# A GEOLOGICAL INVESTIGATION OF THE OFFSHORE AREAS ALONG FLORIDA'S CENTRAL EAST COAST 

ANNUAL REPARTTO the  <br>YEAB:

## PART 1




Henry Freedenberg, P.G. W617 arid Pon Hicensurie, P.G. W57 Principal Invesüysators
Adsl Dabous, Brian Cross, Alien surfleti, Altichelie LaChance
Zi-Qiang Chen and Wimiki Strong

# A GEOLOGICAL INVESTIGATION OF THE OFFSHORE AREAS ALONG FLORIDA'S CENTRAL EAST COAST 

ANNUAL REPORT TO the<br>UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE YEAR 3

## PART 1

Contract Period January 1, 1998 through February 16, 1999 Cooperative Agreement No. 36-0001 30757

Henry Freedenberg, P.G. \#617 and Ron Hoenstine, P.G. \#67 Principal Investigators Adel Dabous, Brian Cross, Allen Willett, Michelle LaChance Zi-Qiang Chen and Nikki Strong

## Table of Contents

Introduction ..... 1
Year 3 Scope of Work ..... 2
Push Core Program ..... 2
Subsurface Acoustic Profiling ..... 2
Grab Sampling ..... 3
Vibracore Collection and Analysis ..... 4
Seismic Character as an Indicator of Sand Resource Potential ..... 5
Interpretation of Year 3 Seismic Data off Indian River, St. Lucie and Martin Counties. ..... 6
Preliminary Estimate of Sand Resources ..... 6
Summary and Conclusions ..... 7
Acknowledgments. ..... 8
Bibliography ..... 8
Figures
Figure 1. Map of Study Area ..... 9
Figure 2. Push Core Locations ..... 10
Figure 3. Subsurface Acoustic Profile Tracklines Including Vibracore Locations ..... 11
Figure 4. Subsurface Acoustic Profile Shooting Geometry. ..... 12
Figure 5. Push Core Photographs ..... 13
Figure 6. Vibracore Photographs ..... 16
Figure 7. Preliminary Sand Reserves ..... 17
Figure 8. Executive Summary Map, Southem Portion of Study Area ..... 20

## Tables

Table 1. Push Core Locations ..... 18
Table 2. Vibracore Locations and Net Restoration Sand Thickness ..... 19
Appendices
Appendix A. Push Core Lithology
Appendix B. Push Core Granulometric Analysis
Appendix C. Vibracore Lithology
Appendix D. Vibracore Granulometric Analysis

# A Geological Investigation of the Offshore Area along Florida's Central East Coast 

## Annual Report to the United State Department of the Interior Minerals Management Service-Year 3

## Introduction

The Minerals Management Service of the U.S. Department of the Interior (MMS) and the Florida Geological Survey have entered into a multi-year cooperative agreement (Cooperative Agreement \# 14-35-0001-330757 / State of Florida Organization Code $37050204 \mathbf{6 7 9}$ ) with the goal of characterizing the beach nourishment potential of sands found in Federal waters off the east coast of Florida. This includes Federal waters out to eight miles offshore of southem Brevard, Indian River, St. Lucie and Martin Counties. Figure 1 displays the area of investigation for this agreement.

Year 1 tasks included the compilation of an annotated bibliography describing previously completed work in the study area, along with the initiation of an onshore push-core program to establish a baseline characterization of beach sands in the study area. Results of tasks completed during Year 1 of this investigation are summarized in "A Geological Investigation of the Oftshore Area Along Flonida's Central East Coast, Annual Report to the MMS-Year 1" (Hoenstine et al., 1995), delivered to the MMS during October 1995. FGS Open File Report \#69, "A Geological Investigation of the Offishore Area Along Florida's Central East Coast, Year $1^{\prime \prime}$ (Freedenberg et al., 1995) also summarizes Year 1 results of this investigation. During October 1995, an interim report, "A Geological Investigation of the Offshore Area Along Florida's Central East Coast, Interim Report to the U.S. Department of the Interior, Minerals Management Service" Freedenberg et al., 1995) described a bottom sediment grab sampling program which was conducted in Federal waters in the northem part of the study area.

Year 2 activties were summarized in "Annual Report to the U.S. Department of the Interior Minerals Management Service Year 2, A Geological Investigation of the Oftshore area along Floride's Central Eest Coast" (Freedenberg et al., 1997). Year 2 tasks included the collection, description and analysis of additional push cores in southem Brevard County. Push cores were also collected in Indian River County. More than 500 line miles of subsurface acoustic profile datia were collected in Federal waters off of southem Brevard County. These data were reprocessed and interpreted. A grab sampling program was also initiated. Bottom sediment grab samples were collected and analyzed. Grab sample locations were chosen based on interpretation of the seismic data. Results of the grab sample analyses were used to pick sampling locations for a follow-on vibracore program.

Year 3 activities are summarized in this report. This document is being delivered as Part 1 and Part 2. Part 1 serves as an executive summary detailing tasks accomplished and summarizing analytical results. Part 2 of this document consists of Appendices containing the supporting data collected during year 3 of this study.

Year 3 tasks commenced with the lithologic description and granulometric analyses of ten Indian River County push cores collected during the previous years' field work. Five additional push cores were collected in St. Lucie County and three additional push cores were acquired in Martin County. Lthologic descriptions and granulometric analyses of all push cores were completed. Approximately 330 miles of subsurface acoustic profile data were collected in Federal waters off of Indian River, St. Lucie and Martin Counties. These data were reprocessed and a preliminary interpretation has been completed, with the aim of locating areas favorable for sand accumulation.

Ten vibracores were collected in Federal waters off of Brevard County. Lithologic descriptions were compiled for each vibracore and granulometric analyses were completed.

## Push Core Program

During years 1 and 2 of this study, a total of 17 vibracores were collected in Brevard County. Ten additional vibracores were collected in Indian River County during year 2, for a total of 14 Indian River County cores. These cores were not described or analyzed in time for inclusion in the Year 2 Annual Report. Year 3 tasks included the description and analyses of these ten Indian River cores. Five additional push cores were collected in St. Lucie County ( 9 total) and 3 additional cores were collected in Martin County ( 6 total). Additional push cores may be collected in the future from an area north of Hobe Sound in Martin County. Lack of roads restricts onshore access to this area.

As with previously collected cores, the cores collected during this year's work will be used to establish a baseline characterization of beach sediments. All push cores were driven to a depth of ten feet below ground surface or until refusal. All cores were split lengthwise, described lithologically and sampled for granulometric analyses. A GPS receiver was used to record the lat-long coordinates of all sampling locations. Figure 2 displays the locations of all cores collected in the study area during both the present and earier phases of this study. Lat-long coordinates and acquisition dates for all push cores are given in Table 1. Lithologic descriptions of the previously undescribed push cores in Indian River, St. Lucie and Martin Counties are summarized in Appendix A, while the results of granulometric analyses of these cores are displayed in Appendix B. Photographs of push core sediments are included as Fig. 5.

## Subsurface Acoustic Profiling

More than 330 line miles of subsurface acoustic profile data were acquired during Year 3 of this study. All data were acquired in Federal waters off of Indian River, St. Lucie and Martin Counties. The seismic program consisted of 32, seven-mile-long, east-west (dip) lines, 15 shorter east-west lines and one north-south (strike) line (Fig. 3). The strike line was approximately 48 miles in length. During post-processing, it was discovered that the navigation data files associated with three of the seven-mile-long dip lines (SL-1, SL-3 and SL-31 off St. Lucie county) were corrupted. The navigation
data associated with SL-31 were recovered from the paper record. The geographic location of the data on lines SL-1 and SL-3 is uncertain. These two lines will be reshot during the next field season. The length of the shorter dip lines was determined by the location of the $100^{\prime}$ water depth contour. At present, it is uneconomical to dredge fill material from water depths greater than 100'. Therefore, shooting was discontinued seaward of the 100' contour.

Most data were collected aboard the FGS chartered survey vessel "Jesse and Jenise." The Jesse and Jenise is a 40 foot long converted work platform based on a Key West \#1 fiberglass hull. The boat is powered by a pair of Detroit Diesel 6-53 engines connected to twin screws. It is capable of making approximately $18-20 \mathrm{knots}$ when lightly loaded in calm seas. The Jesse and Jenise is set up exclusively for daylight operation.

The physical configuration of the data acquisition equipment was identical to the configuration used during year 2. Signal energy for the survey was provided by a Huntec boomer sled towed approximately 20 feet behind the research vessel. A ten station ITI streamer cable was used for signal detection. In an effort to improve signal resolution and provide repetitive imaging of the same depth point, only signals from the five adjacent geophones closest to the research vessel were activated during this shooting program. The shooting geometry used in the current year acquisition program is identical to the geometry employed during year 2. Figure 4 from the year 2 report which display's shooting geometry is included as Figure 4 in this report.

The relative merits of analog versus digital data acquisition were discussed on pages 57 of the Year 2 annual report. This information should be reviewed as it is quite germane to the Year 3 report.

Significant changes were made in the shooting parameters of this year's survey. Signal amplitudes were digitally recorded at a rate of 8000 times per second for a record length of 200 milliseconds. This provided 1600 samples per shot record. Using an average boat speed of four knots and a 1 second shot interval, it can be calculated that the seafloor was imaged at consecutive depth imaging points of approximately 6.7 feet. These shooting parameters were chosen after review of the Year 2 survey which had a greater than optimal data density.

## Grab Sampling

Grab sampling is an ongoing task to assist in determining vibracore placement as well as site characterization. This sampling will continue upon initiation of the Year 4 field season. Grab sample locations will be chosen based on the preliminary seismic interpretation. Also, most NOAA coastal charts post bottom lithology data at random intervals. These bottom characterizations provide a "de facto" data base of previously collected grab samples. These data, however, are of limited utility in that grain size distribution data and percentage of fines included in the sample is not readily available. During our grab sampling program, the FGS will attempt to collect samples from selected NOAA chart locations displaying favorable bottom lithologies.

## Vibracore Collection and Analysis

On September 2, 1998 a Brevard County vibracore collection program was initiated using the "Atlantic Twin," a dedicated 90-foot catamaran survey vessel. Sea condifions were unfavorable on September 3 and the vibracoring program was completed on September 4. The Attantic Twin is operated by Alpine Ocean Seismic. Ten 20-foot long vibracores were collected at locations based upon the Year 2 seismic and grab sampling programs. Table 2 provides a tabulation of the core collection locations. Core locations are also shown on Fig. 7.

Granulometric analyses of the 10 vibracores collected reveals that at least 5 of the cores contain sand suitable for use as beach restoration material under the guidelines promulgated in section 5 J of the Florida Administrative Code (FAC) Chapter 62B41.007. This rule stipulates that that restoration sand "...must be similar to that already existing on site in both coloration and grain size..."and "... in general, not contain greater than 5 percent fines (passing the $\# 200$ sieve) or gravel exclusive of shell material (retained by the *4 sieve) and be free of coarse gravel or cobbles." Informal conversations with Florida DEP's Beaches and Coastal Systems staff reveals that, on occasion, sands with as much as a $10 \%$ fine content may be deemed acceptable for beach restoration use. A $\# 200$ sieve opening will pass 3.75 phi grains while a \#4 sieve opening will pass grains of -2.25 phi size.

Surficial sand thickness in the prospective vibracores ranges from 4 feet to more than 20 feet. In Vibracore VB-3, an 8 foot thick surficial sand accumulation is underiain by a $1-$ foot thick layer containing an elevated fines content. Beneath this mud layer, the beach-quality sand continues for the entire 20 foot length of the core (19 feet net sand).

Other vibracores showing promising sand accumulations are VB-1, collected on the south flank of Canaveral Shoal ( $20^{\prime}$ net sand), VB-3 ( 8 ' net sand), VB-4 (4' net sand), VB-9 ( 8 ' net sand), and VB-10 ( 8 ' net sand). Table 2 summarizes vibracore location and the amount of net sand sultable for beach restoration. Appendix C contains lithologic logs for each vibracore and Appendix D contains vibracore granulometric analyses. Fig. 6 contains selected vibracore photographs.

It should be emphasized that the degree of lateral extent can't be firmly assigned to any of the sands found in this vibracoring program. In order to properly evaluate the suitability of these sands for beach restoration, an additional coring program should be undertaken to delineate lateral extent of the individual sand bodies. Once extent is determined, the economic viability of each individual sand body can be evaluated and environmental assessments can be carried out on those accumulations thought to show economic promise.

Figure 7 shows vibracore location, thickness of surficial sand and projected reserve potential for the surficial sands found in each of the vibracores. Reserve potential is highly speculative and is based on the assumption that the sand distribution is both continuous and homogenous.

## Seismic Character as an Indicator of Sand Resource Potential

Locations for vibracores VB-1 through VB-6 along with VB-9 and VB-10 were chosen on the basis of sand quality in grab samples collected from locations that were chosen on the basis of seismic character. The choice of locations for vibracores VB7/1, VB7/2 and VB-8 were based solely on seismic character.

VB-1, collected on the flank of Canaveral Shoal, was found to contain 20 feet of beachquality sand. The beach-quality sand in this core is probably connected to an outlying extension of Canaveral Shoal. This core was collected from a location nearer to proposed Brevard County restoration projects than the anticipated Canaveral Shoal borrow area. Additional vibracores should be collected to determine the limits of this sand deposit and to evaluate whether this deposit might serve as a more economical source of beach-quality restoration sand.

VB-3, collected on a topographic high overlying a buried onlap stratigraphic sequence, contained a total of 19 feet of beach-quality sand. A 1 foot thick layer of sand with an elevated content of fine grained material was found to exist 8 ' below the top of the core. This location has not been previously recognized as containing beach-quality sand. The sand deposit is newly located.

VB-4 was located on a seismic amplitude anomaly coincident with the flank of a topographic high and was found to contain 4 feet of beach-quality sand. This sand may exist as a previously unrecognized discrete accumulation. Atternatively, it may be associated with the sands found in VB-3. If this were the case, VB-4 sands could be viewed as a thinning edge of the VB-3 sand deposit. Additional vibracoring will be necessary in order to determine if the sands located in Vibracores VB-3 and VB-4 are connected.

VB-9, which contains 8 feet of surficial beach-quality sand, was located on the flank of a topographic high and was underlain by a near-surface seismic amplitude anomaly. The vibracore was collected seaward of the topographic high associated with Thomas Shoal. The sands located in this core may be associated with Thomas Shoal or they may exist as an independent, previously unrecognized sand body.

Vibracore VB-10 was drilled overlying a deeper seismic amplitude anomaly on the westem flank of Thomas Shoal. Thomas Shoal has not been previously characterized as a source of beach-quality restoration sand.

Of the cores which failed to show beach-quality sand, VB-2, VB-6, VB-7/1 and VB-7/2 were collected from locations overlying a buried onlap sequence. The choice of locations for VB-5, VB-8 and VB-9 were based on the presence of seismic amplitude anomalies.

