychaete & amphipod tubes, less cohesive sediment	Soft sand bottom, polychaete & amphipod tubes
WTG-124	2021-07-27	360,409.08	4,512,382.89	12:33	360,464.80	4,512,429.24	12:41	soft bottom habitat, muddy substrate, shrimp, tonguefish, Jonah crab	360,458.04	4,512,394.82	12:55:59	> 7 cm	60	light brownish gray 10 YR 6/2	mud	None	polychaete & amphipod tubes	soft bottom
WTG-125	2021-07-27	358,576.57	4,512,354.57	14:19	358,614.13	4,512,414.48	14:29	soft bottom habitat, muddy substrate, shrimp, Jonah crab, burrows, hake, man-made debris	358,604.46	4,512,396.66	14:43:29	> 7 cm	50	light gray 10YR 7/1	mud	None	None	soft bottom
WTG-126	2021-07-24	356,764.30	4,512,381.61	9:29	356,825.69	4,512,350.81	9:35	flat sand substrate, many sea stars, Jonah crab, flounder, sand flounder - 09:34:20	356,770.29	4,512,393.06	10:09:27	> 7 cm	34	pale brown 10 YR 6/3	muddy clay with silt	None	polychaete & amphipod tubes, loose silty material	Sand bottom, sea stars
WTG-127	2021-07-27	354,931.34	4,512,454.58	19:59	354,906.53	4,512,416.34	20:06	soft bottom habitat, many invertebrates in water column, chatognaths, scallop, cerianthid, burrows, flounder, shrimp, Jonah crab, debris	354,919.50	4,512,416.18	20:17:18	> 7 cm	55	light gray 10 YR 7/2	mud	None	None	soft bottom
WTG-128	2021-07-21	369,741.01	4,510,606.21	12:29	369,704.57	4,510,534.35	12:38	soft bottom habitat, muddy substrate, organic material, typical biota	369,744.25	4,510,551.45	12:53:55	> 7 cm	None	brown 10 YR 5/3	mud	None	None	soft bottom
WTG-129	2021-07-27	367,921.55	4,510,590.27	2:36	367,872.85	4,510,523.18	2:44	flat sand substrate, polychaete & amphipod tubes, Jonah crab, many shrimp, many invertebrates in water column, flounder, red hake, winter skate	367,879.57	4,510,536.25	2:53:19	> 7 cm	52	light brownish gray 10 YR 6/2	muddy clay and some sand with organic debris	None	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes
WTG-130	2021-07-27	366,010.28	4,510,485.69	7:37	366,036.29	4,510,557.35	7:44	flat soft substrate, shrimp, cerianthid, flounder, polychaete & amphipod tubes, Jonah crab, gadid fish	366,033.53	4,510,562.61	7:54:13	> 7 cm	40	grayish brown 10 YR 5/2	sandy mud with some clay and organic debris	Mild anoxic	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes
WTG-131	2021-07-22	364,238.59	4,510,563.37	0:49	364,162.86	4,510,565.01	0:56	Note - 10 m offset due to CPT footprint. Soft sand substrate, burrows, polychaete & amphipod tubes, many invertebrates in water column, phycid hake in burrow, Jonah crab, fourspot flounder	364,162.35	4,510,556.67	1:05:32	> 7 cm	80	pale brown 10 YR 6/3	muddy clay and sand	None	polychaete & amphipod tubes, non-cohesive surface	Soft substrate, polychaete & amphipod tubes
