US Wind Export Cable Route Survey Offshore Maryland – Indian River Bay, DE Alpine Report Ref 1783 (Rev0)



APPENDIX I VIBRACORE DESCRIPTIONS



Offshore Vibracore Descriptions

Hole No. A01 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,991.8 E 150,944.6 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A01_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/10/2016 9/10/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -8.41 3.13 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.43 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION LEGEND** NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b 0.00 -8.41 -8.59 light brown fine Sand 0.00 dark brown to light gray Silt 0.30 2 0.30 0.46 3 0.46 -9.35 0.94 0.76 dark to light brown Silt with some fine Sand 0.76 1.07 -9.78 1.37 5 light brown to dark gray fine Sand with Clay 1.07 lens at 6'4" 1.52 -10.49 2.08 dark to light gray fine Sand with black 6 laminations and little coarse Sand 2.13 2.44 2.84 3.15 -11.84 3.43

Hole No. A02 Physical INSTALLATION DIVISION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,982.4 E 150,945.1 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A02_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/10/2016 9/10/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -8.203.14 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.14 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -8.20 0.00 light brown fine-medium Sand -8.81 0.61 gray-green fine Sand with little Silt, lens of brown Silt at 4' 0.61 0.91 2 0.91 1.22 -9.57 1.37 3 light gray fine-medium Sand 1 22 1.52 4 1.52 1.83 -10.64 2.44 gray-brown Silty fine Sand 5 2.44 2.74 6 2.74 3.05 -11.34 3.14

Hole No. A03 Physical INSTALLATION DIVISION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,972.8 E 150,948.1 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A03_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/9/2016 9/9/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -8.11 3.14 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.12 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -8.11 0.00 light brown fine-medium Sand with trace gravel and shell fragments 0.00 0.37 -8.46 0.36 gray fine Sand with some Silt, slightly sticky 2 0.37 0.77 -8.87 0.76 light brown with gray fine-medium Sand 3 0.76 2.83 -10.93 2.82 gray fine Sand with some Silt -11.23 3.12

Hole No. A04 Physical INSTALLATION DIVISION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,814.7 E 151,402.9 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A04_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/10/2016 9/10/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -11.31 3.09 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.05 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION LEGEND** SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b а d brown to gray fine-medium Sand with trace 0.15 -11.46 0.00 Silt 0.15 dark brown Silt with Peat; significant organic 2 content 0.15 -11.92 0.61 0.61 Section sent to lab unopened 3 0.61 1.07 -12.371.07 dark gray silty Clay; highly plastic 1.07 -12.68 1.37 1.37 dark gray silty fine Sand with few thin plastic 5 laminations 1.37 1.83 -13.14 1.83 Section sent to lab unopened 6 1.83 2.35 -13.59 2.29 dark gray silty Sand 2.44 -13.757 gray fine-medium Sand 2.44 -14.05 2.74 2.74 Section sent to lab unopened 8 2.74 -14.36 3.05-3.05

Hole No. A05 Physical DIVISION INSTALLATION VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,575.2 E 151,831.5 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A05_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -12.503.22 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.05 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -12.50 0.00 gray fine-course Sand with trace fine Gravel 0.00 0.46 -12.95 0.46 fine-medium Sand with trace 1/2" thick lenses 2 -13.11 0.61 0.46 of sticky Silt gray fine-coarse Sand with trace 1/2" layers of 0.61 dark gray sticky Silt 3 0.61 1.22 -13.72gray fine Sand with trace pieces of wood 4 1.22 -14.02 1.52 1.52 Section sent to lab unopened 5 1.52 -14.33 1.83 1.83 -14.40 1.91 brown sticky Clay with some Silt and fine 6 1.91 light gray-brown fine Sand with trace light gray 2.44 7 2.44 3.05 -15.54 3.05-

Hole No. A06 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,342.6 E 152,261.1 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A06_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -13.203.34 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.05 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b loose to very loose, light brown to gray sandy Gravel with trace shell fragments, well graded -13.20 0.00 0.00 0.61 -13.81 0.61 2 loose to very loose, gray sandy Gravel 0.61 1.07 3 1.04 1.35 4 1.35 -14.87 1.68 1.68 very loose, alternating 4-6" thick beds of 5 poorly graded and well graded gray to light 1.68 gray Sand with trace fine Gravel 2.13 6 2.13 2.74 7 2.74 -16.25 3.05-3.05

Hole No. A07 Physical DIVISION INSTALLATION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,162.4 E 152,595.9 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and COLLECTED file number) A07_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -12.89 7. Penetration, (m) 4.69 18. TOTAL CORE RECOVERY FOR BORING % 4.65 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d g -12.89 0.00 medium brown fine-coarse Sand with trace 0.00 fine Gravel 0.61 2 0.61 -13.81 1.22 medium brown Gravel to sandy Gravel -14.11 tan to brown fine Sand with trace pieces of 1" 3 Gravel and trace 1/2" Clay or Silt balls 1.22 1.83 4 1.83 2.59 -15.482.59 red-brown fine-medium Sand with trace fine 5 Gravel and trace gray Silt balls 2.59 3.05 -15.99 3.10 6 light gray to white fine Sand; iron stained 3.05 red-brown at +/-11' 3.35 3.35 -16.60 3.72 gray fine-coarse Sand with trace fine Gravel 8 3.71 4.04 -16.93 4.04 tan fine-coarse Sand with little fine-coarse 9 4.04 -17.244.34 4.34 red-brown fine-medium Sand 10 -17.47 4.57 4.34 -17 54 4.65 fine-medium Sand with non-cohesive, 4.57 gray-blue Silt balls 2" in diameter 11 4.57 4.65

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Hole No. A08 Physical DIVISION INSTALLATION **VIBRACORE LOG** OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,872.2 E 153,131.0 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A08_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -14.90 4.42 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.70 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION** DEPTH LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b -14.90 0.00 loose, light brown fine-course Sand with trace shell fragments and trace Gravel 0.00 0.91 2 0.91 1.65 -16.43 1.52 light brown fine-coarse Sand with some Gravel 1/2" in diameter 1.65 2.54 -17.422.51 loose, light gray fine-medium Sand with trace 1/2" gray Silt balls and trace fine Gravel 2.51 3.05 5 3.05 4.05 -18.94 4.04 gray fine-coarse Sand with some Gravel and 6 trace 1/2" Silt balls; non-cohesive 4.05 -19.25 4.36 light gray fine-coarse Sand with trace fine gravel and few dark gray laminations of heavy 4.34 minerals in bottom foot -19.60 4.71 4.70

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Hole No. A09 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,584.0 E 153,663.4 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A09_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -17.71 4.70 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.67 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -17.71 0.00 light brown fine to coarse Sand with some Gravel 3/4" in diameter 0.00 1.04 -18.75 1.04 Sandy Gravel 2 1.04 2.68 -19.35 1.65 light gray to light brown fine-medium Sand 3 with trace fine Gravel; grades with coarse 1.65 Sand below 13' 2 74 4 2.74 3.78 5 3.78 4.66 -22.37 4.66

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Hole No. A10 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,296.8 E 154,198.2 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A10_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -18.997. Penetration, (m) 4.61 18. TOTAL CORE RECOVERY FOR BORING % 4.57 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION** DEPTH LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -18.99 0.00 brown fine-medium Sand with trace shell hash 0.00 -19.220.23 0.23 soft, dark gray silty fine Sand with trace shell -19.42 0.43 2 hash 0.23 soft, dark gray silty Clay -19.620.63 0.63 light brown medium-coarse Sand with some 3 fine-medium Gravel 0.63 1.52 1.52 2.44 <u>-2</u>1.43 2 44 light brown fine-coarse Sand with trace gray 5 Silt balls 2.44 2.90 -21.88 2.90 gray to dark gray fine-coarse Sand with some 6 fine Gravel 2.90 3.96 -22.95 light brown fine-coarse Sand with some fine 3.96 Gravel 4.57 -23.56 4.57

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Hole No. A11 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,008.9 E 154,734.5 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A11_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -18.504.70 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.67 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d light brown fine-medium Sand with trace shell -18.50 0.00 fragments and coarse Sand/fine Gravel; more 0.00 gravel in bottom 0.5' 0.61 2 0.61 0.91 3 0.91 -19.721.22 loose, soft, dark gray sandy, silty Gravel; no 4 shear strength 1 22 -20.03 1.52 1.52 gray coarse Sand with trace fine-coarse 5 Gravel 1.52 1.83 6 1.83 2.44 -20.94 2.44 gray fine Sand with trace Silt 7 2.44 -21.24 2.74 2.74 gray to light brown fine-medium Sand 8 2.74 3.20 9 3.20 3.66 10 3.66 4 11 11 4.11 -22.90 4.40 4.42 gray medium-coarse Sand 12 4.42 -23.174.67 4.66

Hole No. A12 Physical DIVISION INSTALLATION VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,299,719.4 E 155,270.5 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A12_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -18.11 4.75 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.34 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -18.11 0.00 light brown fine-medium Sand with trace small 0.00 shell fragments 0.30 2 0.30 0.61 -18.87 0.76 3 -18.89 0.79 soft, sticky dark gray Silt 0.61 0.91 gray to dark gray silty fine Sand; non-cohesive -19.17 1.07 dark gray silty fine Sand to sandy Silt; 0.91 non-cohesive 1.07 5 -19.63 1.52 1.07 gray fine Sand with trace Silt; dark gray 1.52 non-cohesive Silt lens from 8'1"-8'3" 6 1.52 1.83 1.83 2.13 8 2.13 2.44 -20.85 2.74 9 Section sent to lab unopened 2.44 2.74 -21.15 3.0510 dark gray silty fine Sand 2.74 3.05 -21.51 3.40 11 dark gray-green Silt; non-cohesive 3.05 3.41 -21.79 3.68 12 -21 84 light gray fine-medium Sand with trace small 3.40 gravel 3.66 dark gray-green sticky silty Clay, thinly 13 laminated 3.68 3.73 -22.45 14 3 73 4.04 15 4.04 4.34