Given the small sample size, it is impossible to generalize as to the validity of various sand indicators. To date, though, the cores associated with predicted basal transgressive onlap sands do not seem to be promising. Best results seem to be obtained when a topographic high is combined with one of the other indicators. It is
anticipated that, as more experience is obtained, a scoring system will be set up to help optimize vibracore collection locations.

## Interpretation of Year 3 Seismic Data off Indian River, St. Lucie and Martin Counties

Preliminary interpretation of the 330 miles of seismic data collected during the Year-3 filed season has been completed. An Executive Summary map has been prepared for the southem portion of the cooperative agreement study area and is included as Figure 9 of this report.

This map shows areas thought to hold significant potential for sand accumulation based on seismic character. Topographic highs are also indicated. It is believed that these highs are indicative of sand shoaling or reef (Sabellarid worm rock) development. A paleo-sheff edge dating back to one of the recent ice ages is also clearly identifiable in St. Lucie and Martin Counties. The location of this shelf edge has also been added to the summary map. It is possible that the area immediately seaward of this shelf edge might be a zone of sand accumulation.

Interpretation of data obtained during acquisition of this 330 mile seismic program is an ongoing effort and is essential to determining vibracore placement and for bottom sediment ground truthing. A final map will be produced highlighting areas considered favorable for sand development and the original seismic data will be placed in the public domain.

## Preliminary Estimation of Sand Reserves

A classification scheme is being introduced in order to help quantify the sand reserves found. Reserves are assigned to one of 3 categories--proven, probable and potential.

Proven reserves are those reserves whose thickness and lateral extent have been fully determined through the use of vibracore and/or push cores.

Probable reserves are those reserves whose existence has been established through the use of vibracores, push cores and/or grab samples. Thickness and/or lateral extent has not been fully determined. These are reserves that could be viable if additional coring is done.

Potential reserves are those reserves hypothesized to exist on the basis of indirect ovidence such as acoustic subsurface profile (seismic) character or sidescan sonar character. The presence of sand through direct sampling methods has not yet been confirmed. Potential reserves could be upgraded if additional sampling confirms the existence of sand and additional coring is done to determine the extent of sand.

The discussion of reserves in this report is limited to probable reserves in the northern portion of the study area.

The reserves found in VB-1 are assumed to be an extension of the Canaveral Shoal accumulation. The location of the vibracore is approximately 2 miles from the nearest portion of the COE's proposed Borrow Area II. This accumulation could extend for another 2 miles shoreward for a length of 4 miles. Using a $2: 1$ shape factor, the width of this accumulation could be 2 miles. A sand thickness of 20 feet is assigned to the entire feature. If these numbers reflect reality, this area could hold additional sand reserves of approximately 115 million cubic yards. Additional vibracores should be collected to determine the true extent of this accumulation.

VE-3 was found to contain 8 feet of beach quality surficial sand. Beneath this surficial layer lies a 1 foot interval with elevated fines content. The remaining 11 feet of the vibracore is made up of beach-quality sand (19 net feet of beach-quality sand). VB-4 was found to contain 4 feet of surficial beach-quality sand. The remainder of the core displayed an elevated fines content. In view of the proximity of these two vibracores, it can be hypothesized that they both test the same sand body. The vibracores are located seaward of Patrick Air Force Base and is not believed to be associated with the Space Coast Shoal accumulation. This deposit could extend for 4 square miles and have an average net thickness of 12 feet. If this were to be the case, reserves of 49.5 million cubic yards could be assigned to this accumulation. The areal extent of this feature should be confirmed with additional vibracoring.

Vibracores VB-9 and VB-10 were collected on the flank of Thomas Shoal. VB-9 contained 8 feet of beach-quality restoration sand while VB-10 contained 6 feet of beach quality restoration sand. We can arbitrarily assign a sand thickness of 7 feet to the entire shoal. The areal extent of the Thomas Shoal is approximately 12 miles by 3 miles. If these numbers are a reasonable estimate, we could assign reserves of approximately $\mathbf{2 6 0}$ million cubic yards to this feature. The areal extent of this feature should be confirmed with future vibracoring.

## Summary and Conclusions

- In an effort to augment previous push core data, five additional ten-foot push cores were collected in St. Lucie County and three additional push cores were collected in Martin County. Lithologic descriptions were made of each push core and grain size distributions were determined.
- Lithologic descriptions were completed and grain size distributions were determined for ten previously collected push cores in Indian River County.
- More than 330 line miles of subsurface acoustic profile data were acquired. Preliminary interpretation of this data has been completed.
- Ten vibracores were collected off the northern portion of the study area. Five of these cores show beach-restoration quality sand.
- Preliminary sand reserve estimates have been completed. These estimates show that an additional 115 million cubic yards of restoration quality beach-quality sand could be associated with Canaveral Shoal, an additional 49.5 million cubic yards of beach-quality sand could be associated with an unnamed shoal seaward of Patrick AFB. Beach-quality sand was also discovered near Thomas Shoal. There could be 260 million cublc yards of sand associated with the Thomas Shoal feature.
Additional vibracoring should be performed to confirm the magnitude and extent of these three sand accumulations. It should be emphasized that all sand reserve estimates are preliminary and are likely to change as additional work is accomplished. Project planning conceming the use of these reserves should not commence until the size of the sand accumulation is fully determined.


## Acknowledgments

The authors are indebted to the St. Petersburg, Florida, office of the United States Geological Survey for assistance in the acquisition and processing of subsurface acoustic profile data. Jack Kindinger and Dana Wiese provided generous assistance. Thanks are also extended to the staff of the FGS for their review and suggestions during preparation of this report.

## Bibliography

Freedenberg, H., A.B. Highley, R. Hoenstine and H. Williams, 1995, A Geological Investigation of the Offshore Area Along Florida's Central East Coast-Interim Report to the U.S. Department of Interior, Minerals Management Service: Year 1: Florida Geological Survey, Tallahassee, Florida, 8 p., Appendices

Freedenberg, H., R. Hoenstine, Z. Chen and H. Williams, 1995a, A Geological Investigation of the Offshore Area Along Fiorida's Central East Coast, Year 1: Florida Geological Survey, Tallahassee, Florida, Open File Report No. 69, 97 p.

Freedenberg, H., R. Hoenstine, N. Strong, C. Trimble, Z. Chen and A. Dabous, 1997, A Geological Investigation of the Offshore Area Along Florida's Central East Coast, Annual Report to the MMS-Year 2: Florida Geological Survey, Tallahassee, Florida, 31 p. and Appendices.

Hoenstine, R., H. Freedenberg, Z. Chen and H. Williams, 1995, A Geological Investigation of the Offshore Area Along Florida's Central East Coast-Annual Report to the MMS-Year 1: Florida Geological Survey, Tallahassee, Florida, 99 p .


C: \VACAD\HENRYMBRA2.DWG, -PDP 02/09/99 11:20:13. AUTOCAD R14


--

Figure 4 - SHOOTING GEOMETRY

Fig. 5 Push Core Photographs


Photograph of SL-8 showing large shell fragments and basal peat layer. The peat layer is indicative of a low energy lagoonal reducing environment.


Photograph of SL-8 showing gradational sorting with numerous shell fragments


Photograph of IR-14 showing heavy mineral banding in well sorted sands.


Photograph of SL-8 showing fine-medium grained sands at surface grading into coarse shell fragments (possible representing storm overwash deposit) which is underlain in turn by peat.


Figure 6 Vibracore Photographs
Photographs of uppermost 5 feet of vibracores VB-VB-1 and VB-3. Sand is mediumfine grained. Abundant shell fragments. Circular marks are from saw used to open cores.


C: \IVACAD\HENRYVBRA1.DWG. -PDP 02/10/99 09:24:53, AutoCAD R14

|  | TABLE 1 PUSH | CORE LOCA | ATIONS |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core ID | Date Acquired | Lat | Long | D M' S' | D DM |
| B-1 | 11/28/94 | 275222.3 | 803007.5 | X |  |
| B-2 | 11/28/94 | 275721.9 | 803006.9 | X |  |
| B-3 | 11/29/94 | See Notes |  | $\cdots$ |  |
| B-4 | 11/29/94 | 281139.2 | 803539.2 | X |  |
| B-5 | 218/95 | 280520.8 | 803353.6 | X |  |
| B-6 | 218/95 | 275405.7 | 802812.2 | X |  |
| B.7 | 7/10/96 | 2823.529 | 8035.800 | X |  |
| B-8 | 7/10/96 | 2820.270 | 8036.463 | X |  |
| B-8 | 7/10/96 | 2818.996 | 8036.506 | X |  |
| B-10 | 7/15/96 | See Notes |  |  |  |
| B-11 | 7/16/96 | 281117.4 | 803534.8 | X |  |
| B-12 | 7/16/96 | 280913.0 | 803501.8 | X |  |
| B-13 | 7/16/96 | 280853.5 | 803424.1 | X |  |
| B-14 | 7/16/96 | 280152.8 | 803255.3 | X |  |
| B-15 | 7/17/96 | 275917.2 | 803105.5 | X |  |
| B-16 | 7/17/96 | 275610.7 | 802924.7 | X |  |
| B-17 | 7/17/96 | 275155.5 | 802703.2 | X |  |
| IR-1 | 1/5/95 | 275105.2 | 802636.0 | X |  |
| IR-2 | 1/5/95 | 274548.4 | 802349.5 | X |  |
| IR-3 | 1/5/95 | 274841.0 | 802109.1 | X |  |
| IR-4 | 1/5/95 | 273340.8 | 801921.5 | X |  |
| IR-5 | 2/11/97 | 2749.643 | 8025.803 |  | X |
| IR-6 | 2/11/97 | 2747.998 | 8024.948 |  | X |
| IR-7 | 2/11/97 | 2746.411 | 8024.078 |  | X |
| 1R-8 | 2/11/97 | 2744.189 | 8022.800 |  | X |
| IR-9 | 2/11/97 | 2742.693 | 8022.410 |  | X |
| IR-10 | 2/11/97 | 2740.894 | 8021.817 |  | X |
| IR-11 | 2/11/97 | 2738.995 | 8021.248 |  | X |
| IR-12 | 2/12/97 | 2736.686 | 8020.397 |  | X |
| IR-13 | 2/12/97 | 2734.905 | 8019.643 |  | X |
| IR-14 | 2/12/97 | 2745.802 | 8023.810 |  | X |
| SL-1 | 1/5/95 | 272829.3 | 801726.7 | X |  |
| SL-2 | 1/6/95 | 272613.2 | 801644.3 | X |  |
| SL-3 | 1/6/95 | 272144.2 | 801442.2 | X |  |
| SL-4 | 1/6/95 | 271630.2 | 801220.2 | X |  |
| SL-5 | 6/10/98 | 2733.060 | 8019.170 |  | X |
| SL-6 | 6/10/98 | 2729.804 | 8017.905 |  | X |
| SL-7 | 6/10/98 | 2727.582 | 8017.242 |  | X |
| 8L-8 | 6/10/98 | 2723.248 | 8015.517 |  | X |
| SL-9 | 6/10/98 | 2719.197 | 8013.540 |  | X |
| M-1 | 1/5/95 | 271221.3 | 801007.9 | X |  |
| M-2 | 1/5/95 | 270524.1 | 800737.6 | X |  |
| M-3 | 1/5/95 | 270114.1 | 800543.4 | X |  |
| M-4 | 6/10/98 | 2714.420 | 8011.827 | X |  |
| M-5 | 6/11/98 | 2703.153 | 8006.508 |  | X |
| M-6 | 6/11/98 | 2659.593 | 8005.596 |  | X |
| Core B-3 was collected on KSC property and located on topo sheet |  |  |  |  |  |
| GPS unavallable for Core B-10, core was located on topo sheet |  |  |  |  |  |
| All GPS data reported as displayed. Last decimal shold be truncated. |  |  |  |  |  |


|  | Table 2 Vibrac | ore Location | and Net Restor | ation Sand Thic |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core ID | Date Coliected | Lat | Long | Selsmic Line ID | SP ID\# | Sd Thickness | Selsmic Character |
| VB-1 | 9/2/98 | 282325.1280 | 802643.5774 | B-4 | 7750 | 20 | Topo high associated w/Canaveral Shoal |
| VB-2 | 9/2/98 | 282029.8362 | 802643.5774 | B-11 | 1200 | N/A | Buried onlap sequence |
| V8-3 | 9/2/98 | 281509.6096 | 802704.1984 | B-23 | 18900 | 8 | Topo high whburied onlap |
| VB-4 | 9/2/98 | 281352.9026 | 802846.4784 | B-26 | 15600 | 4 | Nr sfc amp anomaly on flank of topo high |
| VB-5 | 9/2/98 | 281258.0956 | 802919.8432 | B-25 | 12200 | N/A | Amplitude anomaly |
| VE-6 | 9/2/98 | 281207.8368 | 802919.7766 | B-30 | 5700 | N/A | Buried onlap w/pinchout close to sfc |
| VB-7/1 | 9/4/98 | 280858.2816 | 802815.5448 | B-37 | 5425 | N/A | Onlap pinchout |
| VB-7/2 | 9/4/98 | 280857.9174 | 802648.4284 | B-37 | 6500 | N/A | Onlap pinchout |
| VB-8 | 9/4/98 | 280503.8886 | 802848.4284 | B-46 | 10900 | N/A | Amplitude Anomaly |
| VB-9 | 9/4/98 | 275607.4580 | 801922.7016 | B-68 | 21250 | 8 | Nr sfi amp anomaly on flank of topo high |
| VB-10 | 9/4/98 | 275254.0886 | 802220.3598 | B-76 | 5500 | 6 | Amplitude anomaly |
| N/A- Not Applicable. No Restoration Quality Sand at Surface |  |  |  |  |  |  |  |
| All Lat-Longs in D M ${ }^{\text {' }}{ }^{\prime \prime}$ |  |  |  |  |  |  |  |

# A GEOLOGIGAL INVESTIGATION OF THE OFFSHORE AREAS ALONG FLORIDA'S CENTRAL EAST COAST 

ANNUAL REPORT TO the<br>UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE YEAR 3

PART 2

Contract Period January 1, 1998 through February 15, 1999 Cooperative Agreement No. 35-0001-30757