WTG-132	2021-07-27	362,309.34	4,510,507.45	9:19	362,365.91	4,510,623.43	9:27	Flat sand substate, gadid fish in burrow, polychaete & amphipod tubes, cerianthids, Jonah crab, small shrimps, summer flounder, spotted hake	362,328.82	4,510,565.15	9:44:44	> 7 cm	72	grayish brown 10 YR 5/2	sandy mud with some clay and organic debris	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-133	2021-07-27	360,447.78	4,510,497.25	10:58	360,535.63	4,510,600.04	11:07	Flat sand substrate, polychaete & amphipod tubes, Jonah crabs, sea star, flounder, gadid, shrimp, school of butterfish	360,483.13	4,510,558.24	11:18:45	> 7 cm	35	light brownish gray 10 YR 6/2	sandy mud with organic debris	None	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes
WTG-134	2021-07-21	358,648.99	4,510,610.87	6:24	358,615.41	4,510,564.41	6:30	Flat sand substrate, Jonah crab, sea star, flounder, possible monkfish, polychaete & amphipod tubes, several sea stars, possible derelict line	358,613.95	4,510,544.36	6:42:04	> 7 cm	44	gray 10 YR 5/1	muddy clay	None	polychaete & amphipod tubes	Soft sand substrate, polychaete & amphipod tubes, sea star
WTG-135	2021-07-27	356,762.21	4,510,623.37	15:53	356,754.17	4,510,581.69	16:00	Soft bottom habitat, muddy substrate, sea stars, flounder, Jonah crab	356,767.52	4,510,565.35	16:13:42	> 7 cm	50	light gray 10 YR 7/1	mud	None	polychaete & amphipod tubes	soft substrate, one sea star, polychaete & amphipod tubes
WTG-136	2021-07-27	367,900.80	4,508,753.37	1:00	367,852.04	4,508,683.30	1:09	flat soft substrate, polychaete & amphipod tubes, many invertebrates in water column, gadid fish, many small red shrimp, Jonah crab, red hake, butterfish, flounder, many fish and shrimp	367,868.98	4,508,689.28	1:18:40	> 7 cm	64	light brownish gray 10 YR 6/2	muddy clay with sand	None	polychaete & amphipod tubes, shrimp	Soft sand bottom, many shrimp, polychaete & amphipod tubes, macroalgae?
WTG-137	2021-07-21	366,028.52	4,508,766.87	14:21	366,010.54	4,508,706.22	14:31	Soft bottom habitat, muddy substrate, with typical regional biota.	366,033.94	4,508,713.65	14:45:24	> 7 cm	65	gray 10 YR 5/1	mud	None	amphipods	soft substrate, polychaete & amphipod tubes
WTG-138	2021-07-25	364,232.86	4,508,749.69	14:07	364,193.60	4,508,698.58	14:16	Soft bottom habitat, muddy substrate, shrimp, Jonah crab, hake, flounder	364,192.12	4,508,702.02	14:29:45	> 7 cm	50	light gray 10 YR 7/2	mud	None	amphipods	soft substrate, polychaete & amphipod tubes
WTG-139	2021-07-25	362,295.69	4,508,753.53	9:03	362,312.79	4,508,684.38	9:10	Flat soft substrate, many sea stars, polychaete & amphipod tubes, flatfishes, Jonah crab, shrimp, gadid in burrow, possible rope	362,323.01	4,508,686.89	9:20:41	> 7 cm	38	light brownish gray 10 YR 6/2	sandy clay	None	polychaete & amphipod tubes, silty	soft substrate, sea stars, polychaete & amphipod tubes
WTG-140	2021-07-24	360,400.45	4,508,735.13	14:23	360,462.24	4,508,688.60	14:32	Soft bottom habitat, muddy substrate, shrimp, hake, sea stars, man-made debris as derelict fishing gear, Jonah crab, flounder	360,457.59	4,508,708.85	14:46:21	> 7 cm	60	light brownish gray 10 YR 6/2	muddy fine sand	None	None	soft substrate; potential flounder observed before grab hits bottom