Hole No. A13 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,299,428.6 E 155,806.8 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A13_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -18.594.52 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.52 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -18.59 0.00 light brown fine-medium Sand with trace shells 0.00 0.52 -19.11 0.52 light brown fine-medium Sand with some 2 0.52 fine-coarse Gravel 1.07 -19.66 1.07 light brown fine-medium Sand with trace fine 3 1.07 gravel and trace shell fragments 1.83 -21.03 2.44 light gray to tan fine-medium Sand with trace shell fragments 2.44 3.35 5 3.35 4.51 -23.10 4.51

Hole No. A14 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,299,139.8 E 156,343.1 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A14_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -20.09 3.73 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.73 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -20.09 0.00 dark-light brown medium-coarse Sand with trace Gravel and shell hash 0.00 0.30 2 0.30 0.61 3 0.61 0.91 -21.10 1.01 light brown medium-coarse Sand with trace shell hash and Gravel up to 1" in diameter 0.91 1.01 5 1.01 1.47 6 1.47 1.83 1.83 2.13 -22.52 2 44 8 light brown medium-coarse Sand 2.13 2.44 9 2.44 2.74 -23.133.05-10 brown coarse Sand 2.74 3.05 11 3.05 3.35 -23.82 3.73 12 3.35 3.73

Hole No. A15 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,923.8 E 156,742.0 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A15_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -23.20 7. Penetration, (m) 4.63 18. TOTAL CORE RECOVERY FOR BORING % 4.65 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b а d one piece of 2" gravel with dark gray coarse -23.250.05 Sand dark gray sticky Clay 0.30 0.61 -23.96 0.76 dark gray-green fine Sand -24.41 1.22 dark gray Silt with trace fine Sand, sticky 2 1.22 -24.72 1.52 1.52 gray fine-medium Sand with trace shell fragments 3 2.13 2.44 4 2.74 3.05 5 -26.40 3.20 3.05 3" boulder in red Sand 3.35 gray Silt with some shell fragments 6 3.35 3.66 -27.01 3.81 dark gray fine Sand with some shell fragments 7 -27.31 4.11 3.96 gray coarse-fine Sand with gravel up to 2" in 4.27 diameter -27.84 4.65

Hole No. A16 Physical DIVISION INSTALLATION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,317.4 E 156,696.8 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and COLLECTED file number) A16_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -23.20 7. Penetration, (m) 4.61 18. TOTAL CORE RECOVERY FOR BORING % 4.62 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (Description) (m) (T/SQ FT = KG/SQ CM)b d g brown fine-medium Sand with Shells -23.32 0.13 0.00 dark gray fine Sand with trace thin beds of silt 0.12 -23.58 0.38 2 dark sticky Clay with silty Clay towards end 0.13 -23.80 0.61 0.37 Section sent to lab unopened 0.38 -24.11 0.91 0.46 dark gray silty Clay with trace coarse Sand 4 -24.29 1.09 0.61 dark gray coarse Sand with trace shell hash 1.24 0.91 -24.44 dark gray fine-medium Sand with with trace shell hash and area of dense shell hash from 0.91 5'4"-5'10" 1.09 6 1.09 1.24 7 -25.29 2.09 1.24 dark gray fine Sand with trace shell hash and 1.52 silty Clay lens from 10'5"-10'8" 8 1.52 1.83 9 1.85 2.16 10 2.16 2 44 2.44 2.74 12 2.80 3.10 13 3.10 -27.334.14 3.51 dark brown silty Sand with trace shell hash; 14 lens of coarse Sand and shells from 3.51 14'3"-14'7' 3.81 15 -27.82 4.62 3.81 4.11 16 4.14 4.62

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Hole No. A17 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,297,725.4 E 156,652.1 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED COLLECTED 4. HOLE NO. (As shown on drawing title and file number) A17_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -23.10 7. Penetration, (m) 4.61 18. TOTAL CORE RECOVERY FOR BORING % 4.65 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND (m) (m) (Description) (T/SQ FT = KG/SQ CM)SAMPLE DEPTH b g -23.10 0.00 interbedded layers 1/4"-1" thick of dark gray silt and fine-medium Sand 0.30 0.61 -23.77 0.66 dark gray Silt, soft 2 0.91 1.22 3 -24.80 1.70 1.52 dark gray-green silty fine Sand with some 1.83 shell fragments 4 1.98 2.29 -25.54 2.44 dark green-gray silty fine Sand with some shell fragments 5 2.74 3.05 6 3.35 -26.76 3.66 3.35 light gray medium Sand 3.66 3.81 8 3.81 4.27 9 4.27 -27.75 4.65 4.57 10 4.57 4.88

Hole No. A18 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,514.8 E 157,455.2 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A18_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -24.99 7. Penetration, (m) 4.65 18. TOTAL CORE RECOVERY FOR BORING % 4.65 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (Description) (m) (T/SQ FT = KG/SQ CM)b а d green-brown fine-medium Sand with some -25.12 0.13 0.00 -25.20 fine-coarse Gravel 0.20 0.13 soft, dark gray silty Clay; plastic 2 light brown sandy coarse Gravel 0.13 0.20 3 0.20 1.07 -26.06 dark gray silty fine Sand; non-plastic 1.07 -26.37 1.37 1.37 gray fine Sand 5 1.37 2.69 <u>-27.</u>68 2.69 gray fine-coarse Sand with trace fine Gravel 6 2.69 3.51 -28.50 3.51 dark gray fine Sand layers 2-8" thick interbedded with soft dark gray silty Clay 3.51 layers 2-6" thick 4 27 -29.26 gray fine-medium Sand with trace Silt; 8 4.27 non-cohesive 4.65 -29.64 4.65

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Hole No. A19 Physical DIVISION INSTALLATION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,297,913.2 E 157,481.4 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and COLLECTED file number) A19_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -23.71 4.72 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.60 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (Description) (m) (T/SQ FT = KG/SQ CM)b d g -23.71 0.00 brown medium-coarse Sand with trace Gravel and shell hash 0.00 -23.94 0.23 0.23 dark brown fine-medium Sand with trace shell hash and lens of coarse Sand from 1'4"-1'6" 0.23 0.61 3 0.61 0.91 0.91 -25.03 1.32 light-dark brown fine Sand with trace shell 5 hash and Clay lens from 4'5"-4'6" 1.32 1.65 6 -25.75 2.03 1.88 dark gray fine Sand with trace shell hash and 2.19 Clay lens from 6'9"-6'10" 2.19 -26.232.51 2.51 dark gray silty Sand with Clay lens from 8 8'3"-8'5" and coarse Sand lens from 8'5"-8'7" 2.51 -26.53 2.82 2.82 Section sent to lab unopened 9 2.82 -26.84 3.12 3.12 light gray fine Sand with shell hash and dense shell lens from 11'5"-11'8' 10 3.12 3.58 11 3 58 4.09 -27.80 4.09 12 dark brown silty Sand with shell hash 4.09 4.60 -28.31 4.60

Hole No. A20 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,172.9 E 157,887.6 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A20_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -24.69 7. Penetration, (m) 4.61 18. TOTAL CORE RECOVERY FOR BORING % 4.60 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -24.69 0.00 light green-brown fine Sand 0.00 0.66 -25.35 0.66 2 gray to light brown fine Sand 0.66 2.90 -27.58 2.90 light brown-green fine-medium Sand with 3 3.07 -27.76 some shells and trace fine Gravel 2.90 3.07 gray silty fine Sand with one piece of gravel at 4 3.07 4.60 -29.29 4.60

Hole No. A21 Physical DIVISION INSTALLATION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,297,765.8 E 158,342.8 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED COLLECTED 4. HOLE NO. (As shown on drawing title and file number) A21_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) : STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -27.10 4.70 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.69 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d g -27.10 0.00 light brown medium-coarse Sand with some 0.00 shells 0.34 -27.43 0.33 gray-green silty fine Sand with very fine shell 2 0.34 hash -27.71 0.61 0.61 Section sent to lab unopened 3 0.61 -28.01 0.91 1.52 gray medium-coarse Sand with some shells -28.22 1.12 4 0.91 light brown-gray very fine-fine Sand with some 2.03 Silt and shells in lenses 2-3" thick 5 1.12 1.47 6 1.47 1.83 1.83 2.13 8 2.13 2.44 9 2.54 2.84 10 2.84 3.15 11 3.15 3.45 12 3.45 3.76 13 3.76 4.06 14 4.06 4.37 -31.79 4.69 15 4.37 4.67

Hole No. A22 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,297,274.1 E 158,699.7 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED COLLECTED 4. HOLE NO. (As shown on drawing title and file number) A22_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -27.49 4.59 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.59 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -27.49 0.00 light brown fine Sand, Silt lens at 0.5' -27.95 0.46 0.30 light brown- light gray fine-medium Sand with 0.61 trace 2" layers of shell hash, 2"x2" pebble at 2 0.91 1.22 3 1.22 1.52 -29.53 2.03 wet, dark gray Silt, low plasticity 2.13 2.44 5 2.44 2.74 6 2.74 3.05 7 3.05 3.35 8 3.35 3.66 9 3.96 4.27 -32.08 4.59