Henry Freedenberg, P.G. \#617 and Ron Hoenstine, P.G. \#57 Principal Investigators
Adel Dabous, Brian Cross, Allen Willett, Michelle LaChance Zi-Qiang Chen and Nikki Strong









| PRDJECT: MMS CODPERATIVE STUDY CENTRAL FLDRIDA EAST CDAST | B $\$ RING ID: IR-13} \hline INSTALLATIUN DATE: & \multicolumn{2}{\|l|}{DRILLING METHDD: $2^{\prime}$ PUSH CORE |  |
| :---: | :---: | :---: |
|  | GEDLDGISTS: H. FREEDENBERG, STRONG, DABDUS, TRIMBLE |  |
| DEPTH GEQLOGIC DESCRIPTIDN $(F)$ | LITH. USCS CDMMENTSSYMBLL CLASS |  |
|  |  | ACCESSORY MINERALS: 25\% SHELL FOSSILS: FISSIL FRAGMENTS, MDLLUSKS $0.07 \%$ FINES <br> ACCESSORY MINERALS: 45\% SHELL FOSSILSI FOSSIL FRAGMENTS, MDLLUSKS, ECHINDIDS <br> $0.21 \%$ FINES <br> ACCESSORY MINERALSI 20\% SHELL, $1 \%$ HEAVY MINERALS <br> FOSSILS: FOSSIL FRAGMENTS 0.09\% FINES <br> ACCESSORY MINERALS: $15 \%$ SHELL, 3\% HEAVY MINERALS <br> FOSSILS: FOSSIL FRAGMENTS 0.27\% FINES <br> ACCESSORY MINERALS: 15\% SHELL, $1 \%$ HEAVY MINERALS <br> FOSSILS FOSSIL FRAGMENTS, MDLLUSKS 0.17\% FINES <br> ACCESSORY MINERALS: $15 \%$ SHELL, 2\% HEAVY MINERALS, $1 \%$ LIMESTONE FOSSILS: FOSSIL FRAGMENTS, MDLLUSKS, ECHINDIDS <br> 0.25\% FINES <br> ACCESSORY MINERALS: 35\% SHELL, <1\% HEAVY MINERALS FOSSILS: FOSSIL FRAGMENTS, MDLLUSKS $0.20 \%$ FINES |











GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 0-0.3 ft
PHI SIZE .. SAMPLE WT.
CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0.042 | 0.042 | 0.00080634 | 0.00080634 |
| -1.00 | 0.026 | 0.068 | 0.00049916 | 0.00130551 |
| -0.75 | 0.061 | 0.087 | 0.00117112 | 0.00247663 |
| -0.50 | 0.095 | 0.182 | 0.00182387 | 0.00430050 |
| -0.25 | 0.171 | 0.353 | 0.00328297 | 0.00758347 |
| 0.00 | 0.252 | 0.605 | 0.00483806 | 0.01242153 |
| 0.25 | 0.442 | 1.047 | 0.00848580 | 0.02090733 |
| 0.50 | 0.832 | 1.879 | 0.01597328 | 0.03688060 |
| 0.75 | 1.492 | 3.371 | 0.02864438 | 0.06552499 |
| 1.00 | 3.422 | 6.793 | 0.06569777 | 0.13122276 |
| 1.25 | 6.292 | 13.085 | 0.12079790 | 0.25202066 |
| 1.50 | 7.430 | 20.515 | 0.14264596 | 0.39466662 |
| 1.75 | 13.741 | 34.256 | 0.26380863 | 0.65847524 |
| 2.00 | 10.785 | 45.041 | 0.20705742 | 0.86553267 |
| 2.25 | 5.428 | 50.469 | 0.10421026 | 0.96974293 |
| 2.50 | 1.326 | 51.795 | 0.02545741 | 0.99520034 |
| 2.75 | 0.171 | 51.966 | 0.00328297 | 0.99848331 |
| 3.00 | 0.044 | 52.010 | 0.00084474 | 0.99932805 |
| 3.25 | 0.015 | 52.025 | 0.00028798 | 0.99961603 |
| 3.50 | 0.006 | 52.031 | 0.00011519 | 0.99973122 |
| 3.75 | 0.003 | 52.034 | 0.00005760 | 0.99978881 |
| 4.00 | 0.003 | 52.037 | 0.00005760 | 0.99984641 |
| PAN | 0.008 | 52.045 | 0.00015359 | 1.0 |


|  | 52.087 | grams |  |
| :--- | :---: | :---: | :--- |
| TOTAL WT. | 26.044 | grams |  |
| MEDIAN WT. | 1.6 | phi | 0.3299 mm |
| MEAN GRAIN SIZE |  |  |  |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-5: 0.3-0.9 ft



GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 0.9-2.0 ft


## GRAIN SIZE DISTRIBUTION CORE IR-5: 0.9-2.0 ft



GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 2.0-2.6 ft



| GRAIN SIZE DISTRIBUTION CHART |  |  |  |
| :---: | :---: | :---: | :---: |
| CORE IR-5: 2.6-3.0 ft |  |  |  |
| PHI SIZE - SAMPLE WT. | CUM. WT. | WT. \% | CUM. WT. \% |
| <-2.00 0.069 | 0.069 | 0.00126471 | 0.001264709 |
| -1.75 0.000 | 0.069 | 0.00000000 | 0.001264709 |
| -1.50 0.346 | 0.415 | 0.00634187 | 0.007606584 |
| -1.25 0.296 | 0.711 | 0.00542542 | 0.013032003 |
| -1.00 0.846 | 1.557 | 0.01550643 | 0.028538436 |
| -0.75 1.149 | 2.706 | 0.02106016 | 0.049598592 |
| -0.50 2.103 | 4.809 | 0.03854613 | 0.088144727 |
| -0.25 3.100 | 7.909 | 0.05682026 | 0.144964991 |
| $0.00 \quad 3.862$ | 11.771 | 0.07078705 | 0.215752044 |
| $0.25 \quad 4.913$ | 16.684 | 0.09005095 | 0.305802999 |
| 0.50 - 4.961 | 21.645 | 0.09093075 | 0.396733751 |
| 0.75 5.372 | 27.017 | 0.09846402 | 0.495197771 |
| 1.00 6.110 | 33.127 | 0.11199091 | 0.60718868 |
| 1.25 5.862 | 38.989 | 0.10744529 | 0.714633968 |
| 1.50 4.277 | 43.266 | 0.07839364 | 0.793027604 |
| 1.75 5.116 | 48.382 | 0.09377177 | 0.886799369 |
| 2.00 3.169 | 51.551 | 0.05808497 | 0.944884343 |
| 2.25 1.748 | 53.299 | 0.03203930 | 0.976923641 |
| 2.50 - 0.750 | 54.049 | 0.01374684 | 0.99067048 |
| 2.75 0.270 | 54.319 | 0.00494886 | 0.99561934 |
| $3.00 \quad 0.117$ | 54.436 | 0.00214451 | 0.99776385 |
| $3.25 \quad 0.051$ | 54.487 | 0.00093478 | 0.99869863 |
| $3.50 \quad 0.019$ | 54.506 | 0.00034825 | 0.99904689 |
| $3.75 \quad 0.000$ | 54.506 | 0.00000000 | 0.99904689 |
| $4.00 \quad 0.013$ | 54.519 | 0.00023828 | 0.99928516 |
| PAN 0.039 | 54.558 | 0.00071484 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE | 54.558 | grams |  |
|  | 27.279 | grams |  |
|  | 0.76 | phi | 0.5905 mm |

GRAIN SIZE DISTRIBUTION CORE IR-5: 2.6-3.0 ft


GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 3.0-3.3 ft.
PHI SIZE _ SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0.208 | 0.208 | 0.003150036 | 0.003150036 |
| -1.25 | 0.319 | 0.527 | 0.004831064 | 0.007981100 |
| -1.00 | 0.426 | 0.953 | 0.006451515 | 0.014432615 |
| -0.75 | 0.854 | 1.807 | 0.012933319 | 0.027365934 |
| -0.50 | 1.420 | 3.227 | 0.021505051 | 0.048870985 |
| -0.25 | 2.188 | 5.415 | 0.033135951 | 0.082006936 |
| 0.00 | 2.601 | 8.016 | 0.039390589 | 0.121397525 |
| 0.25 | 3.697 | 11.713 | 0.055988854 | 0.177386379 |
| 0.50 | 3.907 | 15.620 | 0.059169178 | 0.236555557 |
| 0.75 | 4.560 | 20.180 | 0.069058473 | 0.305614030 |
| 1.00 | 6.036 | 26.216 | 0.091411610 | 0.397025639 |
| 1.25 | 7.103 | 33.319 | 0.107570686 | 0.504596326 |
| 1.50 | 6.279 | 39.598 | 0.095091699 | 0.599688025 |
| 1.75 | 8.934 | 48.532 | 0.135300086 | 0.734988112 |
| 2.00 | 7.367 | 55.899 | 0.111568809 | 0.846556920 |
| 2.25 | 5.707 | 61.606 | 0.086429101 | 0.932986022 |
| 2.50 | 2.915 | 64.521 | 0.044145931 | 0.977131953 |
| 2.75 | 1.033 | 65.554 | 0.015644167 | 0.992776120 |
| 3.00 | 0.325 | 65.879 | 0.004921931 | 0.997698051 |
| 3.25 | 0.081 | 65.960 | 0.001226697 | 0.998924747 |
| 3.50 | 0.022 | 65.982 | 0.000333177 | 0.999257924 |
| 3.75 | 0.016 | 65.998 | 0.000242310 | 0.999500235 |
| 4.00 | 0.009 | 66.007 | 0.000136300 | 0.999636534 |
| PAN | 0.024 | 66.031 | 0.000363466 | 1.0 |


| TOTAL WT. | 66.031 | grams |  |
| :--- | :---: | :---: | :--- |
| MEDIAN WT. | 33.016 | grams |  |
| MEAN GRAIN SIZE | 1.24 | phi | 0.4234 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 3.3-3.7 ft.

PHI SIZE _ SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.038 | 0.038 | 0.000595089 | 0.000595089 |
| -1.50 | 0 | 0.038 | 0 | 0.000595089 |
| -1.25 | 0.019 | 0.057 | 0.000297544 | 0.000892633 |
| -1.00 | 0.033 | 0.090 | 0.000516788 | 0.001409421 |
| -0.75 | 0.120 | 0.210 | 0.001879228 | 0.003288649 |
| -0.50 | 0.208 | 0.418 | 0.003257329 | 0.006545978 |
| -0.25 | 0.268 | 0.686 | 0.004196943 | 0.010742922 |
| 0.00 | 0.358 | 1.044 | 0.005606364 | 0.016349286 |
| 0.25 | 0.624 | 1.668 | 0.009771987 | 0.026121273 |
| 0.50 | 0.861 | 2.529 | 0.013483463 | 0.039604736 |
| 0.75 | 1.261 | 3.790 | 0.019747557 | 0.059352293 |
| 1.00 | 2.347 | 6.137 | 0.036754573 | 0.096106865 |
| 1.25 | 3.756 | 9.893 | 0.058819845 | 0.154926710 |
| 1.50 | 4.744 | 14.637 | 0.074292157 | 0.229218867 |
| 1.75 | 9.475 | 24.112 | 0.148380732 | 0.377599599 |
| 2.00 | 11.700 | 35.812 | 0.183224756 | 0.560824355 |
| 2.25 | 13.152 | 48.964 | 0.205963418 | 0.766787772 |
| 2.50 | 9.241 | 58.205 | 0.144716237 | 0.911504009 |
| 2.75 | 3.945 | 62.150 | 0.061779629 | 0.973283638 |
| 3.00 | 1.306 | 63.456 | 0.020452268 | 0.993735906 |
| 3.25 | 0.295 | 63.751 | 0.004619769 | 0.998355675 |
| 3.50 | 0.047 | 63.798 | 0.000736031 | 0.999091706 |
| 3.75 | 0.021 | 63.819 | 0.000328865 | 0.999420571 |
| 4.00 | 0.014 | 63.833 | 0.000219243 | 0.999639815 |
| PAN | 0.023 | 63.856 | 0.000360185 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE

| 63.856 | grams |
| :---: | :---: |
| 31.928 | grams |
| 1.92 | phi |

phi
0.2643 mm

GRAIN SIZE DISTRIBUTION CORE IR-5: 3.3-3.7 ft


Phi Size

GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 3.7-4.0 ft.



GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 4.0-4.6 ft.

| PHI SIZE _SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.099 | 0.099 | 0.001821293 | 0.001821293 |
| -1.75 | 0.056 | 0.155 | 0.001030226 | 0.002851519 |
| -1.50 | 0.124 | 0.279 | 0.002281215 | 0.005132734 |
| -1.25 | 0.165 | 0.444 | 0.003035488 | 0.008168221 |
| -1.00 | 0.225 | 0.669 | 0.004139301 | 0.012307522 |
| -0.75 | 0.315 | 0.984 | 0.005795022 | 0.018102544 |
| -0.50 | 0.460 | 1.444 | 0.008462572 | 0.026565116 |
| -0.25 | 0.714 | 2.158 | 0.013135383 | 0.039700499 |
| 0.00 | 0.749 | 2.907 | 0.013779274 | 0.053479773 |
| 0.25 | 1.367 | 4.274 | 0.025148555 | 0.078628328 |
| 0.50 | 1.877 | 6.151 | 0.034530971 | 0.113159299 |
| 0.75 | 3.094 | 9.245 | 0.056919992 | 0.170079291 |
| 1.00 | 5.269 | 14.514 | 0.096933238 | 0.267012528 |
| 1.25 | 7.136 | 21.650 | 0.131280240 | 0.398292768 |
| 1.50 | 6.084 | 27.734 | 0.111926707 | 0.510219475 |
| 1.75 | 8.155 | 35.889 | 0.150026675 | 0.660246150 |
| 2.00 | 6.423 | 42.312 | 0.118163254 | 0.778409404 |
| 2.25 | 5.462 | 47.774 | 0.100483838 | 0.878893243 |
| 2.50 | 3.306 | 51.080 | 0.060820134 | 0.939713376 |
| 2.75 | 1.464 | 52.544 | 0.026933054 | 0.966646430 |
| 3.00 | 0.728 | 53.272 | 0.013392939 | 0.980039369 |
| 3.25 | 0.487 | 53.759 | 0.008959288 | 0.988998657 |
| 3.50 | 0.220 | 53.979 | 0.004047317 | 0.993045974 |
| 3.75 | 0.205 | 54.184 | 0.003771363 | 0.996817337 |
| 4.00 | 0.076 | 54.260 | 0.001398164 | 0.998215501 |
| PAN | 0.097 | 54.357 | 0.001784499 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 54.357 | grams |  |
| MEDIAN WT. |  | 27.179 | 1.48 |  |
| MEAN GRAIN SIZE |  |  | phi | 0.3585 mm |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 4.6-5.6 ft.
PHI SIZE SAMPLE WT. CUM. WT.