WTG-141	2021-07-25	358,582.12	4,508,751.86	7:29	358,594.45	4,508,694.51	7:35	Flat sand substrate, many sea stars, fish, polychaete & amphipod tubes, flounder, cerianthids, Jonah crab	358,608.57	4,508,689.98	7:49:31	> 7 cm	40	gray 10 YR 5/1	sandy clay with organic debris	None	None	Soft sand substrate, sea star, hermit crab
WTG-142	2021-07-24	356,719.31	4,508,650.71	11:02	356,770.74	4,508,685.16	11:08	Flat soft substrate, polychaete & amphipod tubes, many sea stars, cerianthids	356,751.99	4,508,706.46	11:40:19	> 7 cm	34	Pale Brown 10 yr. 6/3	muddy clay with organic debris	None	polychaete & amphipod tubes	Soft sand substrate
WTG-143	2021-07-21	366,086.63	4,506,879.94	23:10	366,027.12	4,506,832.40	23:19	Soft bottom substrate, cerianthids, Jonah crab, unidentified eel	366,041.16	4,506,843.74	23:29:47	> 7 cm	None	light brownish gray 10 YR 6/2	mud	None	None	soft bottom
WTG-144	2021-07-25	364,198.33	4,506,852.50	12:38	364,175.77	4,506,830.42	12:43	Soft bottom habitat, muddy substrate, Jonah crab, shrimp, sand flounder	364,190.65	4,506,851.16	12:57:36	> 7 cm	40	light gray 10 YR 7/1	muddy fine sand	None	polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes, shrimp
WTG-145	2021-07-25	362,313.58	4,506,920.47	10:31	362,301.10	4,506,850.31	10:39	Flat soft substrate, flatfish, large hole/depressions in seafloor	362,330.39	4,506,833.02	1 - 10:49:07 2 - 10:54:21	> 7 cm	28	light brownish gray 10 YR 6/2	sandy clay with organic debris	None	polychaete & amphipod tubes	1 - Sand bottom, shrimp, polychaete & amphipod tubes 2 - Sand bottom, polychaete & amphipod tubes
WTG-146	2021-07-24	360,395.85	4,506,883.08	15:58	360,459.09	4,506,824.89	16:08	Soft bottom habitat, muddy substrate, sea stars, shrimp, tonguefish, Jonah crab, anemone, man-made debris	360,459.08	4,506,855.45	16:21:08	> 7 cm	50	light gray 10 YR 7/1	muddy fine sand	None	Multiple sea stars	soft bottom with several sea stars

Attachment E Field Sampling Log

Drop Camera										Grab									Grab Mounted Camera
Station	Date	Start X	Start Y	Time Start	End X	End Y	Time Stop	Notes / Observations		X	Y	Bottom Touchdown Time	Grab Penetration > or = 7cm?	aRPD depth (mm)	Color (Munsell chart)	Texture	Odor	Surficial Features	Notes / Observations
WTG-147	2021-07-24	358,568.64	4,506,891.79	5:26	358,598.49	4,506,841.80	5:32	Flat soft substrate, many invertebrates in water column, fishes, flounder, many sea stars, cerianthids, gadid in burrows, Jonah crab - fawn cusk-eel at 05:31:36		358,604.34	4,506,840.31	5:43:21	> 7 cm	64	light brownish gray 10 YR 6/2	silty mud with some clay	None	Silty, polychaete & amphipod tubes	Soft substrate, polychaete & amphipod tubes
WTG-148	2021-07-27	356,858.45	4,506,723.08	17:45	356,841.27	4,506,677.43	17:53	Soft bottom habitat, muddy substrate, sea stars, shrimp, Jonah crab, skate, burrows/depressions		356,837.16	4,506,660.98	18:12:56	> 7 cm	40	light brownish gray 10 YR 6/2	mud	None	None	soft substrate
WTG-149	2021-07-24	364,142.67	4,505,060.10	21:22	364,166.22	4,504,974.42	21:32	Soft bottom habitat, muddy substate, sea stars, flounder, Jonah crab, butterfish, hake, man-made debris		364,163.40	4,505,001.85	21:45:11	> 7 cm	50	light brownish gray 10 YR 6/2	mud	None	None	soft substrate