Hole No. A23 Physical INSTALLATION DIVISION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,296,781.8 E 159,055.2 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A23_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -28.71 7. Penetration, (m) 4.83 18. TOTAL CORE RECOVERY FOR BORING % 2.69 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION LEGEND** NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d light brown to dark gray fine-medium Sand with clay lens from 2'9"-2'10" and shell lens -28.71 0.00 0.00 from 3'3"-3'5" 0.30 2 0.30 0.61 3 0.61 0.91 0.91 1.22 5 -30.24 1.52 1.22 unsplit 1.52 6 -30.54 1.83 1.52 dark brown Silt with trace fine Sand and shell 1.83 lens from 6'7"-6'10" 1.83 -31.00 2.29 2.29 dark gray silty Sand with trace shell hash 8 2.29 2.39 2.69 -31.40 9 2.39 2.69

Hole No. A24 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,296,290.1 E 159,414.6 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) A24_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -30.69 7. Penetration, (m) 4.66 18. TOTAL CORE RECOVERY FOR BORING % 4.57 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND (m) (m) (Description) (T/SQ FT = KG/SQ CM)SAMPLE DEPTH b -30.69 0.00 light brown-brown gray fine-medium Sand with trace fine gravel in top few inches 0.15 0.25 2 0.61 -31.61 0.91 0.91 gray sandy Silt 3 0.91 1.22 1.80 2.10 5 2.29 2.59 6 3.02 3.32 3.54 3.81 8 3.81 4.08 9 4.08 4.39 -35.27 4.57

Hole No. P01 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,832.9 E 151,367.3 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P01_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/10/2016 9/10/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -10.61 3.11 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.65 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -10.61 0.00 light brown coarse-fine Sand with trace fine 0.00 Gravel 0.30 2 0.30 -11.22 0.61 0.61 black fine-medium Sand with some organic 3 -11.45 0.84 0.61 light brown to gray coarse-fine Sand 0.91 4 -11.95 1.35 1.22 -12.05 dark gray Clay lens 1.52 gray fine Sand 1.68 -12.28medium-dark brown fine Sandy Silt 5 1.68 -12.51 1.91 1.98 medium-dark brown silty fine Sand 6 2.13 -12.97 2.36 2.44 very dense, light brown clayey fine Sand -13.122.51 7 gray to light brown silty Clay, high plasticity 2.44 -13.35 2.74 2.74 Section sent to lab unopened 8 2.74 -13.663.053.05 green-gray Clay -13.96 3.35 dark gray Clay with some fine Sand 9 3.51 3.81 -14.473.86 Silty Clay with trace fine Sand 10 3.96 -14.85 4.24 4.27 coarse-fine silty Sand with trace fine gravel 11 4.42 -15.26 4.65 4.65

Hole No. P02 Physical DIVISION INSTALLATION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,301,536.0 E 151,914.2 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P02_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -13.504.71 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.99 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b g -13.50 0.00 gray to brown silty Clay with trace lenses of medium Sand; low plasticity 0.00 0.30 2 0.30 -14.11 0.61 0.61 Section sent to lab unopened 3 0.61 -14.42 0.91 0.91 dark gray-brown Silt with trace fine Sand 4 -14.721.22 0.91 dark gray-brown fine-medium Sand with 1" 1.22 clay lens at 4'9" 5 -15.03 1.52 1.22 Section sent to lab unopened 1.52 6 -15.33 1.83 1.52 -15.38 1.88 dark gray-brown fine-medium Sand with 1" 1.83 clay lens 6'1" tan fine-coarse Sand with trace fine-coarse 1.83 Gravel and dark gray Silt balls 2.13 8 2.13 2.44 9 2.44 2.59 10 2.59 2.90 11 2.90 3.20 12 3.20 3.99 -17.493.51 13 3.51 3.81 14 3.81 3.99

Hole No. P03 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,377.0 E 154,046.9 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P03_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -17.31 3.35 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.25 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION LEGEND** NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -17.31 0.00 silty coarse-fine Sand with trace coarse-fine Gravel 0.15 0.46 -18.13 0.81 coarse-fine gravely Clay with some coarse-fine Sand 2 0.91 -18.531.22 1.22 gray silty Clay 3 1.22 1.52 4 1.83 -19.37 2.06 2.13 gray silty Clay 5 2.44 2.74 6 2.74 3.05 3.18 -20.49-20.56 Peat 3.05 3.18 8 3.18 3.25

Hole No. P04 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,177.2 E 154,420.7 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P04_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -19.993.29 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.18 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND (m) (m) (Description) (T/SQ FT = KG/SQ CM)SAMPLE DEPTH b -19.99 0.00 Clay with coarse-fine Sand and some coarse-fine Gravel, 2 large cobbles -20.30 0.30 0.15 gray Clay 0.30 2 0.30 0.61 3 0.91 1.22 4 1.52 1.83 5 2.13 2.44 6 2.44 2.74 7 -22.94 2.95 2.74 organic Clay with inter-bedding of peat 3.05 -23.17 3.18 8 3.05 3.17

Hole No. P05 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,481.5 E 157,497.2 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P05_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -25.91 7. Penetration, (m) 4.68 18. TOTAL CORE RECOVERY FOR BORING % 4.68 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d g dark brown to dark gray sandy Silt with numerous laminations 1/8-3/4" thick and some -25.91 0.00 0.00 shell fragments 0.30 2 0.30 0.61 3 0.61 0.91 0.91 1.22 5 1.22 1.52 6 1.52 1.83 1.83 2.13 8 2.13 2.44 9 2.44 2.74 10 2.74 -29.16 3.25 3.05 dark gray fine-medium Sand with little Silt and 11 trace shell fragments; non-cohesive 3.05 3.35 12 3.30 3.67 13 3.66 4.11 14 4.11 4.68 -30.594.68

Hole No. P06_Physical INSTALLATION DIVISION SHEET VIBRACORE LOG **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,318.8 E 157,697.0 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P06_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -27.01 3.71 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 3.68 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION** DEPTH LEGEND NO. SAMPLE DEPTH (m) (Description) (m) (T/SQ FT = KG/SQ CM)b d -27.01 0.00 gray-brown fine Sand with few shell fragments 0.00 0.33 -27.33 0.33 dark gray silty fine Sand; non-cohesive 2 0.33 0.71 -27.72 0.71 gray fine-medium Sand with some shell fragments and trace thin Silt lenses 3 0.71 1.34 -28.35 1.35 dark gray sandy Silt with few shell fragments 4 -28.55 1.55 1 34 Section sent to lab unopened 1.55 5 -28.83 1.83 1.55 dark gray fine Sand with trace Silt and trace 1.83 sticky silt lenses 1.5" wide 6 1.83 2.10 -29.75 2.74 gray fine-medium Sand with some shells and 7 2.74 3.18 -30.18 3.18 dark gray silty fine Sand with trace 1/4" Silt 8 3.18 lenses; grades into sandy Silt at 11' 3.68 -30.69 3.68

Hole No. P07 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,298,141.9 E 157,913.0 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P07_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -27.19 7. Penetration, (m) 4.90 18. TOTAL CORE RECOVERY FOR BORING % 3.86 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION LEGEND** NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -27.19 0.00 gray fine Sand with trace shell fragments in 0.00 few lenses 0.46 2 0.46 0.91 4 0.91 1.37 5 1.37 1.83 6 1.83 2.29 2.29 2.74 8 2.74 3.20 -30.39 3.20 dark gray-green silty fine Sand with some shell fragments; non-cohesive 9 3.20 3.66 -31.05 3.86

Hole No. P08 Physical DIVISION INSTALLATION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,297,588.8 E 158,469.4 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P08_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -26.70 7. Penetration, (m) 4.63 18. TOTAL CORE RECOVERY FOR BORING % 4.11 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d g -26.70 0.00 tan to gray fine-medium Sand with trace shell fragments and sticky Silt lens from 7'5"-7'6" 0.00 0.30 2 0.30 0.61 3 0.61 0.91 0.91 1.22 5 1.22 1.52 6 1.52 1.83 1.83 2.13 8 -29.222.51 2.26 Section sent to lab unopened 2.51 9 2.51 -29.62 2.92 2.92 -29.67 soft, sticky dark gray-green Silt 10 gray silty fine Sand with trace shells and shell 2.97 fragments 3.35 11 3.35 3.66 12 3.66 4.11 -30.82 4.11

Hole No. P09 Physical INSTALLATION DIVISION SHEET VIBRACORE LOG OF **SHEETS** 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,300,685.3 E 153,481.3 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES COLLECTED DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and file number) P09_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) COMPLETED STARTED 6. DIRECTION OF HOLE 16. DATE HOLE 9/13/2016 9/13/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -16.404.50 7. Penetration, (m) 18. TOTAL CORE RECOVERY FOR BORING % 4.50 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SOIL STRENGTH CHARACTERIZATION SAMPLE DEPTH CLASSIFICATION OF MATERIALS **ELEVATION** LEGEND NO. SAMPLE DEPTH (m) (m) (Description) (T/SQ FT = KG/SQ CM)b d -16.40 0.00 loose, light brown fine-medium Sand with trace fine-coarse Gravel 0.00 0.46 2 0.46 0.91 3 0.91 1.37 4 -17.92 1.52 1.37 gray to red-brown fine Sand with trace Silt 1.83 balls 5 1.83 2.29 6 2.29 -18.91 2.51 2.51 dark gray-green silty Clay; low plasticity 7 2.51 3.05 8 3.05 3.35 9 3.35 3.66 10 3.66 3.96 11 3.96 4.27 -20.89 4.50 12 4.27 4.50