WT.\%
0.010808192
0.004420157 0.002527967
0.004495845
0.006917849
0.008249951
0.011686169
0.015879263
0.018588880
0.034468143
0.045336886
0.072584430
0.118526816
0.153176609
0.115120873
0.135450568
0.088993506
$0.065727131 \quad 0.912959235$
$\begin{array}{lll}60.311 & 0.065727131 & 0.912959235 \\ 62.764 & 0.037132347 & 0.950091582\end{array}$
$0.017211365 \quad 0.967302947$
$0.011625619 \quad 0.978928566$
0.0102632420 .989191808
$0.005267858 \quad 0.994459666$
$0.003481631 \quad 0.997941297$
$0.001105039 \quad 0.999046336$
0.000953664

CUM. WT. \%
0.010808192
0.015228350
0.017756316
0.022252161
0.029170010
0.037419960
0.049106129
0.064985392
0.083574272
0.118042415
0.163379301
0.235963730
0.354490547
0.507667156
0.622788029
0.758238598
0.847232104
$\begin{array}{ll}63.901 & 0.017211365 \\ 64.669 & 0.011625619\end{array}$
65.347
65.695
65.925
65.998
66.061
grams
grams
phi
0.4234 mm


GRAIN SIZE DISTRIBUTION CHART
CORE IR-5: 5.6-6.0 ft.

| PHI SIZE SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.021 | 0.021 | 0.000331706 | 0.000331706 |
| -1.25 | 0.059 | 0.080 | 0.000931937 | 0.001263643 |
| -1.00 | 0.221 | 0.301 | 0.003490815 | 0.004754458 |
| -0.75 | 0.443 | 0.744 | 0.006997425 | 0.011751884 |
| -0.50 | 0.828 | 1.572 | 0.013078709 | 0.024830593 |
| -0.25 | 1.066 | 2.638 | 0.016838048 | 0.041668641 |
| 0.00 | 1.518 | 4.156 | 0.023977634 | 0.065646275 |
| 0.25 | 2.820 | 6.976 | 0.044543430 | 0.110189704 |
| 0.50 | 3.977 | 10.953 | 0.062818873 | 0.173008577 |
| 0.75 | 6.419 | 17.372 | 0.101391587 | 0.274400164 |
| 1.00 | 9.426 | 26.798 | 0.148888784 | 0.423288948 |
| 1.25 | 10.775 | 37.573 | 0.170196970 | 0.593485918 |
| 1.50 | 7.043 | 44.616 | 0.111248006 | 0.704733924 |
| 1.75 | 7.413 | 52.029 | 0.117092357 | 0.821826281 |
| 2.00 | 4.431 | 56.460 | 0.069990049 | 0.891816329 |
| 2.25 | 3.187 | 59.647 | 0.050340394 | 0.942156723 |
| 2.50 | 1.821 | 61.468 | 0.028763683 | 0.970920406 |
| 2.75 | 0.764 | 62.232 | 0.012067794 | 0.982988201 |
| 3.00 | 0.360 | 62.592 | 0.005686395 | 0.988674596 |
| 3.25 | 0.259 | 62.851 | 0.004091046 | 0.992765642 |
| 3.50 | 0.160 | 63.011 | 0.002527287 | 0.995292928 |
| 3.75 | 0.145 | 63.156 | 0.002290354 | 0.997583282 |
| 4.00 | 0.060 | 63.216 | 0.000947733 | 0.998531015 |
| PAN | 0.093 | 63.309 | 0.001468985 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 63.309 | grams |  |
| MEDIAN WT. |  | 31.655 | grams |  |
| MEAN GRAIN SIZE | 1.11 | phi | 0.4633 mm |  |
|  |  |  |  |  |



# GRAIN SIZE DISTRIBUTION CHART 

CORE IR-5: 6.0-7.1 ft.
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.047 | 0.047 | 0.000713657 | 0.000713657 |
| -1.00 | 0.000 | 0.047 | 0.000000000 | 0.000713657 |
| -0.75 | 0.000 | 0.047 | 0.000000000 | 0.000713657 |
| -0.50 | 0.042 | 0.089 | 0.000637736 | 0.001351392 |
| -0.25 | 0.119 | 0.208 | 0.001806918 | 0.003158310 |
| 0.00 | 0.331 | 0.539 | 0.005025965 | 0.008184275 |
| 0.25 | 1.121 | 1.660 | 0.017021470 | 0.025205746 |
| 0.50 | 2.302 | 3.962 | 0.034953992 | 0.060159738 |
| 0.75 | 4.546 | 8.508 | 0.069027301 | 0.129187039 |
| 1.00 | 8.950 | 17.458 | 0.135898448 | 0.265085487 |
| 1.25 | 13.616 | 31.074 | 0.206747851 | 0.471833338 |
| 1.50 | 10.059 | 41.133 | 0.152737708 | 0.624571047 |
| 1.75 | 11.777 | 52.910 | 0.178824137 | 0.803395184 |
| 2.00 | 6.038 | 58.948 | 0.091682104 | 0.895077287 |
| 2.25 | 3.144 | 62.092 | 0.047739075 | 0.942816362 |
| 2.50 | 1.325 | 63.417 | 0.020119044 | 0.962935406 |
| 2.75 | 0.677 | 64.094 | 0.010279693 | 0.973215099 |
| 3.00 | 0.483 | 64.577 | 0.007333961 | 0.980549060 |
| 3.25 | 0.478 | 65.055 | 0.007258040 | 0.987807100 |
| 3.50 | 0.313 | 65.368 | 0.004752650 | 0.992559750 |
| 3.75 | 0.300 | 65.668 | 0.004555255 | 0.997115005 |
| 4.00 | 0.111 | 65.779 | 0.001685444 | 0.998800449 |
| PAN | 0.079 | 65.858 | 0.001199551 |  |


| TOTAL WT. | 65.858 | grams |  |
| :--- | :---: | :---: | ---: |
| MEDIAN WT. | 32.929 | grams |  |
| MEAN GRAIN SIZE | 1.3 | phi | 0.4061 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-6: 0-1.6 ft



## GRAIN SIZE DISTRIBUTION CHART

CORE IR6: 1.6-3.5 ft

| PHI SIZE ${ }^{-}$ | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0.030 | 0.030 | 0.000444800 | 0.000444800 |
| -1.00 | 0.017 | 0.047 | 0.000252053 | 0.000696854 |
| -0.75 | 0.096 | 0.143 | 0.001423361 | 0.002120215 |
| -0.50 | 0.258 | 0.401 | 0.003825282 | 0.005945497 |
| -0.25 | 0.301 | 0.702 | 0.004462830 | 0.010408327 |
| 0.00 | 0.615 | 1.317 | 0.009118406 | 0.019526732 |
| 0.25 | 1.114 | 2.431 | 0.016516917 | 0.036043650 |
| 0.50 | 1.794 | 4.225 | 0.026599057 | 0.062642707 |
| 0.75 | 3.121 | 7.346 | 0.046274056 | 0.108916763 |
| 1.00 | 5.960 | 13.306 | 0.088366990 | 0.197283753 |
| 1.25 | 9.770 | 23.076 | 0.144856626 | 0.342140379 |
| 1.50 | 9.725 | 32.801 | 0.144189426 | 0.486329805 |
| 1.75 | 15.946 | 48.747 | 0.236426178 | 0.722755983 |
| 2.00 | 10.473 | 59.220 | 0.155279779 | 0.878035762 |
| 2.25 | 5.251 | 64.471 | 0.077854876 | 0.955890638 |
| 2.50 | 1.789 | 66.260 | 0.026524924 | 0.982415562 |
| 2.75 | 0.621 | 66.881 | 0.009207366 | 0.991622928 |
| 3.00 | 0.284 | 67.165 | 0.004210776 | 0.995833704 |
| 3.25 | 0.140 | 67.305 | 0.002075735 | 0.997909439 |
| 3.50 | 0.062 | 67.367 | 0.000919254 | 0.998828693 |
| 3.75 | 0.047 | 67.414 | 0.000696854 | 0.999525546 |
| 4.00 | 0.014 | 67.428 | 0.000207573 | 0.999733120 |
| PAN | 0.018 | 67.446 | 0.000266880 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 67.446 | grams grams phi | 0.3500 mm |
|  |  | 33.723 |  |  |
|  |  | 1.314 |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE IR6: 3.5 - 3.9 ft

| PHISIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 |
| -0.50 | 0 | 0 | 0 | 0 |
| -0.25 | 0.001 | 0.001 | 0.000022776 | 0.000022776 |
| 0.00 | 0.004 | 0.005 | 0.000091103 | 0.000113879 |
| 0.25 | 0.013 | 0.018 | 0.000296085 | 0.000409964 |
| 0.50 | 0.027 | 0.045 | 0.000614945 | 0.001024909 |
| 0.75 | 0.056 | 0.101 | 0.001275442 | 0.002300352 |
| 1.00 | 0.298 | 0.399 | 0.006787176 | 0.009087527 |
| 1.25 | 1.439 | 1.838 | 0.032774315 | 0.041861842 |
| 1.50 | 3.146 | 4.984 | 0.071652533 | 0.113514375 |
| 1.75 | 7.744 | 12.728 | 0.176375466 | 0.289889841 |
| 2.00 | 9.889 | 22.617 | 0.225229466 | 0.515119307 |
| 2.25 | 10.627 | 33.244 | 0.242045567 | 0.757164874 |
| 2.50 | 6.794 | 40.038 | 0.154738496 | 0.911903370 |
| 2.75 | 2.389 | 42.427 | 0.054411285 | 0.966314655 |
| 3.00 | 0.942 | 43.369 | 0.021454764 | 0.987769418 |
| 3.25 | 0.354 | 43.723 | 0.008062618 | 0.995832036 |
| 3.50 | 0.100 | 43.823 | 0.002277576 | 0.998109612 |
| 3.75 | 0.053 | 43.876 | 0.001207115 | 0.999316727 |
| 4.00 | 0.017 | 43.893 | 0.000387188 | 0.999703915 |
| PAN | 0.013 | 43.906 | 0.000296085 | 1.0 |
| TOTAL WT. <br> MEDIAN WT. <br> MEAN GRAIN SIZE |  | 43.906 | grams |  |
|  |  | 21.953 | grams |  |
|  |  | 1.983 | phi | 0.2529 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR6: 3.9-4.3 ft
PHI SIZE_ SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 5.280 | 5.280 | 0.081373486 | 0.081373486 |
| :---: | :---: | :---: | :---: | ---: |
| -1.75 | 0.341 | 5.621 | 0.005255371 | 0.086628857 |
| -1.50 | 0.495 | 6.116 | 0.007628764 | 0.094257621 |
| -1.25 | 0.460 | 6.576 | 0.007089357 | 0.101346978 |
| -1.00 | 0.648 | 7.224 | 0.009986746 | 0.111333724 |
| -0.75 | 0.937 | 8.161 | 0.014440711 | 0.125774435 |
| -0.50 | 1.492 | 9.653 | 0.022994174 | 0.148768610 |
| -0.25 | 1.741 | 11.394 | 0.026831674 | 0.175600284 |
| 0.00 | 1.487 | 12.881 | 0.022917116 | 0.198517400 |
| 0.25 | 1.651 | 14.532 | 0.025444626 | 0.223962026 |
| 0.50 | 1.657 | 16.189 | 0.025537096 | 0.249499122 |
| 0.75 | 1.935 | 18.124 | 0.029821533 | 0.279320655 |
| 1.00 | 3.169 | 21.293 | 0.048839503 | 0.328160158 |
| 1.25 | 5.551 | 26.844 | 0.085550042 | 0.413710199 |
| 1.50 | 5.898 | 32.742 | 0.090897882 | 0.504608082 |
| 1.75 | 8.961 | 41.703 | 0.138103751 | 0.642711833 |
| 2.00 | 7.733 | 49.436 | 0.119178251 | 0.761890084 |
| 2.25 | 6.728 | 56.164 | 0.103689548 | 0.865579632 |
| 2.50 | 4.949 | 61.113 | 0.076272231 | 0.941851863 |
| 2.75 | 1.921 | 63.034 | 0.029605770 | 0.971457633 |
| 3.00 | 1.004 | 64.038 | 0.015473292 | 0.986930925 |
| 3.25 | 0.496 | 64.534 | 0.007644176 | 0.994575101 |
| 3.50 | 0.164 | 64.698 | 0.002527510 | 0.997102611 |
| 3.75 | 0.102 | 64.800 | 0.001571988 | 0.998674599 |
| 4.00 | 0.040 | 64.840 | 0.000616466 | 0.999291064 |
| PAN | 0.046 | 64.886 | 0.000708936 |  |


|  |  |  |  |
| :--- | :---: | :---: | :---: |
| TOTAL WT. | 64.886 | grams |  |
| MEDIAN WT. | 32.443 | grams | 0.3567 mm |
| MEAN GRAIN SIZE | 1.487 | phi |  |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR6: 4.3-5.1 ft

PHI SIZE - SAMPLE WT. CUM. WT. WT. \% CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 |
| -0.50 | 0.008 | 0.008 | 0.000126430 | 0.000126430 |
| -0.25 | 0.011 | 0.019 | 0.000173841 | 0.000300271 |
| 0.00 | 0.044 | 0.063 | 0.000695365 | 0.000995636 |
| 0.25 | 0.098 | 0.161 | 0.001548767 | 0.002544403 |
| 0.50 | 0.183 | 0.344 | 0.002892085 | 0.005436488 |
| 0.75 | 0.391 | 0.735 | 0.006179264 | 0.011615753 |
| 1.00 | 1.252 | 1.987 | 0.019786289 | 0.031402042 |
| 1.25 | 3.759 | 5.746 | 0.059406279 | 0.090808320 |
| 1.50 | 5.796 | 11.542 | 0.091598508 | 0.182406828 |
| 1.75 | 13.484 | 25.026 | 0.213099914 | 0.395506742 |
| 2.00 | 14.433 | 39.459 | 0.228095456 | 0.623602198 |
| 2.25 | 12.816 | 52.275 | 0.202540800 | 0.826142998 |
| 2.50 | 6.753 | 59.028 | 0.106722692 | 0.932865690 |
| 2.75 | 2.061 | 61.089 | 0.032571519 | 0.965437209 |
| 3.00 | 1.014 | 62.103 | 0.016024998 | 0.981462207 |
| 3.25 | 0.670 | 62.773 | 0.010588509 | 0.992050716 |
| 3.50 | 0.291 | 63.064 | 0.004598890 | 0.996649606 |
| 3.75 | 0.150 | 63.214 | 0.002370562 | 0.999020168 |
| 4.00 | 0.035 | 63.249 | 0.000553131 | 0.999573299 |
| PAN | 0.027 | 63.276 | 0.000426701 | 1.0 |


| TOTAL WT. | 63.276 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 31.638 | grams |  |
| MEAN GRAIN SIZE | 1.865 | phi | 0.2744 mm |
|  |  |  |  |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR6: 5.1-5.9 ft