WTG-150	2021-07-24	362,285.85	4,505,053.20	19:55	362,324.10	4,504,984.40	20:04	Soft bottom habitat, muddy substrate, abundant Astropecten spp. , silver hake, man-made debris, sand flounder		362,323.13	4,504,996.59	20:15:54	> 7 cm	70	light gray 10 YR 7/2	muddy fine sand	None	None	soft substrate, several sea stars
WTG-151	2021-07-25	360,457.59	4,504,988.41	0:25	360,506.20	4,504,936.23	0:31	Flat soft sand substrate, many sea stars, many invertebrates in water column, fish, polychaete & amphipod tubes		360,479.50	4,504,983.89	0:43:47	> 7 cm	35	light brownish gray 10 YR 6/2	mud and silt	None	silt, sea stars	Sand bottom, many sea stars, polychaete & amphipod tubes
WTG-152	2021-07-24	358,576.50	4,505,041.07	17:30	358,614.58	4,504,979.48	17:39	Soft bottom habitat, muddy substate abundant, sea stars, flounder, Jonah crab, red hake, silver hake, man-made debris		358,600.96	4,504,997.57	17:54:42	> 7 cm	60	light gray 10 YR 7/2	muddy fine sand	None	*Astropecten* spp	soft substrate, sea stars, polychaete & amphipod tubes
WTG-153	2021-07-25	356,816.31	4,504,958.71	3:52	356,773.88	4,505,002.95	3:58	Flat sand substate, abundant sea stars, mercluccid hake, squid, flounder, Jonah crab		356,776.77	4,505,001.72	4:08:47	> 7 cm	59	light brownish gray 10 YR 6/2	silt mud with some clay	None	None	Soft sand bottom, multiple sea star
WTG-154	2021-07-24	362,306.04	4,503,201.34	22:51	362,345.22	4,503,131.26	23:00	Soft bottom habitat, muddy substrate, abundant sea stars, Jonah crab, flounder, hake		362,324.97	4,503,159.31	23:10:32	> 7 cm	70	Pale Brown 10 yr. 6/3	muddy with some clay	None	*Astropecten* spp	soft substrate, many sea stars, polychaete & amphipod tubes
WTG-155	2021-07-21	360,536.86	4,503,163.58	21:06	360,483.91	4,503,131.80	21:14	Soft bottom habitat, muddy substrate, abundant sea stars, flounder, merluccid hakes		360,487.61	4,503,144.20	21:25:03	> 7 cm	None	light brownish gray 10 YR 6/2	mud	None	None	soft substrate, two sea stars
WTG-156	2021-07-25	358,678.31	4,503,102.03	1:59	358,636.84	4,503,142.39	2:05	Flat soft bottom substrate, many sea stars, Jonah crab, flounder, winter skate		358,628.78	4,503,134.01	1- 02:19:05 2 - 02:29:02	> 7 cm	45	Pale Brown 10 yr. 6/3	muddy clay with sand	Fishy smell	Holothuroids, brittle stars, polychaete & amphipod tubes	1 - Sand, sea stars, polychaete & amphipod tubes 2- Sand, polychaete & amphipod tubes
WTG-157	2021-07-21	356,837.16	4,503,190.98	17:41	356,790.96	4,503,132.01	17:51	Soft bottom habitat, muddy substrate, abundant sea stars (*Asterias rubens)* possibly some *Astropecten* sp., shell hash		356,791.30	4,503,144.10	1-19:37:00 2-19:50:03	> 7 cm	None	light brownish gray 10 YR 6/2	mud	None	None	1-soft substrate, sea star, Jonah crab 2-Soft sand bottom, multiple sea star, polychaete & amphipod tubes

ATTACHMENT F | GIS DATA DELIVERABLES

PROVIDED WITH FILING ON EXTERNAL HARD DRIVE



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