Hole No. P10 Physical DIVISION INSTALLATION VIBRACORE LOG OF SHEETS 1. PROJECT 10. SIZE AND TYPE OF CUTTER: 3.5 INCH **Export Cable Survey** 11. DATUM FOR ELEVATION SHOWN: MLLW 2. LOCATION (Coordinates or Station) Delaware & Maryland N 1,296,053.1 E 159,452.6 12. MANUFACTURER'S DESIGNATION OF CORER 3. DRILLING AGENCY Vibracore Alpine Ocean Seismic 13. TOTAL NO. OF SAMPLES DISTURBED UNDISTURBED 4. HOLE NO. (As shown on drawing title and COLLECTED file number) P10_Physical 14. TOTAL NUMBER CORE BOXES 5. NAME OF DRILLER 15. DEPTH BELOW SEA SURFACE () (m) STARTED COMPLETED 6. DIRECTION OF HOLE 16. DATE HOLE 9/14/2016 9/14/2016 **▼** VERTICAL INCLINED DEG. FROM VERT. 17. MLLW ELEVATION AT TOP OF CORE () (m) -28.71 7. Penetration, (m) 4.61 18. TOTAL CORE RECOVERY FOR BORING % 4.65 8. Recovery, (m) 19. SIGNATURE OF INSPECTOR 9. Total Recovery, (m) SAMPLE DESCRIPTIONS AND SAMPLE CLASSIFICATION OF MATERIALS **ELEVATION DEPTH** LEGEND SOIL STRENGTH CHARACTERIZATION NO. SAMPLE DEPTH (m) (Description) (m) (T/SQ FT = KG/SQ CM)b d g dark gray-green fine silty Sand grading down -28.71 0.00 to sandy Silt; non-plastic, slightly cohesive 0.00 0.30 2 0.30 -29.32 0.61 0.61 Section sent to lab unopened 3 0.61 -29.63 0.91 0.91 dark gray-green fine silty Sand grading down -29.80 1.09 to sandy Silt; non-plastic, slightly cohesive 0.91 dark green-gray silty fine Sand with some 1.07 shells and shell fragments 5 1.07 1.37 6 -30.54 1.83 1.37 Section sent to lab unopened 1.68 -30.85 2.13 1.68 soft, sticky dark green-gray fine sandy Silt 1.83 8 -31.232.51 1.83 dark gray fine silty Sand with numerous shell 2.13 fragments; non-cohesive -31.46 2.74 9 Section sent to lab unopened 2.13 2.51 -31.76 3.05-10 tan to gray fine-medium Sand with little shell 2.51 fragments 2.74 11 2.74 3.05 12 -32.603.89 3.05 gray to dark gray Sand with shell fragments; 3.35 cohesive 13 3.35 -32.98 4.27 3.66 dark gray sandy Silt with shells 14 3.89 4.27 -33.36 4.65 15 4.27 4.57



Inshore Vibracore Descriptions



BORING NUMBER VC-IRB-01-ALT

	WATE CORE CORE	R DEP PENE RECO LOCA 3, UTM (tst)	ATION TH TRATI VERY TION I Zone	ON _ 1.7' X:47	2.50 i 7 met 79360 orth,	meters .02 meter	ay, Di	E SIZE _8.018 cm 7:4271065.12 A SECONDS PER SAMPLE A 20 40 60 80 PL MC LL 20 40 60 80 □ FINES CONTENT (%) □
RILLING CONTRACTOR Alpine Ocean Seismic RILLING METHOD Vibracore OGGED BY MK CHECKED BY OTES MATERIAL DESCRIPTION (CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	CORE CORE CORE NAD 8	PENE RECO LOCA 3, UTM (tst)	TRATI VERY TION I Zone	ON _ 1.7 X:47	2.50 i 7 met 79360 orth,	meter ers .02 meter	s	7:4271065.12 A SECONDS PER SAMPLE 20 40 60 80 PL MC LL 20 40 60 80
CHECKED BY OTES MATERIAL DESCRIPTION (CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	CORE CORE NAD 8	LOCKET PEN. (tst)	VERY TION I Zone	1.7 X:47	7 met '9360 orth,	ers .02 meter	s	7:4271065.12 A SECONDS PER SAMPLE A 20 40 60 80 PL MC LL 20 40 60 80
OGGED BY MK CHECKED BY	CORE NAD 8	POCKET PEN. (tsf)	TION I Zone	X:47	'9360 orth,	.02 meter	s	7:4271065.12 ▲ SECONDS PER SAMPLE ▲ 20 40 60 80 PL MC LL 20 40 60 80
MATERIAL DESCRIPTION (CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	NAD 8	POCKET PEN. (tsf)	1 Zone	18 N	orth,	meter	s	A SECONDS PER SAMPLE ▲ 20 40 60 80 PL MC LL 20 40 60 80
MATERIAL DESCRIPTION (CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,		POCKET PEN. (tsf)		. 1				20 40 60 80 PL MC LL 20 40 60 80
(CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, black Clay with organic odor, non-cohesive, (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	SAMPLE TYPE NUMBER		TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	ELECTRICAL RES (ohms-cm)	HERMAL COND. (W/m-K)	20 40 60 80 PL MC LL 20 40 60 80
(CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, black Clay with organic odor, non-cohesive, (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	SAMPLE TYI NUMBER		TORVANE (tsf)	TOTAL UNIT V WEIGHT (pc	SPECIFIC GRAVITY	ELECTRICAL I (ohms-cm)	HERMAL CO (W/m-K)	PL MC LL 20 40 60 80
(CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, black Clay with organic odor, non-cohesive, (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	SAMPLE		TORV (ts:	TOTAL UI WEIGH	SPEC GRA\	ELECTRIC (ohms	HERMAI (W/r	20 40 60 80
(CL) Soft, wet, black Clay with organic odor, non-cohesive, non-plastic (CL) Soft, wet, black Clay with organic odor, non-cohesive, (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,	SAN		Ĭ.	TOT	s o) SELEC	Η	☐ FINES CONTENT (%) ☐
non-plastic 1.5 (CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,		N/A		-		Ш		
(CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,		N/A						20 40 60 80 : : : :
(CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,		N/A						
(CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,			N/A					
(CL) Soft, wet, dark gray Clay with organic odor, non-cohesive,								
(CL) Soft, wet, dark gray Clay with organic odor, non-cohesive, non-plastic								
non-plastic	-	N/A	0.03					
7////								
	1	N/A	0.05					
<u>.0.</u>	2							
		N/A	0.07					
	3							
.5		N/A	0.08					
(SP) Loose, moist, dark gray fine Sand	-	1						
2.0								
-								······································
Bottom of borehole at 2.50 meters.								



BORING NUMBER VC-IRB-02-ALT

DDO		JS Wind	PROJEC	T NAN	/ IE _E	xport	Cable	Surv	/ey	
FICO	JECT N	NUMBER _1783	PROJEC	T LOC	ATIO	N Inc	dian F	River E	Bay, D	E
DAT	E STAF	RTED 10/7/17 COMPLETED 10/7/17	WATE	R DEP	PTH _	1.8 m			HOLE	SIZE 8.018 cm
DRIL	LING (CONTRACTOR Alpine Ocean Seismic	CORE	PENE	TRAT	ION _	3.35	meter	rs	
DRIL	LING N	METHOD Vibracore	CORE	RECO	VERY	2.5	6 me	ters		
LOG	GED B	Y MK CHECKED BY	CORE	LOCA	TION	X:4	79364	1	Y:4	271033.18
NOT	ES		NAD 8	3, UTN	M Zon	e 18 N				
			Щ	j		/ET		ELECTRICAL RES (ohms-cm)	Ğ.	▲ SECONDS PER SAMPLE ▲
Ξ.	SRAPHIC LOG		SAMPLE TYPE NUMBER	H .	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	ALF Gm)	THERMAL COND (W/m-K)	20 40 60 80
DEPTH (m)	E SPI	MATERIAL DESCRIPTION	PLE	Eg (RV/ (tsf)	N F	ĕECI	RIC ms-	MAL Wm	PL MC LL 20 40 60 80
	9		N M M	200	잍	TAL	20	[교호	문장	☐ FINES CONTENT (%) ☐
		(9).) (0)	ш.		D'		<u>u</u>	Ė	20 40 60 80
		(CL) Very soft, wet, dark gray-green Clay, non-cohesive, non-plastic								ļ
				N/A	0.01					
 0.5			Н							
				NI/A	0.01					
			2	IN/A	0.01					
	////			1						
		(CL) Soft, wet, gray-green Clay with thin bed of Peat at 1.98 m, non-cohesive, non-plastic		N/A	0.015	5				
1.0_										
-										
-				N/A	0.03					
. <u>-</u>										
1.5			3	N/A	0.05					ļ
-				IN/A	0.03					
										ļ
			4	N/A	0.05					
 2.0										
				N/A	0.07					
			5							
	-	(CL) Soft, moist, dark brown Silty Clay with Peat		NI/A	0.06					
2.5			6	11//	0.00					
-										
-										
· -										
3.0										<u></u>
										ļ <u>.</u>
		Bottom of borehole at 3.35 meters.								<u> </u>