PHI SIZE_ SAMPLE WT. CUM. WT. WT.\% • CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0.022 | 0.022 | 0.000416288 | 0.000416288 |
| -1.00 | 0.018 | 0.040 | 0.000340599 | 0.000756888 |
| -0.75 | 0.019 | 0.059 | 0.000359522 | 0.001116409 |
| -0.50 | 0.037 | 0.096 | 0.000700121 | 0.001816530 |
| -0.25 | 0.042 | 0.138 | 0.000794732 | 0.002611262 |
| 0.00 | 0.089 | 0.227 | 0.001684075 | 0.004295338 |
| 0.25 | 0.211 | 0.438 | 0.003992583 | 0.008287920 |
| 0.50 | 0.543 | 0.981 | 0.010274750 | 0.018562670 |
| 0.75 | 1.231 | 2.212 | 0.023293218 | 0.041855889 |
| 1.00 | 3.161 | 5.373 | 0.059813049 | 0.101668937 |
| 1.25 | 6.434 | 11.807 | 0.121745383 | 0.223414320 |
| 1.50 | 7.536 | 19.343 | 0.142597639 | 0.366011959 |
| 1.75 | 13.115 | 32.458 | 0.248164547 | 0.614176506 |
| 2.00 | 10.337 | 42.795 | 0.195598698 | 0.809775204 |
| 2.25 | 6.704 | 49.499 | 0.126854375 | 0.936629579 |
| 2.50 | 2.452 | 51.951 | 0.046397215 | 0.983026794 |
| 2.75 | 0.496 | 52.447 | 0.009385407 | 0.992412201 |
| 3.00 | 0.191 | 52.638 | 0.003614139 | 0.996026340 |
| 3.25 | 0.106 | 52.744 | 0.002005752 | 0.998032092 |
| 3.50 | 0.045 | 52.789 | 0.000851499 | 0.998883591 |
| 3.75 | 0.027 | 52.816 | 0.000510899 | 0.999394490 |
| 4.00 | 0.017 | 52.833 | 0.000321677 | 0.999716167 |
| PAN | 0.015 | 52.848 | 0.000283833 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 52.848 | grams |  |
| MEDIAN WT. |  | 26.424 | grams |  |
| MEAN GRAIN SIZE | 1.635 | phi | 0.3220 mm |  |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE IR6: 5.9-6.8 ft
PHI SIZE_ SAMPLE WT. CUM.WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0.017 | 0.017 | 0.000295858 | 0.000295858 |
| -1.00 | 0.017 | 0.034 | 0.000295858 | 0.000591716 |
| -0.75 | 0.033 | 0.067 | 0.000574313 | 0.001166029 |
| -0.50 | 0.052 | 0.119 | 0.000904977 | 0.002071006 |
| -0.25 | 0.082 | 0.201 | 0.001427080 | 0.003498086 |
| 0.00 | 0.139 | 0.340 | 0.002419074 | 0.005917160 |
| 0.25 | 0.291 | 0.631 | 0.005064393 | 0.010981552 |
| 0.50 | 0.449 | 1.080 | 0.007814132 | 0.018795684 |
| 0.75 | 0.726 | 1.806 | 0.012634876 | 0.031430560 |
| 1.00 | 1.593 | 3.399 | 0.027723634 | 0.059154194 |
| 1.25 | 3.501 | 6.900 | 0.060929342 | 0.120083536 |
| 1.50 | 4.927 | 11.827 | 0.085746606 | 0.205830143 |
| 1.75 | 12.415 | 24.242 | 0.216063348 | 0.421893491 |
| 2.00 | 14.686 | 38.928 | 0.255586495 | 0.677479986 |
| 2.25 | 11.915 | 50.843 | 0.207361643 | 0.884841629 |
| 2.50 | 4.855 | 55.698 | 0.084493561 | 0.969335190 |
| 2.75 | 1.047 | 56.745 | 0.018221371 | 0.987556561 |
| 3.00 | 0.357 | 57.102 | 0.006213018 | 0.993769579 |
| 3.25 | 0.188 | 57.290 | 0.003271841 | 0.997041420 |
| 3.50 | 0.071 | 57.361 | 0.001235642 | 0.998277062 |
| 3.75 | 0.043 | 57.404 | 0.000748347 | 0.999025409 |
| 4.00 | 0.022 | 57.426 | 0.000382875 | 0.999408284 |
| PAN | 0.034 | 57.460 | 0.000591716 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 57.460 |  | grams |
| MEDIAN WT. |  | 28.730 | grams |  |
| MEAN GRAIN SIZE | 1.826 |  | phi | 0.2820 mm |
|  |  |  |  |  |

GRAIN SIZE DISTRIBUTION CORE IR-6: 5.9-6.8 ft.




GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 0.7-0.9 ft

| PHI | SAMPLE | CUM. | WT. |
| :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | $\%$ |


| $<-2.00$ | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 |


| -0.75 | 0.005 | 0.005 | 0.000089141 | 0.000089141 |
| :--- | :--- | :--- | :--- | :--- |


| -0.50 | 0.001 | 0.006 | 0.000017828 | 0.000106969 |
| :--- | :--- | :--- | :--- | :--- |


| -0.25 | 0.032 | 0.038 | 0.000570502 | 0.000677471 |
| :--- | :--- | :--- | :--- | :--- |

$0.00 \quad 0.069 \quad 0.107$
$0.25 \quad 0.172 \quad 0.27$
$0.50 \quad 0.447$
0.726
0.001230144
0.001907614
0.004974060
0.012943253

| 0.75 | 1.054 | 1.780 | 0.018790893 | 0.031734146 |
| :--- | :--- | :--- | :--- | :--- |


| 1.00 | 3.379 | 5.159 |
| :---: | :---: | :---: |
| 1.25 | 6.972 | 12.131 |
| 1.50 | 9.196 | 21.327 |

$1.50 \quad 9.196 \quad 21.327$
$1.75 \quad 15.106 \quad 36.433$
$2.00 \quad 10.585 \quad 47.018$
$2.25 \quad 5.722 \quad 52.740$
$2.50 \quad 2.095 \quad 54.835$
$2.75 \quad 0.743 \quad 55.578$

| 3.00 | 0.313 | 55.891 | 0.005580218 | 0.996434366 |
| :---: | :---: | :---: | :---: | :---: |
| 3.25 | 0.107 | 55.998 | 0.001907614 | 0.998341980 |
| 3.50 | 0.034 | 56.032 | 0.000606158 | 0.998948138 |
| 3.75 | 0.023 | 56.055 | 0.000410048 | 0.999358186 |
| 4.00 | 0.013 | 56.068 | 0.000231766 | 0.999589952 |
| PAN | 0.023 | 56.091 | 0.000410048 | 1.0 |

TOTAL WT.
MEDIAN WT. MEAN GRAIN SIZE
56.091 28.046 grams 1.611 phi
phi
0.3273 mm


GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 0.9 - 1.1 ft

| PHI <br> SIZE | - SAMPLE WT. | CUM. WT. | WT. \% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.330 | 0.330 | 0.006017067 | 0.006017067 |
| -1.75 | 0 | 0.330 | 0 | 0.006017067 |
| -1.50 | 0 | 0.330 | 0 | 0.006017067 |
| -1.25 | 0 | 0.330 | 0 | 0.006017067 |
| -1.00 | 0.031 | 0.361 | 0.000565240 | 0.006582306 |
| -0.75 | 0.040 | 0.401 | 0.000729341 | 0.007311648 |
| -0.50 | 0.063 | 0.464 | 0.001148713 | 0.008460360 |
| -0.25 | 0.123 | 0.587 | 0.002242725 | 0.010703085 |
| 0.00 | 0.143 | 0.730 | 0.002607396 | 0.013310481 |
| 0.25 | 0.227 | 0.957 | 0.004139012 | 0.017449493 |
| 0.50 | 0.427 | 1.384 | 0.007785719 | 0.025235213 |
| 0.75 | 0.825 | 2.209 | 0.015042666 | 0.040277879 |
| 1.00 | 1.902 | 4.111 | 0.034680184 | 0.074958063 |
| 1.25 | 3.393 | 7.504 | 0.061866385 | 0.136824448 |
| 1.50 | 4.116 | 11.620 | 0.075049231 | 0.211873678 |
| 1.75 | 7.158 | 18.778 | 0.130515644 | 0.342389322 |
| 2.00 | 6.731 | 25.509 | 0.122729925 | 0.465119247 |
| 2.25 | 7.837 | 33.346 | 0.142896215 | 0.608015462 |
| 2.50 | 10.418 | 43.764 | 0.189956969 | 0.797972431 |
| 2.75 | 7.572 | 51.336 | 0.138064328 | 0.936036759 |
| 3.00 | 2.821 | 54.157 | 0.051436803 | 0.987473561 |
| 3.25 | 0.572 | 54.729 | 0.010429582 | 0.997903143 |
| 3.50 | 0.059 | 54.788 | 0.001075779 | 0.998978922 |
| 3.75 | 0.022 | 54.810 | 0.000401138 | 0.999380060 |
| 4.00 | 0.010 | 54.820 | 0.000182335 | 0.999562395 |
| PAN | 0.024 | 54.844 | 0.000437605 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 54.844 | grams |  |
|  |  | 27.422 | grams |  |
|  |  | 2.061 | phi | 0.2396 mm |



# GRAIN SIZE DISTRIBUTION CHART 

CORE IR7: 1.1-1.5 ft

| PHI SIZE | - SAMPLE WT. | CUM. WT. | WT. \% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0.141 | 0.141 | 0.002601860 | 0.002601860 |
| -1.25 | 0.230 | 0.371 | 0.004244169 | 0.006846029 |
| -1.00 | 0.269 | 0.640 | 0.004963832 | 0.011809861 |
| -0.75 | 0.555 | 1.195 | 0.010241364 | 0.022051225 |
| -0.50 | 1.096 | 2.291 | 0.020224387 | 0.042275613 |
| -0.25 | 1.567 | 3.858 | 0.028915707 | 0.071191320 |
| 0.00 | 1.795 | 5.653 | 0.033122970 | 0.104314290 |
| 0.25 | 2.437 | 8.090 | 0.044969737 | 0.149284027 |
| 0.50 | 2.832 | 10.922 | 0.052258636 | 0.201542663 |
| 0.75 | 3.458 | 14.380 | 0.063810156 | 0.265352820 |
| 1.00 | 5.283 | 19.663 | 0.097486714 | 0.362839534 |
| 1.25 | 6.821 | 26.484 | 0.125867287 | 0.488706820 |
| 1.50 | 6.662 | 33.146 | 0.122933274 | 0.611640094 |
| 1.75 | 9.296 | 42.442 | 0.171538234 | 0.783178329 |
| 2.00 | 6.215 | 48.657 | 0.114684824 | 0.897863153 |
| 2.25 | 3.375 | 52.032 | 0.062278565 | 0.960141718 |
| 2.50 | 1.146 | 53.178 | 0.021147033 | 0.981288751 |
| 2.75 | 0.426 | 53.604 | 0.007860939 | 0.989149690 |
| 3.00 | 0.274 | 53.878 | 0.005056097 | 0.994205787 |
| 3.25 | 0.165 | 54.043 | 0.003044730 | 0.997250517 |
| 3.50 | 0.074 | 54.117 | 0.001365515 | 0.998616032 |
| 3.75 | 0.038 | 54.155 | 0.000701211 | 0.999317242 |
| 4.00 | 0.013 | 54.168 | 0.000239888 | 0.999557130 |
| PAN | 0.024 | 54.192 | 0.000442870 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 54.192 | grams grams phi |  |
|  |  | 27.096 |  |  |
|  |  | 1.274 |  | 0.4134 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 1.5-2.2 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{gathered} \text { - SAMPLE } \\ \text { WT. } \end{gathered}$ | cum. WT. | $\begin{gathered} \text { wT. } \end{gathered}$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 |
| -0.75 | 0.026 | 0.026 | 0.000499846 | 0.000499846 |
| -0.50 | 0.100 | 0.126 | 0.001922485 | 0.002422332 |
| -0.25 | 0.286 | 0.412 | 0.005498308 | 0.007920640 |
| 0.00 | 0.548 | 0.960 | 0.010535220 | 0.018455860 |
| 0.25 | 1.287 | 2.247 | 0.024742387 | 0.043198247 |
| 0.50 | 2.107 | 4.354 | 0.040506767 | 0.083705014 |
| 0.75 | 3.536 | 7.890 | 0.067979083 | 0.151684097 |
| 1.00 | 6.082 | 13.972 | 0.116925561 | 0.268609659 |
| 1.25 | 8.582 | 22.554 | 0.164987696 | 0.433597355 |
| 1.50 | 8.079 | 30.633 | 0.155317595 | 0.588914949 |
| 1.75 | 10.060 | 40.693 | 0.193402030 | 0.782316979 |
| 2.00 | 6.097 | 46.790 | 0.117213934 | 0.899530914 |
| 2.25 | 3.122 | 49.912 | 0.060019994 | 0.959550907 |
| 2.50 | 1.115 | 51.027 | 0.021435712 | 0.980986620 |
| 2.75 | 0.413 | 51.440 | 0.007939865 | 0.988926484 |
| 3.00 | 0.262 | 51.702 | 0.005036912 | 0.993963396 |
| 3.25 | 0.166 | 51.868 | 0.003191326 | 0.997154722 |
| 3.50 | 0.073 | 51.941 | 0.001403414 | 0.998558136 |
| 3.75 | 0.042 | 51.983 | 0.000807444 | 0.999365580 |
| 4.00 | 0.013 | 51.996 | 0.000249923 | 0.999615503 |
| PAN | 0.020 | 52.016 | 0.000384497 | 1.0 |
| total wr. MEDIAN WT. MEAN GRAIN SIZE |  | 52.016 | grams grams |  |
|  |  | 26.008 |  |  |
|  |  | 1.357 | phi | 0.3904 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 2.2-2.8 ft

| PHI <br> SIZE | SAMPLE <br> WT. | CUM. <br> WT. | WT. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | CUM. <br> WT. |
| -2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0.032 | 0.293 | 0.000591814 | 0.005418801 |
| -0.75 | 0.050 | 0.343 | 0.000924710 | 0.006343511 |
| -0.50 | 0.018 | 0.361 | 0.000332896 | 0.006676407 |
| -0.25 | 0.066 | 0.427 | 0.001220617 | 0.007897024 |
| 0.00 | 0.053 | 0.480 | 0.000980193 | 0.008877217 |
| 0.25 | 0.119 | 0.599 | 0.002200810 | 0.011078027 |
| 0.50 | 0.252 | 0.851 | 0.004660539 | 0.015738566 |
| 0.75 | 0.615 | 1.466 | 0.011373934 | 0.027112500 |
| 1.00 | 1.665 | 3.131 | 0.030792846 | 0.057905347 |
| 1.25 | 3.596 | 6.727 | 0.066505151 | 0.124410497 |
| 1.50 | 5.363 | 12.090 | 0.099184406 | 0.223594903 |
| 1.75 | 10.189 | 22.279 | 0.188437425 | 0.412032328 |
| 2.00 | 8.608 | 30.887 | 0.159198091 | 0.571230419 |
| 2.25 | 7.003 | 37.890 | 0.129514897 | 0.700745316 |
| 2.50 | 6.444 | 44.334 | 0.119176638 | 0.819921954 |
| 2.75 | 5.650 | 49.984 | 0.104492242 | 0.924414196 |
| 3.00 | 3.011 | 52.995 | 0.055686042 | 0.980100239 |
| 3.25 | 0.916 | 53.911 | 0.016940689 | 0.997040928 |
| 3.50 | 0.113 | 54.024 | 0.002089845 | 0.999130773 |
| 3.75 | 0.018 | 54.042 | 0.000332896 | 0.999463668 |
| 4.00 | 0.008 | 54.050 | 0.000147954 | 0.999611622 |
| PAN | 0.021 | 54.071 | 0.000388378 |  |
|  |  | 54.071 |  | 1.0 |
|  |  | 27.036 |  | grams |



GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 2.8-3.3 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIIE } \end{aligned}$ | $\begin{gathered} \text { SAMPLE } \\ \text { WT. } \end{gathered}$ | CUM. WT. | $\begin{aligned} & \text { wr. } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CUM. } \\ & \text { WT. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 |
| -0.50 | 0 | 0 | 0 | 0 |
| -0.25 | 0 | 0 | 0 | 0 |
| 0.00 | 0.008 | 0.008 | 0.000165741 | 0.000165741 |
| 0.25 | 0.045 | 0.053 | 0.000932295 | 0.001098036 |
| 0.50 | 0.102 | 0.155 | 0.002113201 | 0.003211237 |
| 0.75 | 0.269 | 0.424 | 0.005573050 | 0.008784288 |
| 1.00 | 0.972 | 1.396 | 0.020137565 | 0.028921853 |
| 1.25 | 2.642 | 4.038 | 0.054736057 | 0.083657910 |
| 1.50 | 14.977 | 19.015 | 0.310288390 | 0.393946300 |
| 1.75 | 15.911 | 34.926 | 0.329638684 | 0.723584984 |
| 2.00 | 8.219 | 43.145 | 0.170278445 | 0.893863429 |
| 2.25 | 2.747 | 45.892 | 0.056911411 | 0.950774840 |
| 2.50 | 1.338 | 47.230 | 0.027720229 | 0.978495069 |
| 2.75 | 0.526 | 47.756 | 0.010897489 | 0.989392558 |
| 3.00 | 0.330 | 48.086 | 0.006836828 | 0.996229386 |
| 3.25 | 0.124 | 48.210 | 0.002568990 | 0.998798376 |
| 3.50 | 0.037 | 48.247 | 0.000766553 | 0.999564929 |
| 3.75 | 0.012 | 48.259 | 0.000248612 | 0.999813541 |
| 4.00 | 0.006 | 48.265 | 0.000124306 | 0.999937847 |
| PAN | 0.003 | 48.268 | 0.000062153 | 1.0 |
| TOTAL WT. MEDIAN WT. mean grain size |  | 48.268 | grams |  |
|  |  | 24.134 | grams |  |
|  |  | 1.58 | phi | 0.3344 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 3.3-3.6 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | SAMPLE WT. | CUM. WT. | $\begin{aligned} & \text { WT. } \\ & \text { \% } \end{aligned}$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 |
| -0.50 | 0.011 | 0.011 | 0.000217308 | 0.000217308 |
| -0.25 | 0.013 | 0.024 | 0.000256819 | 0.000474127 |
| 0.00 | 0.008 | 0.032 | 0.000158042 | 0.000632170 |
| 0.25 | 0.051 | 0.083 | 0.001007521 | 0.001639691 |
| 0.50 | 0.078 | 0.161 | 0.001540914 | 0.003180605 |
| 0.75 | 0.282 | 0.443 | 0.005570998 | 0.008751603 |
| 1.00 | 1.121 | 1.564 | 0.022151630 | 0.030903233 |
| 1.25 | 3.604 | 5.168 | 0.071198140 | 0.102101372 |
| 1.50 | 6.990 | 12.158 | 0.138089622 | 0.240190994 |
| 1.75 | 14.848 | 27.006 | 0.293326854 | 0.533517848 |
| 2.00 | 11.049 | 38.055 | 0.218276428 | 0.751794276 |
| 2.25 | 5.982 | 44.037 | 0.118176269 | 0.869970545 |
| 2.50 | 2.863 | 46.900 | 0.056559455 | 0.926529999 |
| 2.75 | 1.876 | 48.776 | 0.037060963 | 0.963590962 |
| 3.00 | 1.262 | 50.038 | 0.024931202 | 0.988522164 |
| 3.25 | 0.453 | 50.491 | 0.008949156 | 0.997471320 |
| 3.50 | 0.094 | 50.585 | 0.001856999 | 0.999328319 |
| 3.75 | 0.013 | 50.598 | 0.000256819 | 0.999585138 |
| 4.00 | 0.003 | 50.601 | 0.000059266 | 0.999644404 |
| PAN | 0.018 | 50.619 | 0.000355596 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 50.619 | grams grams |  |
|  |  | 25.310 |  |  |
|  |  | 1.721 |  | 0.3032 mm |



GRAIN SIZE DISTRIBUTION CHART

CORE IR7: 3.6 -3.9 ft

| PHI SIZE | - SAMPLE WT. | CUM. WT. | WT. \% | CUM. <br> WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0.054 | 0.054 | 0.001142688 | 0.001142688 |
| -1.25 | 0.052 | 0.106 | 0.001100366 | 0.002243054 |
| -1.00 | 0.089 | 0.195 | 0.001883319 | 0.004126373 |
| -0.75 | 0.144 | 0.339 | 0.003047168 | 0.007173540 |
| -0.50 | 0.178 | 0.517 | 0.003766638 | 0.010940178 |
| -0.25 | 0.340 | 0.857 | 0.007194701 | 0.018134879 |
| 0.00 | 0.506 | 1.363 | 0.010707408 | 0.028842288 |
| 0.25 | 0.736 | 2.099 | 0.015574412 | 0.044416700 |
| 0.50 | 1.287 | 3.386 | 0.027234061 | 0.071650761 |
| 0.75 | 2.180 | 5.566 | 0.046130732 | 0.117781493 |
| 1.00 | 4.152 | 9.718 | 0.087860000 | 0.205641492 |
| 1.25 | 6.862 | 16.580 | 0.145206001 | 0.350847493 |
| 1.50 | 7.789 | 24.369 | 0.164822143 | 0.515669636 |
| 1.75 | 10.898 | 35.267 | 0.230611338 | 0.746280974 |
| 2.00 | 6.857 | 42.124 | 0.145100197 | 0.891381171 |
| 2.25 | 3.410 | 45.534 | 0.072158622 | 0.963539793 |
| 2.50 | 1.043 | 46.577 | 0.022070804 | 0.985610597 |
| 2.75 | 0.330 | 46.907 | 0.006983092 | 0.992593690 |
| 3.00 | 0.203 | 47.110 | 0.004295660 | 0.996889350 |
| 3.25 | 0.085 | 47.195 | 0.001798675 | 0.998688025 |
| 3.50 | 0.024 | 47.219 | 0.000507861 | 0.999195886 |
| 3.75 | 0.014 | 47.233 | 0.000296252 | 0.999492139 |
| 4.00 | 0.005 | 47.238 | 0.000105804 | 0.999597943 |
| PAN | 0.019 | 47.257 | 0.000402057 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 47.257 | grams grams phi |  |
|  |  | 23.629 |  |  |
|  |  | 1.476 |  | 0.3594 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 3.9 - 5.5 ft

| PHI <br> SIZE | SAMPLE <br> WT. | CUM. <br> WT. | WT. <br> $\%$ | CUM. <br> WT. $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 |  |
| -1.75 | 0.277 | 0.277 | 0.005000361 | 0.005000361 |
| -1.50 | 0.388 | 0.665 | 0.007004116 | 0.012004477 |
| -1.25 | 0.219 | 0.884 | 0.003953354 | 0.015957831 |
| -1.00 | 0.216 | 1.100 | 0.003899198 | 0.019857029 |
| -0.75 | 0.448 | 1.548 | 0.008087227 | 0.027944256 |
| -0.50 | 0.551 | 2.099 | 0.009946567 | 0.037890822 |
| -0.25 | 0.747 | 2.846 | 0.013484728 | 0.051375551 |
| 0.00 | 1.061 | 3.907 | 0.019153007 | 0.070528558 |
| 0.25 | 1.740 | 5.647 | 0.031410210 | 0.101938768 |
| 0.50 | 2.351 | 7.998 | 0.042439887 | 0.144378655 |
| 0.75 | 3.240 | 11.238 | 0.058487977 | 0.202866633 |
| 1.00 | 5.260 | 16.498 | 0.094952704 | 0.297819337 |
| 1.25 | 7.415 | 23.913 | 0.133854430 | 0.431673767 |
| 1.50 | 7.414 | 31.327 | 0.133836378 | 0.565510145 |
| 1.75 | 10.149 | 41.476 | 0.183208174 | 0.748718319 |
| 2.00 | 6.730 | 48.206 | 0.121488916 | 0.870207235 |
| 2.25 | 3.964 | 52.170 | 0.071557513 | 0.941764748 |
| 2.50 | 1.724 | 53.894 | 0.031121381 | 0.972886129 |
| 2.75 | 0.745 | 54.639 | 0.013448624 | 0.986334753 |
| 3.00 | 0.441 | 55.080 | 0.007960864 | 0.994295617 |
| 3.25 | 0.198 | 55.278 | 0.003574265 | 0.997869882 |
| 3.50 | 0.051 | 55.329 | 0.000920644 | 0.998790526 |
| 3.75 | 0.028 | 55.357 | 0.000505452 | 0.999295978 |
| 4.00 | 0.013 | 55.370 | 0.000234674 | 0.999530652 |
| PAN | 0.026 | 55.396 | 0.000469348 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 55.396 |  | grams |



GRAIN SIZE DISTRIBUTION CHART
CORE IR7: 5.5 -6.1 ft

| PHI <br> SIZE | SAMPLE <br> WT. | CUM. <br> WT. | WT. <br> $\%$ | CUM. <br> WT. $\%$ |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 |  |  |  |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0.017 | 0.017 | 0.000274939 | 0.000274939 |
| -1.00 | 0.049 | 0.066 | 0.000792470 | 0.001067408 |
| -0.75 | 0.035 | 0.101 | 0.000566050 | 0.001633458 |
| -0.50 | 0.063 | 0.164 | 0.001018890 | 0.002652348 |
| -0.25 | 0.137 | 0.301 | 0.002215681 | 0.004868029 |
| 0.00 | 0.237 | 0.538 | 0.003832967 | 0.008700996 |
| 0.25 | 0.410 | 0.948 | 0.006630871 | 0.015331867 |
| 0.50 | 0.760 | 1.708 | 0.012291370 | 0.027623237 |
| 0.75 | 1.539 | 3.247 | 0.024890025 | 0.052513262 |
| 1.00 | 3.915 | 7.162 | 0.063316729 | 0.115829991 |
| 1.25 | 8.212 | 15.374 | 0.132811489 | 0.248641480 |
| 1.50 | 8.894 | 24.268 | 0.143841377 | 0.392482857 |
| 1.75 | 13.315 | 37.583 | 0.215341571 | 0.607824427 |
| 2.00 | 10.165 | 47.748 | 0.164397076 | 0.772221503 |
| 2.25 | 6.800 | 54.548 | 0.109975417 | 0.882196921 |
| 2.50 | 3.280 | 57.828 | 0.053046966 | 0.935243887 |
| 2.75 | 1.696 | 59.524 | 0.027429163 | 0.962673050 |
| 3.00 | 1.271 | 60.795 | 0.020555699 | 0.983228749 |
| 3.25 | 0.714 | 61.509 | 0.011547419 | 0.994776168 |
| 3.50 | 0.164 | 61.673 | 0.002652348 | 0.997428516 |
| 3.75 | 0.071 | 61.744 | 0.001148273 | 0.998576789 |
| 4.00 | 0.035 | 61.779 | 0.000566050 | 0.999142839 |
| PAN | 0.053 | 61.832 | 0.000857161 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 61.832 |  |  |
| MEDIAN WT. |  | 30.916 |  | grams |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-8: 0-0.3 ft.
PHI SIZE
CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 |
| -1.25 | 0.043 | 0.043 | 0.000580853 | 0.000580853 |
| -1.00 | 0.022 | 0.065 | 0.000297181 | 0.000878034 |
| -0.75 | 0.134 | 0.199 | 0.001810101 | 0.002688136 |
| -0.50 | 0.212 | 0.411 | 0.002863743 | 0.005551878 |
| -0.25 | 0.307 | 0.718 | 0.004147023 | 0.009698902 |
| 0.00 | 0.437 | 1.155 | 0.005903092 | 0.015601994 |
| 0.25 | 1.079 | 2.234 | 0.014575369 | 0.030177363 |
| 0.50 | 1.949 | 4.183 | 0.026327520 | 0.056504883 |
| 0.75 | 3.492 | 7.675 | 0.047170703 | 0.103675587 |
| 1.00 | 6.913 | 14.588 | 0.093382323 | 0.197057910 |
| 1.25 | 10.800 | 25.388 | 0.145888773 | 0.342946683 |
| 1.50 | 11.059 | 36.447 | 0.149387402 | 0.492334085 |
| 1.75 | 16.642 | 53.089 | 0.224803793 | 0.717137878 |
| 2.00 | 11.573 | 64.662 | 0.156330627 | 0.873468506 |
| 2.25 | 6.378 | 71.040 | 0.086155426 | 0.959623931 |
| 2.50 | 2.004 | 73.044 | 0.027070472 | 0.986694404 |
| 2.75 | 0.431 | 73.475 | 0.005822043 | 0.992516446 |
| 3.00 | 0.220 | 73.695 | 0.002971808 | 0.995488255 |
| 3.25 | 0.165 | 73.860 | 0.002228856 | 0.997717111 |
| 3.50 | 0.100 | 73.960 | 0.001350822 | 0.999067933 |
| 3.75 | 0.054 | 74.014 | 0.000729444 | 0.999797377 |
| 4.00 | 0.011 | 74.025 | 0.000148590 | 0.999945967 |
| PAN | 0.004 | 74.029 | 0.000054033 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE

| 74.029 | grams |
| :---: | :---: |
| 37.015 | grams |
| 1.51 | phi |

0.3511 mm


| GRAIN SIZE DISTRIBUTION CHART |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| CORE IR-8: 0.3-1.0 ft |  |  |  |  |
| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| <-2.00 | 2.539 | 2.539 | 0.029932566 | 0.029932566 |
| -1.75 | 1.015 | 3.554 | 0.011965953 | 0.041898519 |
| -1.50 | 1.926 | 5.480 | 0.022705838 | 0.064604357 |
| -1.25 | 2.309 | 7.789 | 0.027221070 | 0.091825427 |
| -1.00 | 2.474 | 10.263 | 0.029166274 | 0.120991700 |
| -0.75 | 3.373 | 13.636 | 0.039764689 | 0.160756390 |
| -0.50 | 4.363 | 17.999 | 0.051435914 | 0.212192304 |
| -0.25 | 5.013 | 23.012 | 0.059098840 | 0.271291144 |
| 0.00 | 4.944 | 27.956 | 0.058285391 | 0.329576535 |
| 0.25 | 5.717 | 33.673 | 0.067398378 | 0.396974913 |
| 0.50 | 5.431 | 39.104 | 0.064026691 | 0.461001603 |
| 0.75 | 5.885 | 44.989 | 0.069378949 | 0.530380553 |
| 1.00 | 6.974 | 51.963 | 0.082217297 | 0.612597850 |
| 1.25 | 8.310 | 60.273 | 0.097967556 | 0.710565406 |
| 1.50 | 6.027 | 66.300 | 0.071053004 | 0.781618410 |
| 1.75 | 7.568 | 73.868 | 0.089220032 | 0.870838442 |
| 2.00 | 5.173 | 79.041 | 0.060985099 | 0.931823541 |
| 2.25 | 3.249 | 82.290 | 0.038302839 | 0.970126379 |
| 2.50 | 1.393 | 83.683 | 0.016422239 | 0.986548618 |
| 2.75 | 0.518 | 84.201 | 0.006106762 | 0.992655381 |
| 3.00 | 0.268 | 84.469 | 0.003159483 | 0.995814864 |
| 3.25 | 0.188 | 84.657 | 0.002216354 | 0.998031218 |
| 3.50 | 0.090 | 84.747 | 0.001061020 | 0.999092238 |
| 3.75 | 0.053 | 84.800 | 0.000624823 | 0.999717061 |
| 4.00 | 0.011 | 84.811 | 0.000129680 | 0.999846741 |
| PAN | 0.013 | 84.824 | 0.000153259 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 84.824 | grams |  |
|  |  | 42.412 | grams |  |
|  |  | 0.64 | phi | 0.6417 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-8: 1.0-1.5 ft.