BORING NUMBER VC-IRB-03-ALT

PRU									<u>Surv</u> River E		
		ARTED _10/7/17									SIZE _ 8.018 cm
		CONTRACTOR Alpine Ocean Seismic								_	6.016 CIII
		METHOD Vibracore									V. 4074000 00
		BY MK CHECKED BY									Y:4271003.99
NOIL	<u> </u>		NA	D 83	5, U I N	/i Zone	e 18 N	iortn,	metei	s	
					ż		νET		RES (N O	▲ SECONDS PER SAMPLE ▲
⊑	GRAPHIC LOG		🗏	NUMBER	L DE	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	CTRICAL (ohms-cm)	THERMAL COND. (W/m-K)	20 40 60 80
(m)	Z V V V V	MATERIAL DESCRIPTION	 	JMB	(tsf.	(tsf	동	ŞE	ELECTRICAL (ohms-cm)	\A \A \m'	PL MC LL 20 40 60 80
ן כ	9		M	ž	000	2	ME.T	P P	[[기교호		☐ FINES CONTENT (%) ☐
			S		ъ.		2			픋	20 40 60 80
		(CL) Soft, moist, dark gray Clay with thin bed of fine Sand from 0.15-0.20 m, cohesive, non-plastic		1							
		,		•							
		(SP) Loose, moist, gray fine-medium Sand with trace lenses of Clay		,	0.25	0.02					
		Clay		2							
0.5		(CL) Soft, moist, brown Clay with trace fine Sand, cohesive,									
-		non-plastic	\parallel	2	N/A	0.04					
-				3 4							
1.0		(CL) Soft, wet, dark brown Clay with Peat with trace fine Sand and thin beds of dense Peat, cohesive, non-plastic			0.1	0.04					
		and thin beds of derise Feat, corresive, non-plastic									
					N/A	0.01					
			\vdash								
1.5					0.1	0.07					<u> </u>
				5	0.1	0.07					
-			H								
-			\perp		N/A	0.055					
2.0				6							
2.0											
		(OL MI) On the granital limits are sold of the Olevenith Leave give a filter	┵		N/A	0.07					
	44444	 (CL-ML) Soft, moist, light gray Silty Clay with large piece of tree root 									
2.5	_										<u> </u>
. 4											
3.0			1								

A GARDLINE COMPANY

CLIE	ENT _L	JS Wind F	PROJEC	ΓNAN	/IE _E	xport	Cable	Sun	vey					
PRC	JECT		PROJEC [*]	LOC	ATIO	N Inc	dian F	River I	Bay, D	E				
DAT	E STA	RTED 10/6/17 COMPLETED 10/6/17	WATE	R DEP	тн _	5.6 m			HOLE	SIZE _	8.018	cm		
DRII	LING	CONTRACTOR Alpine Ocean Seismic	CORE	PENE	TRAT	ION _	3.05	mete	rs					
DRII	LING	METHOD _Vibracore	CORE	RECC	VERY	2.7	'4 me	ters						
LOG	GED E	BY _MK CHECKED BY	CORE	LOCA	TION	X:48	80905	5.7	Y	:4271289	9.16			
тои	ES _		NAD 8	3, UTN	/I Zon	e 18 N	lorth,	mete	rs					
			ш			H		ES	<u>□</u>	▲SE	CONDS F	PER SA	AMPLE	_
	2		SAMPLE TYPE NUMBER	POCKET PEN. (tsf)	빌	TOTAL UNIT WET WEIGHT (pcf)	으는	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	. 20	40	60	80	0
E (E	GRAPHIC LOG	MATERIAL DESCRIPTION	MBE.	(ET	TORVANE (tsf)	SH	SPECIFIC GRAVITY	35C/	¥ F	Pl F		MC	_LL 	
ĪĒ	GR		A M	Š	2	API MEIG	SPI		<u> </u> }}≳	20	40 FINES CO			
			\s\	ď		0_^			岸	20				0
		(CL) Soft, moist, brownish-gray Sandy Clay with little Peat, cohesive, non-plastic										;		
ļ.		conesive, non-plastic								ļ			;	; ;
├ -				N/A	0.075	,				ļ				
- -			1							ļ				
0.5											<u>:</u>			
† -			2	N/A	0.04					;		:	:	:
<u> </u>											:	:	:	
		(CL) Soft, moist, gray Clay with trace Peat, cohesive, non-plastic			0.00						:	:	:	:
1.0				N/A	0.09									
ļ.										ļ <u>.</u>				
├ -				0.1	0.05					ļ <u>.</u>				
				0	0.00					ļ <u>.</u>				<u>.</u>
- -														
1.5				0.1	0.12					 			-	
† -													••••••	:
ļ -			3								:			
				N/A	0.12									
2.0											<u></u>			
├ -				0.1	0.09					ļ <u>.</u>				
├ -				0.1	0.03									
-				1									:	; :
2.5				N/A	0.04						· · · · · · · · · ·			:
<u>} </u>			4							<u> </u>				
													:	
	<i> </i>		₩	N/A	0.095	•								
<u>-</u>										ļ <u>.</u>				: : •
3.0	↓													<u> </u>
<u> </u>		Bottom of borehole at 3.05 meters.	•	•	•			•	•	· · ·				
5														
3.0														
3														
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SAlpine Agardine company

		JS Wind	PROJEC	TNAN	/IE	xport	Cable	Surv	ey					
PRO	JECT N	NUMBER <u>1783</u>	PROJEC	T LOC	ATIO	N Inc	dian R	liver E	Bay, D	E				
DAT	E STAF	RTED 10/6/17 COMPLETED 10/6/17	WATE	R DEP	тн	1.6 m			HOLE	SIZE _	8.018	cm		
		CONTRACTOR Alpine Ocean Seismic												
		METHOD Vibracore	CORE											
		SY MK CHECKED BY								Y:427141	18.94			
			NAD 8											
						1.					001100			
			٦ _~	z.	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	ر ا	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	SE 20	CONDS 40			E ▲ 80
ř E	GRAPHIC LOG	MATERIAL DECORPTION	SAMPLE TYPE NUMBER	⊢ (:	NA €	ĔΕ	SPECIFIC GRAVITY	SAL	loš	PL		MC	LL	
当ち	LO RA	MATERIAL DESCRIPTION	IPL IVM	X (1)	(S)	글프	PEG	표	W/n	20	40	60		80
	ا قا		SAN	POC	Ĕ	OTA	SO		岸)	□F	INES C	ONTEN	NT (%) [٦
	7777	(CL) Very soft, moist, gray Clay with trace fine shell fragments,				Ĕ		Ш	Ė	20	40	60) 8	80
		non-cohesive, non-plastic												
											:	:		
				N/A	0.15						:	:		:
 0.5			1	-										
0.5											:			:
-			2	N/A	0.02						:	:		:
	//// //	(CL) Soft, moist, gray Clay with trace fine shell fragments and		1								:		:
		thin bed of Peat from 1.58-1.62 m, non-cohesive, non-plastic		NI/A	0.04						:	:		:
1.0				N/A	0.04									<u>:</u>
				-										<u>:</u>
				NI/A	0.06									. .
			3	IN/A	0.00									
				1										. ;
1.5			L 4	N/A	0.065	5					<u>:</u> -			!
				1							· · · · · . · ·			<u>.</u>
	<u> </u>	Soft, moist, dark brown Peat		1							:	:		:
	1/ 1/	Cott, moist, dank brown i cat		N/A	0.05						:	:		:
 2.0	<u> </u>		6											
	1/2 \(\frac{1}{2}\)		5								÷			:
	-										:	:		:
										ļ <u>.</u>				<u>.</u>
2.5										ļ	<u></u>			<u>:</u>
														<u>:</u>
														. <u>.</u>
														. <u>.</u>
										 : 	· · · · · . · ·			<u>:</u>
3.0	-									<u> </u>				
														÷
											· · · · · · · · · · · · · · · · · · ·			
		Bottom of borehole at 3.35 meters.									•••••	• • • • • •		<u>: · · · · · · · · · · · · · · · · · · ·</u>

DATE S	STAR [®]	UMBER 1783 TED 10/6/17 COMPLETED 10/6/17 ONTRACTOR Alpine Ocean Seismic	PROJEC WATE											
DRILLI	ING C			R DEP	тн	1 6 m			UOI E	SIZE	0 010	2 cm		
		ONTRACTOR Alpine Ocean Seismic				1.0 111			HOLE	- 0126 _	0.010	CIII		
			CORE	PENE	TRAT	ION	3.35	meter	s					
	ing m	ETHOD Vibracore	CORE											
LOGGE		/ MK CHECKED BY								Y:427139	94.1			
			NAD 8											
1					1						001100		24451	
	,		SAMPLE TYPE NUMBER	Ä.	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	0 <	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	20			SAMPLI	80
(m) GRAPHIC	၌	MATERIAL DESCRIPTION	<u> </u>	⊢€ P	A E	E E	SPECIFIC GRAVITY	S-cr	Αξ	PL		MC	LL	
		MATERIAL DESCRIPTION	JAN M	본환	N 3		RA RA	몺뼕	W.W.	20 H	40	6	0	80
ا	,		SAN	PO	F	OTA	S		""	□F	INES C	ONTE	NT (%) I	
		(CL) Soft, wet, gray Clay with shell at 0.50 m, non-cohesive,				Ĕ		Ш	<u> </u>	20	40	6	0	80
		non-plastic												·
-														•
				N/A	0.025	5								
0.5												• • • • • • • • • • • • • • • • • • • •		·;····
0.0			1								:			:
1//				N/A	0.015									
				1								:		:
<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>				N/A	0.05					ļ				
1.0				18/7	0.03									<u>:</u>
-1//	///	(CL) Medium, moist, dark brown Clay with trace organics,		1										
		cohesive, low plasticity		N/A	0.028	3								÷
														÷ · · · ·
<u>, - ///</u>														
1.5				N/A	0.045	5								:
1//														:
1//			3								:	:		:
1//				N/A	0.05						:	:		:
2.0				1										<u> </u>
			4							ļ <u>.</u>				
<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>				N/A	0.07									
-1//														
- 1//			5	NI/A	0.045									
2.5				IN/A	0.045	1								:
				1										÷
-				N/A	0.055									
	///		_									• • • • • • • •		÷
3.0											•••••			:
-										:				:
]										l				
		Bottom of borehole at 3.35 meters.		1	<u> </u>		<u> </u>	<u> </u>						<u>: </u>