GRAIN SIZE DISTRIBUTION CHART
CORE IR-8: 1.5-1.9 ft.


GRAIN SIZE DISTRIBUTION IR-8: 1.5-1.9 ft.


GRAIN SIZE DISTRIBUTION CHART
CORE IR-8: 1.9-2.4 ft.

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | CUM. WT. \% |
| $<-2.00$ | 0.075 | 0.075 | 0.000830629 | 0.000830629 |
| -1.75 | 0.300 | 0.375 | 0.003322517 | 0.004153146 |
| -1.50 | 0.872 | 1.247 | 0.009657449 | 0.013810594 |
| -1.25 | 1.766 | 3.013 | 0.019558548 | 0.033369143 |
| -1.00 | 3.221 | 6.234 | 0.035672754 | 0.069041897 |
| -0.75 | 4.486 | 10.720 | 0.049682700 | 0.118724597 |
| -0.50 | 6.197 | 16.917 | 0.068632120 | 0.187356716 |
| -0.25 | 5.165 | 22.082 | 0.057202662 | 0.244559379 |
| 0.00 | 4.253 | 26.335 | 0.047102212 | 0.291661591 |
| 0.25 | 3.449 | 29.784 | 0.038197867 | 0.329859458 |
| 0.50 | 2.522 | 32.306 | 0.027931290 | 0.357790748 |
| 0.75 | 2.621 | 34.927 | 0.029027721 | 0.386818469 |
| 1.00 | 3.782 | 38.709 | 0.041885860 | 0.428704329 |
| 1.25 | 5.797 | 44.506 | 0.064202098 | 0.492906427 |
| 1.50 | 6.680 | 51.186 | 0.073981372 | 0.566887799 |
| 1.75 | 11.918 | 63.104 | 0.131992513 | 0.698880312 |
| 2.00 | 10.399 | 73.503 | 0.115169504 | 0.814049816 |
| 2.25 | 7.711 | 81.214 | 0.085399754 | 0.899449570 |
| 2.50 | 3.915 | 85.129 | 0.043358843 | 0.942808413 |
| 2.75 | 1.710 | 86.839 | 0.018938345 | 0.961746758 |
| 3.00 | 1.145 | 87.984 | 0.012680939 | 0.974427696 |
| 3.25 | 1.039 | 89.023 | 0.011506983 | 0.985934679 |
| 3.50 | 0.694 | 89.717 | 0.007686089 | 0.993620768 |
| 3.75 | 0.446 | 90.163 | 0.004939475 | 0.998560243 |
| 4.00 | 0.077 | 90.240 | 0.000852779 | 0.999413022 |
| PAN | 0.053 | 90.293 | 0.000586978 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 90.293 | grams |  |
| MEDIAN WT. |  | 45.147 | grams |  |
| MEAN GRAIN | SIZE | 1.27 |  | phi |
|  |  |  |  | 0.4147 mm |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART

CORE IR8: 2.4-2.7 ft
PHI SIZE SAMPLE WT. CUM. WT. WT.\% . CUM. WT. \%

| $<-2.00$ | 0 | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| -1.75 | 0.289 | 0.289 | 0.005792512 | 0.005792512 |
| -1.50 | 0 | 0.289 | 0 | 0.005792512 |
| -1.25 | 0 | 0.289 | 0 | 0.005792512 |
| -1.00 | 0.066 | 0.355 | 0.001322857 | 0.007115369 |
| -0.75 | 0.069 | 0.424 | 0.001382987 | 0.008498356 |
| -0.50 | 0.099 | 0.523 | 0.001984286 | 0.010482643 |
| -0.25 | 0.145 | 0.668 | 0.002906278 | 0.013388920 |
| 0.00 | 0.228 | 0.896 | 0.004569871 | 0.017958791 |
| 0.25 | 0.553 | 1.449 | 0.011083941 | 0.029042732 |
| 0.50 | 0.975 | 2.424 | 0.019542211 | 0.048584943 |
| 0.75 | 1.905 | 4.329 | 0.038182474 | 0.086767418 |
| 1.00 | 4.114 | 8.443 | 0.082458110 | 0.169225527 |
| 1.25 | 7.161 | 15.604 | 0.143530025 | 0.312755552 |
| 1.50 | 8.261 | 23.865 | 0.165577648 | 0.478333200 |
| 1.75 | 12.751 | 36.616 | 0.255572036 | 0.733905235 |
| 2.00 | 7.764 | 44.380 | 0.155616131 | 0.889521366 |
| 2.25 | 3.388 | 47.768 | 0.067906678 | 0.957428045 |
| 2.50 | 1.172 | 48.940 | 0.023490740 | 0.980918785 |
| 2.75 | 0.530 | 49.470 | 0.010622946 | 0.991541730 |
| 3.00 | 0.267 | 49.737 | 0.005351559 | 0.996893290 |
| 3.25 | 0.092 | 49.829 | 0.001843983 | 0.998737273 |
| 3.50 | 0.028 | 49.857 | 0.000561212 | 0.999298485 |
| 3.75 | 0.021 | 49.878 | 0.000420909 | 0.999719394 |
| 4.00 | 0.007 | 49.885 | 0.000140303 | 0.999859697 |
| PAN | 0.007 | 49.892 | 0.000140303 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 49.892 | grams |  |
| MEDIAN WT. |  | 24.946 | grams |  |
| MEAN GRAIN SIZE | 1.52 | phi | 0.3487 mm |  |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE IR8: 2.7-3.0 ft

| PHI SIZE _ SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 | 0 |
| $<-2.00$ | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0.014 | 0.000172115 |
| -1.25 | 0 | 0.036 | 0.000270466 | 0.000172115 |
| -1.00 | 0.014 | 0.146 | 0.001352332 | 0.000442581 |
| -0.75 | 0.022 | 0.615 | 0.005765850 | 0.0079490763 |
| -0.50 | 0.110 | 1.445 | 0.010203956 | 0.017764719 |
| -0.25 | 0.469 | 3.407 | 0.024120677 | 0.041885396 |
| 0.00 | 0.830 | 6.927 | 0.043274609 | 0.085160005 |
| 0.25 | 1.962 | 12.775 | 0.071894862 | 0.157054868 |
| 0.50 | 3.520 | 23.039 | 0.126184827 | 0.283239695 |
| 0.75 | 5.848 | 38.112 | 0.185306303 | 0.468545998 |
| 1.00 | 10.264 | 50.407 | 0.151153785 | 0.619699782 |
| 1.25 | 15.073 | 65.951 | 0.191096741 | 0.810796523 |
| 1.50 | 12.295 | 74.900 | 0.110018318 | 0.920814841 |
| 1.75 | 15.544 | 79.424 | 0.055617708 | 0.976432549 |
| 2.00 | 8.949 | 80.757 | 0.016387800 | 0.992820349 |
| 2.25 | 4.524 | 81.058 | 0.003700471 | 0.996520820 |
| 2.50 | 1.333 | 81.183 | 0.001536740 | 0.998057560 |
| 2.75 | 0.301 | 81.258 | 0.000922044 | 0.998979604 |
| 3.00 | 0.125 | 81.295 | 0.000454875 | 0.999434480 |
| 3.25 | 0.075 | 81.321 | 0.000319642 | 0.999754122 |
| 3.50 | 0.037 | 81.329 | 0.000098351 | 0.999852473 |
| 3.75 | 0.026 | 81.341 | 0.000147527 | 1.0 |
| 4.00 | 0.008 |  |  |  |
| PAN | 0.012 |  |  |  |


| TOTAL WT. | 81.341 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 40.671 | grams |  |
| MEAN GRAIN SIZE | 1.3 | phi | 0.4061 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-8: 3.0-3.8 ft

| PHISIZE | WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 |
| -1.75 | 0.077 | 0.077 | 0.000872106 | 0.000872106 |
| -1.50 | 0 | 0.077 | 0 | 0.000872106 |
| -1.25 | 0.015 | 0.092 | 0.000169891 | 0.001041997 |
| -1.00 | 0.066 | 0.158 | 0.000747520 | 0.001789517 |
| -0.75 | 0.043 | 0.201 | 0.000487020 | 0.002276537 |
| -0.50 | 0.058 | 0.259 | 0.000656911 | 0.002933448 |
| -0.25 | 0.142 | 0.401 | 0.001608300 | 0.004541748 |
| 0.00 | 0.256 | 0.657 | 0.002899470 | 0.007441218 |
| 0.25 | 0.436 | 1.093 | 0.004938160 | 0.012379378 |
| 0.50 | 0.819 | 1.912 | 0.009276039 | 0.021655416 |
| 0.75 | 1.728 | 3.640 | 0.019571422 | 0.041226838 |
| 1.00 | 4.688 | 8.328 | 0.053096543 | 0.094323382 |
| 1.25 | 10.282 | 18.610 | 0.116454492 | 0.210777873 |
| 1.50 | 13.038 | 31.648 | 0.147669098 | 0.358446971 |
| 1.75 | 21.461 | 53.109 | 0.243068455 | 0.601515426 |
| 2.00 | 14.327 | 67.436 | 0.162268382 | 0.763783808 |
| 2.25 | 8.675 | 76.111 | 0.098253522 | 0.862037331 |
| 2.50 | 5.683 | 81.794 | 0.064365967 | 0.926403298 |
| 2.75 | 3.841 | 85.635 | 0.043503375 | 0.969906673 |
| 3.00 | 1.947 | 87.582 | 0.022051828 | 0.991958501 |
| 3.25 | 0.574 | 88.156 | 0.006501155 | 0.998459657 |
| 3.50 | 0.090 | 88.246 | 0.001019345 | 0.999479001 |
| 3.75 | 0.024 | 88.270 | 0.000271825 | 0.999750827 |
| 4.00 | 0.010 | 88.280 | 0.000113261 | 0.999864087 |
| PAN | 0.012 | 88.292 | 0.000135913 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | $\begin{aligned} & 88.292 \\ & 44.146 \end{aligned}$ | grams grams |  |
|  |  |  |  |  |
|  |  | 44.146 1.65 | phi | 0.3186 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-8: 3.8-5.2 ft.

PHI SIZE

SAMPLE WT.
$<-2.00$
0.128
-1.75
-1.50
-1.25
-1.00
-0.75
-0.50
$-0.25$
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
3.00
3.25
3.50
3.75
4.00

PAN
0.057
0.017
0.277
0.458
0.836
1.593
2.234
2.627
3.698
4.092
4.869
6.860
8.995
8.779
11.850
7.566
4.248
1.065
0.229
0.104
0.071
0.032
0.020
0.011
0.015

CUM. WT.
WT. \%
CUM. WT. \%

| 0.128 | 0.001809673 | 0.001809673 |
| :--- | ---: | ---: |
| 0.185 | 0.000805870 | 0.002615543 |
| 0.202 | 0.000240347 | 0.002855891 |
| 0.479 | 0.003916246 | 0.006772137 |
| 0.937 | 0.006475237 | 0.013247374 |
| 1.773 | 0.011819429 | 0.025066802 |
| 3.366 | 0.022521949 | 0.047588752 |
| 5.600 | 0.031584454 | 0.079173206 |
| 8.227 | 0.037140716 | 0.116313922 |
| 11.925 | 0.052282592 | 0.168596514 |
| 16.017 | 0.057852992 | 0.226449506 |
| 20.886 | 0.068838275 | 0.295287780 |
| 27.746 | 0.096987177 | 0.392274957 |
| 36.741 | 0.127171961 | 0.519446919 |
| 45.520 | 0.124118138 | 0.643565056 |
| 57.370 | 0.167536158 | 0.811101214 |
| 64.936 | 0.106968656 | 0.918069870 |
| 69.184 | 0.060058532 | 0.978128402 |
| 7.249 | 0.015057047 | 0.993185449 |
| 70.478 | 0.003237619 | 0.996423068 |
| 70.582 | 0.001470360 | 0.997893427 |
| 70.653 | 0.001003803 | 0.998897230 |
| 70.685 | 0.000452418 | 0.999349649 |
| 70.705 | 0.000282761 | 0.999632410 |
| 70.716 | 0.000155519 | 0.999787929 |
| 70.731 | 0.000212071 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
70.731
35.366
1.21
grams
grams phi
0.4323 mm