BORING NUMBER VC-IRB-07-ALT

PAGE 1 OF 1

CLIENT _	US Wind P	PROJEC	T NAN	/E _E	xport	Cable	Surv	ey	
PROJECT	NUMBER <u>1783</u> P	PROJEC	T LOC	ATIO	N <u>Inc</u>	dian F	River E	Bay, D	<u>E</u>
DATE STA	RTED10/7/17 COMPLETED10/7/17	WATE	R DEP	PTH _	2.7 m			HOLE	SIZE 8.018 cm
DRILLING	CONTRACTOR Alpine Ocean Seismic	CORE	PENE	TRAT	ION _	2.44	meter	s	
DRILLING	METHOD Vibracore	CORE	RECC	VERY	2.1	8 me	ters		
LOGGED E	BY MK CHECKED BY	CORE	LOCA	TION	X:48	85960).43	•	Y:4271859.4
NOTES _		NAD 8	3, UTN	/I Zone	e 18 N	lorth,	mete	rs	
_ 0		Y PE	EN.	Щ	WET pcf)	U≻	- RES	OND.	▲ SECONDS PER SAMPLE ▲ 20 40 60 80
DEPTH (m) GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	POCKET PEN. (tsf)	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	PL MC LL 20 40 60 80
		SAI	PO	-	OT/	0,0		里	☐ FINES CONTENT (%) ☐
	(CL-ML) Very soft, wet, gray Silty Clay, non-cohesive, non-plastic								20 40 60 80
		1 2	N/A	0.025					
-			""	0.020					
0.5									
	Very soft, wet, dark brown Peat		N/A	0.03					
		3	J						
1.0		4	N/A	0.025					
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	(SP) Medium dense, moist, dark gray-brown fine-medium Sand		0.75						
F 3	(or) Medium dense, moist, dank gray-brown inte-medium dand	6	0						ļ <u>.</u>
1.5	(SP) Dense, moist, light gray-brown fine-medium Sand with	5							
1.3	piece of Gravel at 1.52 m		1.4						
		7							
	(CL) Medium dense, moist, light gray Sandy Clay with roots at	8	2.75	0.15					
2.0	1.92 m, cohesive, low plasticity	H°							<u> </u>
	(SW) Medium dense, moist, light gray-brown fine Sand with trace Gravel and roots	9	0.7						
- - - - - - - - - -									
	Bottom of borehole at 2.44 meters.								
1									

US WIND 1783_USWIND_IRB.GPJ 1783_USWIND_IRB.GDT 1/12/18



BORING NUMBER VC-IRB-08-ALT

PROJE		JS Wind F	PROJEC	T NAN	/E E	xport	Cable	Surv	/ev	
	ECT		PROJEC							E
DDILL	STAI	RTED _10/8/17 COMPLETED _10/8/17	WATE	R DEF	PTH _	2.3 m			HOLE	SIZE 8.018 cm
DKILL	ING (CONTRACTOR Alpine Ocean Seismic	CORE	PENE	TRAT	ION _	3.05	meter	`S	
DRILLI	ING I	METHOD Vibracore	CORE	RECC	OVERY	2.7	0 me	ters		
LOGG	ED B	Y MK CHECKED BY	CORE	LOCA	ATION	X:48	36667	7.35		Y:4272031.93
NOTES	s		NAD 8	3, UTI	VI Zon	e 18 N	orth,	mete	rs	
			ш	_;		ET (ELECTRICAL RES (ohms-cm)	Ō.	▲ SECONDS PER SAMPLE ▲
<u>۔</u> ٰ⊆	2		유	PEN	빌	T W (pcf	스유	를 지 ((S S	20 40 60 80
DEPTH (m)		MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	(tsf)	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	RIC/	THERMAL COND (W/m-K)	PL MC LL 20 40 60 80
عا ۵	5		AME	OCI	10	TAL	Ŝ₽	[[한		☐ FINES CONTENT (%) ☐
			<u>σ</u>	ш		10			F	20 40 60 80
1/2		(CL) Very soft, wet, gray Clay, non-cohesive, non-plastic								
1/2			1							
1/2			2	N/A	0.025	i				
0.5										
				NI/A	0.018					
. E	\exists	(OL) Very soft, wet, interbedded gray Clay and Peat		IN/A	0.010					
· + <u>-</u>	크		3							ļ <u>.</u>
1.0 \(\frac{1}{2}\)		Very soft, wet, dark brown Peat		N/A	0.04					
1.0	.									
_]~	1/2									
- ـ ـ ''	<u>// //</u>		4	N/A	0.05					
			5							
1.5		Will be the second of the seco		N/A	0.052					
2	<u>''</u>	Void due to settling of sediment Very soft, wet, dark brown Peat	+	-						
		(SP) Loose, wet, dark brown medium Sand with trace organic	6							
		matter		0.25						
2.0		(SP) Dense, moist, gray medium Sand								
				1.25						ļ <u>.</u>
			7							
			8							
2.5				1.60						
				-						ļ
· <u> </u> ::			-							
- +										
3.0		Bottom of borehole at 3.05 meters.		1						

BORING NUMBER VC-IRB-09-ALT SAlpine PAGE 1 OF 1 **CLIENT** US Wind PROJECT NAME Export Cable Survey PROJECT NUMBER 1783 PROJECT LOCATION Indian River Bay, DE DATE STARTED 10/8/17 **COMPLETED** 10/8/17 WATER DEPTH 3.2 m HOLE SIZE 8.018 cm DRILLING CONTRACTOR Alpine Ocean Seismic CORE PENETRATION 3.35 meters DRILLING METHOD Vibracore CORE RECOVERY 2.94 meters LOGGED BY MK CHECKED BY CORE LOCATION X:489062.77 Y:4272436.45 NOTES NAD 83, UTM Zone 18 North, meters TOTAL UNIT WET WEIGHT (pcf) ▲ SECONDS PER SAMPLE ▲ SAMPLE TYPE NUMBER THERMAL COND (W/m-K) POCKET PEN. (tsf) TORVANE (tsf) SPECIFIC GRAVITY GRAPHIC LOG 60 ELECTRICAL (ohms-cm) DEPTH (m) MATERIAL DESCRIPTION 40 ☐ FINES CONTENT (%) ☐ (CL-ML) Very soft, moist, gray Silty Clay with thin bed of shell hash at 0.91 m and organic odor, non-cohesive, non-plastic N/A 0.05 2 N/A 0.045 N/A 0.068 1.0 Soft, moist, dark brown Peat N/A 0.098 (CL-ML) Very soft, moist, gray Silty Clay with trace organics and N/A 0.076 organic odor, non-plastic, non-cohesive Void due to settling of sediment (CL-ML) Very soft, moist, gray Silty Clay with trace organics up to 1.83 m and organic odor, non-plastic, non-cohesive N/A 0.062 2.0 N/A 0.06 5 N/A 0.058 2.5 US WIND 1783 USWIND IRB.GPJ 1783 USWIND IRB.GDT 1/12/18 6

0.1 0.1

Bottom of borehole at 3.35 meters.

3.0

BORING NUMBER VC-IRB-10-ALT Alpine PAGE 1 OF 1 **CLIENT** US Wind PROJECT NAME Export Cable Survey PROJECT NUMBER 1783 PROJECT LOCATION Indian River Bay, DE DATE STARTED 10/7/17 **COMPLETED** 10/7/17 WATER DEPTH 2.6 m HOLE SIZE 8.018 cm **DRILLING CONTRACTOR** Alpine Ocean Seismic CORE PENETRATION 3.35 meters DRILLING METHOD Vibracore CORE RECOVERY 2.93 meters LOGGED BY MK CHECKED BY CORE LOCATION X:490397.23 Y:4272635.29 NOTES NAD 83, UTM Zone 18 North, meters TOTAL UNIT WET WEIGHT (pcf) ▲ SECONDS PER SAMPLE ▲ SAMPLE TYPE NUMBER THERMAL COND (W/m-K) POCKET PEN. (tsf) TORVANE (tsf) ELECTRICAL R (ohms-cm) SPECIFIC GRAVITY GRAPHIC LOG 60 DEPTH (m) MATERIAL DESCRIPTION ☐ FINES CONTENT (%) ☐ (CL-ML) Very soft, moist, gray Silty Clay with trace Peat and black laminations, non-cohesive, non-plastic N/A 0.04 N/A 0.048

N/A 0.038 N/A 0.058 0.1 0.08 Void due to settling of sediment (CL-ML) Very soft, moist, gray Silty Clay with trace Peat and black laminations, non-cohesive, non-plastic 0.1 0.108 2.0 N/A 0.075 N/A 0.038 2.5 US WIND 1783 USWIND IRB.GPJ 1783 USWIND IRB.GDT 1/12/18 2 N/A 0.065 3.0 Bottom of borehole at 3.35 meters.



BORING NUMBER VC-IRB-11-ALT

CLIE	NT U	S Wind	PROJEC [*]	Τ ΝΔΙ	/F =	xnort	Cable	Surv	/ev					
1			PROJEC [®]											
		RTED _10/10/17								SIZE	8.018 cı	m		
		CONTRACTOR Alpine Ocean Seismic			_									-
1		METHOD Vibracore	CORE											
1		Y MK CHECKED BY	CORE	LOCA	TION	X:49	92078	3.71		Y:427235	9.79			
NOT	ES		NAD 8	3, UT I	VI Zon	e 18 N	lorth,	mete	rs					
			T.,,			H		S	<u>.</u>	▲SE	CONDS PE	ER SAM	IPLE ▲	_
_	ಲ		SAMPLE TYPE NUMBER	JEN	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	으논	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	. 20	40	60	80	
m (m	F 8	MATERIAL DESCRIPTION	LET	(ET I	(tsf)	SE	돌	RICA ns-c	A #	PL F	-		LL -	
اة ا	GRAPHIC LOG		AMP	ock S	10 10 10	TAL	SPECIFIC GRAVITY	S T		20 □ F	40 INES CON		80 %)□	
			Ŝ	Ф) 			王	20	40		80	
		(SP) Dense, moist, light brown medium Sand with bed of gray Sand from 0.08-0.11 m and trace fine shell fragments								ļ <u>.</u>				
		(SP) Dense, moist, dark gray medium Sand with trace shell								1 :			•	
-		fragments		1.75						:		:	:	
0.5			1							ļ	:		• • • • • • • • • • • • • • • • • • • •	
				2.1									;	
-			1,							:			:	
		(SP) Medium dense, moist, gray medium to coarse Sand with little shell fragments	2							<u>:</u>	· · · · :		· · · : : · ·	
1.0	7777	(CL) Soft, moist, dark gray Sandy Clay with trace shell		0.8									••••	
		fragments, cohesive, non-plastic												
L -		(CL-ML) Soft, moist, dark gray Silty Clay with trace shell fragments, cohesive, low plasticity		N/A	0.1					ļ			;	
		lagillone, concerts, low placesty	3	INA	0.1									
1.5			4							ļ				
1.5				0.1	0.052	2					:			
ļ -				0.1	0.068	2				ļ <u>.</u>				
- -	-	(CL MIL) Coff graint deals gray City Class the game Deat and		0.1	0.000									
2.0		(CL-ML) Soft, moist, dark gray Silty Clay with some Peat and organic odor, dense layers of Peat from 1.97-2.13 m and												
-		2.47-2.80 m, cohesive, low plasticity		0.1	0.06					:			• • • • • • • • • • • • • • • • • • • •	• • • •
			5											
-			6	, , ,	0.00					ļ <u>.</u>				
2.5				IN/A	0.06								$\stackrel{\cdot}{+}$	
<u>-</u>			7										····	
3.0				0.25	0.082					l				
<u> </u>														
3.0			\dashv							<u> </u>				
<u>-</u>														
,		Bottom of borehole at 3.20 meters.		1	1		<u> </u>	<u> </u>			•	<u></u>	<u>:</u>	
3														

	Alpine									PAGE 1 OF 1				
_	A GARDLINE COMPANY													
1								Surv Siver F	rey Bay, D					
	ARTED _10/6/17									E SIZE _ 8.018 cm				
1	CONTRACTOR Alpine Ocean Seismic									- OILL - 0.010 0III				
1	METHOD Vibracore													
	BY MK CHECKED BY	CC	ORE L	OCA	TION	X:49	93269	<u>).45</u>		Y:4272066.42				
NOTES _		NAD 83, UTM Zone 18 North, meters												
		T H	1	z	Ī,	NET cf)		RES)	ND.	▲ SECONDS PER SAMPLE ▲				
DEPTH (m) GRAPHIC LOG	MATERIAL DESCRIPTION	\	NUMBER	POCKET PEN. (tsf)	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	CAL s-cm	THERMAL COND (W/m-K)	20 40 60 80 PL MC LL				
DEF SRAI LC	MATERIAL DESCRIPTION	MPL		Š #	- NO- St)	A E F F	SPEC	STR.	RMA (W/r	20 40 60 80				
		SA	5	D		TOT	-	ELECTRICAL F (ohms-cm)	뿓	☐ FINES CONTENT (%) ☐ 20 40 60 80				
	(SP) Very dense, moist, light gray fine Sand with thin bed of dark gray Silt at 0.09 m and thin bed of Gravel at 0.21 m	\top	1							20 40 00 00				
		Ш		1.4										
F - HAM	(SM) Soft, moist, dark gray Silty Sand with trace Peat			1.25	0.13									
0.5			2											
F - 1111	(ML) Soft, moist, dark gray Clayey Silt with trace fine shell	\dagger		N/A	0.115									
┞ ┤	fragments, cohesive, non-plastic		3											
<u> </u>		H	4	2.1	2006									
1.0				0.1	0.096									
<u> </u>		\vdash												
	(CL-ML) Soft, moist, dark gray Silty Clay with trace fine shell	\dagger		N/A	0.108									
	fragments and trace Peat, non-cohesive, non-plastic		5											
1.5		Ц		N/A	0.108									
├ <u> </u>														
				- 1/A										
F			6	N/A	0.13									
2.0														
		\vdash		N/A	0.13									
		H												
2.5			_	N/A	0.146									
			7											
		\coprod												
├ ┤ │														
3.0														
	Bottom of borehole at 3.05 meters.													
ı														



BORING NUMBER VC-IRB-13-ALT

									_	<u>E</u>
		TED	WATE							SIZE 8.018 cm
		ONTRACTOR Alpine Ocean Seismic	CORE	PENE	TRAT	ION _	3.35	meter	s	
		ETHOD Vibracore	CORE	RECC	VERY	2.8	2 met	ters		
		MK CHECKED BY	CORE	LOCA	TION	X:49	94001	.96		Y:4271737.14
NOT	ES		NAD 8	3, UTN	/I Zone	e 18 N				
			ш	÷		ET (ELECTRICAL RES (ohms-cm)	<u>-</u>	▲ SECONDS PER SAMPLE ▲
Г	GRAPHIC LOG		SAMPLE TYPE NUMBER	PE	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	실원	THERMAL COND. (W/m-K)	20 40 60 80
ËΞ	AP COR	MATERIAL DESCRIPTION) IMB	(ET	RVA (tsf)	동	EC	RIC/	/AL	PL MC LL
ב	8		MA NU	Ö	<u> 1</u>	ZA MEIG	SP RP	[등 등	\ <u>\</u>	20 40 60 80 ☐ FINES CONTENT (%) ☐
			Ŝ	Ь		TO.		ELE	표	20 40 60 80
_		(SP) Very dense, moist, light gray fine Sand with trace dark gray Sand								
_		(SP) Very dense, moist, gray fine Sand with beds of dark gray Silt from 0.96-1.01 m and 1.04-1.07 m								
_		Silt from 0.96-1.01 m and 1.04-1.07 m	<u> </u>	4.25						
0.5_	_		1							
-				3.75						
-										
-										
1.0				3.7						
		(CL-ML) Soft, moist, dark gray Silty Clay with organic odor,	 							
_		non-cohesive, non-plastic		0.1	0.95					
_				0.1	0.93					
_										
1.5_	<u> </u>	Void due to settling of sediment	1							
-		(CL-ML) Soft, moist, dark gray Silty Clay with Silt bed from	1	0.1	0.7					
-		2.70-2.73 m, organic odor, non-cohesive, non-plastic								
				N/A	0.1					
2.0			3							
_			11.							
_			4	N/A	0.084					
-			+	1						
. <u>-</u>				N/A	0.08					
2.5_			5	1,7,7	0.00					
-										
-				0.1	0.062					
	XXXXI		†							
.0_	_									
_										
_										



BORING NUMBER VC-IRB-14-ALT

CLIE	NT II	S Wind	PROJEC [®]	TNAN	Λ F =	vnort	Cable	Sun	/AV									
1			PROJEC [®]															
l		RTED _10/10/17								= E SIZE _	8 018 c	m						
1		CONTRACTOR Alpine Ocean Seismic								_ 0126 _								
1		METHOD Vibracore	CORE															
1		Y <u>MK</u> CHECKED BY								Y:427170	10 54							
1		OILORED DT	NAD 8							1.42/1/0	13.54							
NOT			NAD 0	3, U III	VI ZOII	E 10 N												
				z		λET		ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	▲ SE	CONDS PE							
E_	GRAPHIC LOG		SAMPLE TYPE NUMBER		TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	4 P	응충	. 20 PL	40 MC	60	80 LL					
DEPTH (m)	₽ŏ	MATERIAL DESCRIPTION	HE	A \$	(tsf	일원	₹	RIC Fins	MA M	20	40	60	-∐ 80					
	5		N N	00	12	TAI	20.02			□ F	INES CON							
			0	ш		2		ᆸ	<u> </u>	20	40	60	80					
L 4		(SP) Very dense, moist, dark gray fine Sand with some light brown Sand from 0-0.06 m																
 										ļ								
 				3.5						ļ								
F										ļ								
0.5				1						-	:		:					
F +				3.7														
h 1			1							1 :		:	:					
										:	····	:	:					
1.0				3.3						:								
				2.2									. .					
L				2.2						ļ <u>.</u>								
			<u> </u>							ļ								
1.5		(SM) Medium, wet, dark gray Silty Sand	2	N/A	0.146	5				ļ <u>:</u>			:					
F -		(ML) Soft, wet, dark gray Sandy Silt with trace shell fragments		4									· · · · : : · · · ·					
F +		(ML) Sort, wet, dark gray Sandy Silt with trace shell fragments	3							:		:	:					
┞┤		(CL-ML) Soft, moist, dark gray Silty Clay, cohesive, non-plastic		N/A	0.1					;		:	:					
2.0				1														
			4							:			-					
			5	N/A	0.098	3				[<u>.</u>								
				1														
										ļ <u>.</u>								
2.5	_		6							ļ <u>:</u>								
 -										ļ <u>.</u>								
┝╶┤				-														
F +																		
3.0											:		· · · · : . · · · · · · · · · · · · · ·					
3.0	-																	
											:							
										l								
\vdash		Bottom of borehole at 3.35 meters.		1	ļ				1	L :								
3.0																		



BORING NUMBER VC-IRB-15-ALT

CI IE	NIT II	IC Wind	DDO IEC	T NIA R	. -	woort	Cable					
		NUMBER 1783	PROJEC PROJEC)F		
		RTED 10/9/17 COMPLETED 10/9/17								SIZE 8.018 cr	n	
		CONTRACTOR Alpine Ocean Seismic	CORE									
		METHOD Vibracore				_						
		Y <u>MK</u> CHECKED BY								Y:4271676.3		
										1.427 1070.3		
NOI			NAD 8	3, U I I	VI ZOII	e ioiv				1		
			出	z		راد S)		ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	▲ SECONDS PE		
Ħ,	SRAPHIC LOG		SAMPLE TYPE NUMBER	L PE	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	A h	양춘	20 40 PL MC	60 : I	80 _L
DEPTH (m)	L & B	MATERIAL DESCRIPTION	I PLE	Ä s	SS (ts)	3.5	R	TRIC	MAI	20 40	60	
	g		A A N	ပ္က	۲	OTA WE	ខេត	(<u>C</u>)	点。	☐ FINES CON	TENT (%) 🗆
	2.32.74	(CD) Vary dance, maintilight brown fine Cand with dark brown	- 0,			ĭ		□	<u> </u>	20 40	60	80
		(SP) Very dense, moist, light brown fine Sand with dark brown Sandy Silt and trace shell fragments										
-	-	(SP) Very dense, moist, gray fine Sand with trace dark gray										
		laminations		3.5								
0.5												:
			1							i i		
L -				3.0								;
ļ -												
				2.6								
1.0												
-												
-		(CL-ML) Soft, moist, dark gray Silty Clay with very trace shell fragments, cohesive, non-plastice		0.1	0.08							
		rragments, corresive, non-plastice	2								•••••••	:
1.5												
L -				N/A	0.085							
			3	0.1	0.06					ļ		
- ا				•••								
2.0			4								- 	-
			4	N/A	0.082							
										: :		
2.5												
										ļ		
-												
L -	1									ļ		
 3.0	1											
0.0	<u> </u>	Bottom of borehole at 3.05 meters.										
		Bottom of poreniole at 3.00 meters.										

PAGE 1 OF 1

CLIE	ENT _	US Wind P	ROJE	CT NAN	/E _E	xport	Cable	Sur	/ey							
PRC	JECT	NUMBER <u>1783</u> F	ROJE	CT LOC	ATIO	N Inc	dian R	River E	Bay, D	E						
DAT	E STA	ARTED _10/9/17 COMPLETED _10/9/17	WATER DEPTH 0.9 m HOLE SIZE 8.018 cm													
l		CONTRACTOR Alpine Ocean Seismic		PENE												
DRII	LLING	METHOD Vibracore														
		BY MK CHECKED BY														
l				83, UT I	/I Zon	e 18 N	lorth,									
DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	POCKET PEN. (tsf)	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	SPECIFIC GRAVITY	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)		40 40	60 ONTENT	LL ———————————————————————————————————)		
	THE PER	Void due to settling of sediment	\Box					_		:	:	:	:	,		
		(SM) Silty fine Sand, dark gray, medium dense, trace shell fragments throughout subsection 0.6-3.0 cm in size, strong organic odor, sharp contact, Silt vaneer 0.3 cm thick at 0.46 m	1	1.25	0.05											
0.5				1.1	0.05											
J.0.	† —	(SP) Fine Sand, olive gray, medium dense	1	0.5							Ī		:			
										l						
		Bottom of borehole at 0.80 meters.														

US WIND 1783_USWIND_IRB.GPJ 1783_USWIND_IRB.GDT 1/12/18

PROJE	ECT	NUMBER <u>1783</u> I	PROJEC	LOC	ATIO	\ <u>Ind</u>	ian R	liver E	<u> Bay, D</u>	E				
DATE	STA	RTED 10/7/17 COMPLETED 10/7/17	WATE	R DEP	тн :	3.2 m			HOLE	SIZE	8.018	cm		
		CONTRACTOR Alpine Ocean Seismic								_				
		METHOD Vibracore												
		SY MK CHECKED BY								Y:42710				
			NAD 83											
			1	, · ·	1					l				
			世	z.		TOTAL UNIT WET WEIGHT (pcf)		ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)		CONDS		MPLE.	
DEPTH (m)	F06	MATERIAL RECORDITION	SAMPLE TYF NUMBER	T PE	TORVANE (tsf)	F C	SPECIFIC GRAVITY	당 당	SŠ	PI	40 L I	60 MC	LL	,
OFPII (m)		MATERIAL DESCRIPTION	₹N	X 돲	SR)	글핑	PEC	돌	WA	20	40	60	80)
ان –	7		AS N	90	Ĕ	OTA WE	<u>ω</u> ω	ညူ	篇)	□F	FINES CO	ONTENT	- (%) □	Í
		(MIX Observed Oilly dead arranged a grant in the discrete and an arranged or a second or a	1 0,	_		ĭ		ш	Ė	20	40	60	80)
- 41		(ML) Clayey Silt, dark gray, soft, organics including plant matter at 0.06 m, articulated bivalve 4.6 cm in size at 0.27 m, wood at												
- 41		0.67 m and 0.76 m, strong organic odor, sharp contact	1	N/A	0.03									
- 41				-										
ر ٍ ⊦			2	NI/A	0.02							• • • • • • •		
0.5			2	IN/A	0.02					-	:		:	
• 1				-								• • • • • • • • • • • • • • • • • • • •		
1				N/A	0.03					l :		:		
		(ML) Silt, dark gray, soft, articulated bivalve 9.1 cm in size at	_	-									:	
1.0		0.84 m, gradational contact	3							:			:	
				N/A	0.05									
. 4													;	
	Ш.													
		(CH) Clay, dark gray, medium dense, sharp contact		N/A	0.07					ļ				
1.5										ļ <u>:</u>				
			4								<u>:</u>			
			5	N/A	0.1									
2.0													· · · · · · :	
2.0		¬ (SM) Silty fine Sand, dark gray, loose, light brown staining at	6	0.1	0.1						-			
· -		bottom contact, sharp contact	$+$ \parallel								· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
		Void due to settling of sediment, light brown staining of core liner		0.5							:	• • • • • • • • • • • • • • • • • • • •	:	
]:		(SP) Fine Sand with trace gravel, olive gray, medium dense, organics at 2.41 m, gradational contact		0.5									:	
2.5		, , , , , , , , , , , , , , , , , , , ,	7										:	
				0.75										
		(SM) Silty fine Sand, dark gray, medium dense, organics and	-											
. 🕌		plant matter at 2.53 m and from 2.68-2.77 m	4	0.6									;	
. 4														
3.0	.													
. +														
		Bottom of borehole at 3.40 meters.	1					<u> </u>	<u> </u>	· ·	<u> </u>	<u>:</u>	<u>:</u>	

\$A	pine A GARDLINE COMPANY

CLIE	NT U	S Wind	PROJEC [*]	T NAN	ڮ _E	xport	Cable	Surv	ey						
1		IUMBER _ 1783	PROJECT LOCATION _Indian River Bay, DE												
1		RTED _10/10/17	WATE	R DEF	PTH _	2.7 m			HOLE	SIZE 8.0	18 cm		_		
DRII	LING C	CONTRACTOR Alpine Ocean Seismic	CORE	PENE	TRAT	ION _	3.20	meter	s						
DRII	LING N	METHOD Vibracore	CORE	RECC	VERY	2.9	3 met	ters							
LOG	GED B	Y MK CHECKED BY	CORE	LOCA	TION	X:48	37980).47	,	Y:4272285.2	2				
ПОИ	ES		NAD 8	3, UTI	M Zon	e 18 N	orth,	mete	rs						
			Ш	_:		ET (ES	Ō.	AMPLE ▲					
	<u> </u>		SAMPLE TYPE NUMBER	PEN	TORVANE (tsf)	TOTAL UNIT WET WEIGHT (pcf)	유	ELECTRICAL RES (ohms-cm)	THERMAL COND. (W/m-K)	. 20 4	10 60				
DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION) IMB	(tsf)	RVA (tsf)	ട	ECII	RIC/	/h/	PL 	MC 10 60	—I —I 80			
	GF		AME	OCI	2	TAL	SP PP	등 한		☐ FINES	CONTEN				
	/////		o o	ь.		0_			Ŧ	20 4	0 60	80			
├ -		(CL) Soft, wet, gray Clay, non-cohesive, non-plastic								ļ <u>.</u>	<u>.</u>				
} -										ļ	: :	:			
-				N/A	0.042						: :	:			
0.5															
[.			1	N/A	0.058										
ļ .				"	0.000						: :	:			
-										:	<u>:</u> :				
1.0				N/A	0.04										
'												-			
		(CL) Soft, wet, gray Clay with trace Peat, non-cohesive, non-plastic	2	NI/A	0.05						: :	:			
ļ.	<i> </i> -	(CL) Soft, moist, thinly interbedded gray Clay and brown Peat		IN/A	0.05						: :				
<u> </u>		with few laminations of black organic matter, cohesive, low plasticity									<u>.</u>				
1.5		plasticity		N/A	0.07					<u> </u>					
† •											: :	:			
				ļ.,,							: :	:			
├ .				N/A	0.04						<u>.</u>				
2.0															
-			3	N/A	0.04						<u>.</u>				
											:······!· :	:			
										:					
2.5			4	N/A	0.086						<u> </u>				
<u>-</u>											<u>.</u>				
<u>-</u>				N/A	0.075						<u>.</u>				
-										:	·········	:			
3.0															
<u>-</u> -											<u>.</u>				
<u> </u>		Bottom of borehole at 3.20 meters.	<u> </u>							<u> </u>	<u> </u>				
		Estam of Solomore at 0.20 meters.													
3.0															