GRAIN SIZE DISTRIBUTION IR-8: $\mathbf{3 . 8 - 5 . 2 ~ f t ~}$


Phi Size


GRAIN SIZE DISTRIBUTION IR-8: 5.2-6.1 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-9: 0-0.5 ft.
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.174 | 0 | 0 | 0 |
| -1.50 | 0.255 | 0 | 0 | 0 |
| -1.25 | 0.769 | 1.198 | 0.007520120 | 0.011715350 |
| -1.00 | 1.630 | 2.828 | 0.015939917 | 0.027655268 |
| -0.75 | 3.239 | 6.067 | 0.031674474 | 0.059329741 |
| -0.50 | 5.626 | 11.693 | 0.055017162 | 0.114346903 |
| -0.25 | 7.960 | 19.653 | 0.077841559 | 0.192188463 |
| 0.00 | 8.625 | 28.278 | 0.084344654 | 0.276533117 |
| 0.25 | 10.406 | 38.684 | 0.101761214 | 0.378294331 |
| 0.50 | 8.874 | 47.558 | 0.086779648 | 0.465073979 |
| 0.75 | 8.264 | 55.822 | 0.080814403 | 0.545888381 |
| 1.00 | 8.168 | 63.990 | 0.079875610 | 0.625763991 |
| 1.25 | 7.693 | 71.683 | 0.075230542 | 0.700994533 |
| 1.50 | 6.372 | 78.055 | 0.062312364 | 0.763306897 |
| 1.75 | 8.458 | 86.513 | 0.082711546 | 0.846018443 |
| 2.00 | 6.761 | 93.274 | 0.066116430 | 0.912134873 |
| 2.25 | 4.872 | 98.146 | 0.047643728 | 0.959778601 |
| 2.50 | 2.196 | 100.342 | 0.021474882 | 0.981253484 |
| 2.75 | 0.749 | 101.091 | 0.007324539 | 0.988578022 |
| 3.00 | 0.433 | 101.524 | 0.004234346 | 0.992812369 |
| 3.25 | 0.352 | 101.876 | 0.003442240 | 0.996254608 |
| 3.50 | 0.214 | 102.090 | 0.002092725 | 0.998347334 |
| 3.75 | 0.122 | 102.212 | 0.001193049 | 0.999540383 |
| 4.00 | 0.028 | 102.240 | 0.000273815 | 0.999814197 |
| PAN | 0.019 | 102.259 | 0.000185803 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
102.259
51.130
0.61
grams
grams
phi $\quad 0.6552 \mathrm{~mm}$

GRAIN SIZE DISTRIBUTION CHART

CORE IR-9: 0.5-1.8 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.048 | 0 | 0 | 0 |
| -1.50 | 0.161 | 0 | 0 | 0 |
| -1.25 | 0.164 | 0.373 | 0.002351153 | 0.005347440 |
| -1.00 | 0.186 | 0.559 | 0.002666552 | 0.008013992 |
| -0.75 | 0.551 | 1.110 | 0.007899302 | 0.015913294 |
| -0.50 | 0.998 | 2.108 | 0.014307628 | 0.030220922 |
| -0.25 | 1.429 | 3.537 | 0.020486574 | 0.050707496 |
| 0.00 | 1.539 | 5.076 | 0.022063567 | 0.072771064 |
| 0.25 | 2.534 | 7.610 | 0.036328187 | 0.109099250 |
| 0.50 | 3.155 | 10.765 | 0.045231029 | 0.154330280 |
| 0.75 | 4.547 | 15.312 | 0.065187160 | 0.219517440 |
| 1.00 | 7.058 | 22.370 | 0.101185612 | 0.320703052 |
| 1.25 | 9.064 | 31.434 | 0.129944232 | 0.450647284 |
| 1.50 | 8.414 | 39.848 | 0.120625636 | 0.571272920 |
| 1.75 | 11.752 | 51.600 | 0.168480209 | 0.739753129 |
| 2.00 | 8.645 | 60.245 | 0.123937322 | 0.863690451 |
| 2.25 | 5.453 | 65.698 | 0.078175849 | 0.941866300 |
| 2.50 | 2.217 | 67.915 | 0.031783579 | 0.973649879 |
| 2.75 | 0.824 | 68.739 | 0.011813112 | 0.985462991 |
| 3.00 | 0.522 | 69.261 | 0.007483549 | 0.992946540 |
| 3.25 | 0.291 | 69.552 | 0.004171864 | 0.997118404 |
| 3.50 | 0.124 | 69.676 | 0.001777701 | 0.998896105 |
| 3.75 | 0.036 | 69.712 | 0.000516107 | 0.999412212 |
| 4.00 | 0.022 | 69.734 | 0.000315399 | 0.999727610 |
| PAN | 0.019 | 69.753 | 0.000272390 | 1.0 |
|  |  |  |  |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE

$$
69.753
$$

$$
34.877
$$

1.35
grams
grams phi $\quad 0.3923 \mathrm{~mm}$



GRAIN SIZE DISTRIBUTION IR-9: 1.8-3.1 ft.


| GRAIN SIZE DISTRI <br> CORE IR-9: 3.1-3.6 ft. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| <-2.00 | 0.000 | 0 | 0 | 0 |
| -1.75 | 0.061 | 0 | 0 | 0 |
| -1.50 | 0.054 | 0 | 0 | 0 |
| -1.25 | 0.105 | 0.220 | 0.001187487 | 0.002488069 |
| -1.00 | 0.174 | 0.394 | 0.001967836 | 0.004455905 |
| -0.75 | 0.245 | 0.639 | 0.002770804 | 0.007226708 |
| -0.50 | 0.417 | 1.056 | 0.004716021 | 0.011942729 |
| -0.25 | 0.653 | 1.709 | 0.007385040 | 0.019327769 |
| 0.00 | 0.832 | 2.541 | 0.009409423 | 0.028737192 |
| 0.25 | 1.466 | 4.007 | 0.016579584 | 0.045316776 |
| 0.50 | 2.278 | 6.285 | 0.025762819 | 0.071079596 |
| 0.75 | 3.661 | 9.946 | 0.041403723 | 0.112483319 |
| 1.00 | 7.437 | 17.383 | 0.084108027 | 0.196591346 |
| 1.25 | 13.180 | 30.563 | 0.149057927 | 0.345649273 |
| 1.50 | 13.780 | 44.343 | 0.155843568 | 0.501492841 |
| 1.75 | 18.620 | 62.963 | 0.210581077 | 0.712073918 |
| 2.00 | 10.745 | 73.708 | 0.121519531 | 0.833593450 |
| 2.25 | 6.176 | 79.884 | 0.069846871 | 0.903440320 |
| 2.50 | 3.797 | 83.681 | 0.042941802 | 0.946382122 |
| 2.75 | 2.775 | 86.456 | 0.031383592 | 0.977765714 |
| 3.00 | 1.437 | 87.893 | 0.016251612 | 0.994017326 |
| 3.25 | 0.428 | 88.321 | 0.004840424 | 0.998857750 |
| 3.50 | 0.059 | 88.380 | 0.000667255 | 0.999525005 |
| 3.75 | 0.018 | 88.398 | 0.000203569 | 0.999728574 |
| 4.00 | 0.012 | 88.410 | 0.000135713 | 0.999864287 |
| PAN | 0.012 | 88.422 | 0.000135713 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { MEDIAN WT. } \\ & \text { MEAN GRAIN SIZE } \end{aligned}$ |  | 88.422 | grams |  |
|  |  | 44.211 | grams |  |
|  |  | 1.75 | phi | 0.2973 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-9: 3.6-4.2 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.034 | 0 | 0 | 0 |
| -1.25 | 0.087 | 0.121 | 0.001092539 | 0.001519509 |
| -1.00 | 0.063 | 0.184 | 0.000791149 | 0.002310658 |
| -0.75 | 0.167 | 0.351 | 0.002097173 | 0.004407831 |
| -0.50 | 0.380 | 0.731 | 0.004772011 | 0.009179842 |
| -0.25 | 0.573 | 1.304 | 0.007195690 | 0.016375532 |
| 0.00 | 0.947 | 2.251 | 0.011892353 | 0.028267886 |
| 0.25 | 1.913 | 4.164 | 0.024023308 | 0.052291193 |
| 0.50 | 2.947 | 7.111 | 0.037008200 | 0.089299393 |
| 0.75 | 4.600 | 11.711 | 0.057766448 | 0.147065841 |
| 1.00 | 8.490 | 20.201 | 0.106616770 | 0.253682611 |
| 1.25 | 13.215 | 33.416 | 0.165952958 | 0.419635569 |
| 1.50 | 11.966 | 45.382 | 0.150268112 | 0.569903681 |
| 1.75 | 16.494 | 61.876 | 0.207130389 | 0.777034070 |
| 2.00 | 9.929 | 71.805 | 0.124687622 | 0.901721691 |
| 2.25 | 4.723 | 76.528 | 0.059311072 | 0.961032764 |
| 2.50 | 1.559 | 78.087 | 0.019577803 | 0.980610566 |
| 2.75 | 0.673 | 78.760 | 0.008451482 | 0.989062049 |
| 3.00 | 0.454 | 79.214 | 0.005701297 | 0.994763346 |
| 3.25 | 0.231 | 79.445 | 0.002900880 | 0.997664226 |
| 3.50 | 0.086 | 79.531 | 0.001079981 | 0.998744208 |
| 3.75 | 0.047 | 79.578 | 0.000590222 | 0.999334430 |
| 4.00 | 0.025 | 79.603 | 0.000313948 | 0.999648378 |
| PAN | 0.028 | 79.631 | 0.000351622 |  |


| TOTAL WT. | 79.631 | grams |
| :--- | :---: | :---: |
| MEDIAN WT. | 39.816 | grams |
| MEAN GRAIN SIZE | 1.38 | phi |

0.3842 mm




## GRAIN SIZE DISTRIBUTION CHART

CORE IR-9: $5.0-5.4 \mathrm{ft}$.
PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 1.224 | 1 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.572 | 2 | 0 | 0 |
| -1.50 | 0.996 | 3 | 0 | 0 |
| -1.25 | 1.524 | 4.316 | 0.014235008 | 0.040313843 |
| -1.00 | 1.966 | 6.282 | 0.018363534 | 0.058677377 |
| -0.75 | 3.065 | 9.347 | 0.028628806 | 0.087306183 |
| -0.50 | 4.705 | 14.052 | 0.043947319 | 0.131253503 |
| -0.25 | 5.577 | 19.629 | 0.052092285 | 0.183345787 |
| 0.00 | 6.027 | 25.656 | 0.056295535 | 0.239641323 |
| 0.25 | 7.357 | 33.013 | 0.068718476 | 0.308359798 |
| 0.50 | 7.810 | 40.823 | 0.072949748 | 0.381309546 |
| 0.75 | 9.025 | 49.848 | 0.084298524 | 0.465608070 |
| 1.00 | 10.945 | 60.793 | 0.102232393 | 0.567840463 |
| 1.25 | 11.947 | 72.740 | 0.111591631 | 0.679432094 |
| 1.50 | 9.370 | 82.110 | 0.087521016 | 0.766953110 |
| 1.75 | 11.486 | 93.596 | 0.107285634 | 0.874238745 |
| 2.00 | 6.400 | 99.996 | 0.059779563 | 0.934018307 |
| 2.25 | 4.011 | 104.007 | 0.037464973 | 0.971483280 |
| 2.50 | 1.541 | 105.548 | 0.014393798 | 0.985877078 |
| 2.75 | 0.592 | 106.140 | 0.005529610 | 0.991406688 |
| 3.00 | 0.353 | 106.493 | 0.003297217 | 0.994703904 |
| 3.25 | 0.241 | 106.734 | 0.002251074 | 0.996954979 |
| 3.50 | 0.115 | 106.849 | 0.001074164 | 0.998029143 |
| 3.75 | 0.093 | 106.942 | 0.000868672 | 0.998897814 |
| 4.00 | 0.053 | 106.995 | 0.000495050 | 0.999392864 |
| PAN | 0.065 | 107.060 | 0.000607136 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 107.060 | grams |  |
| MEDIAN WT. |  | 53.530 | grams |  |
| MEAN GRAIN SIZE | 0.83 | phi | 0.5625 mm |  |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-10: 0-1.1 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.000 | 0 | 0 | 0 |
| -1.25 | 0.130 | 0.130 | 0.001869105 | 0.001869105 |
| -1.00 | 0.271 | 0.401 | 0.003896365 | 0.005765470 |
| -0.75 | 0.678 | 1.079 | 0.009748102 | 0.015513573 |
| -0.50 | 1.785 | 2.864 | 0.025664251 | 0.041177824 |
| -0.25 | 3.242 | 6.106 | 0.046612606 | 0.087790430 |
| 0.00 | 4.395 | 10.501 | 0.063190131 | 0.150980561 |
| 0.25 | 6.546 | 17.047 | 0.094116632 | 0.245097193 |
| 0.50 | 6.229 | 23.276 | 0.089558891 | 0.334656085 |
| 0.75 | 6.499 | 29.775 | 0.093440879 | 0.428096963 |
| 1.00 | 7.114 | 36.889 | 0.102283184 | 0.530380147 |
| 1.25 | 6.755 | 43.644 | 0.097121578 | 0.627501725 |
| 1.50 | 5.046 | 48.690 | 0.072550035 | 0.700051760 |
| 1.75 | 6.855 | 55.545 | 0.098559351 | 0.798611111 |
| 2.00 | 5.421 | 60.966 | 0.077941684 | 0.876552795 |
| 2.25 | 3.989 | 64.955 | 0.057352772 | 0.933905567 |
| 2.50 | 2.133 | 67.088 | 0.030667702 | 0.964573269 |
| 2.75 | 0.964 | 68.052 | 0.013860133 | 0.978433402 |
| 3.00 | 0.616 | 68.668 | 0.008856683 | 0.987290085 |
| 3.25 | 0.465 | 69.133 | 0.006685645 | 0.993975730 |
| 3.50 | 0.226 | 69.359 | 0.003249367 | 0.997225098 |
| 3.75 | 0.108 | 69.467 | 0.001552795 | 0.998777893 |
| 4.00 | 0.050 | 69.517 | 0.000718887 | 0.999496779 |
| PAN | 0.035 | 69.552 | 0.000503221 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 69.552 | grams |  |
| MEDIAN WT. |  | 34.776 | grams | 0.5285 ma |
| MEAN GRAIN SIZE | 0.92 |  | phi | 0.5 |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-10: 1.1-2.7 ft.

PHI SIZE SAMPLE WT. CUM. WT.

| $<-2.00$ | 3.472 | 3 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 1.833 | 5 | 0 | 0 |
| -1.50 | 2.883 | 8 | 0 | 0 |
| -1.25 | 4.363 | 12.551 | 0.049429012 | 0.142191961 |
| -1.00 | 4.603 | 17.154 | 0.052148004 | 0.194339965 |
| -0.75 | 5.371 | 22.525 | 0.060848779 | 0.255188743 |
| -0.50 | 5.143 | 27.668 | 0.058265736 | 0.313454480 |
| -0.25 | 4.340 | 32.008 | 0.049168442 | 0.362622921 |
| 0.00 | 3.325 | 35.333 | 0.037669371 | 0.400292292 |
| 0.25 | 3.037 | 38.370 | 0.034406580 | 0.434698872 |
| 0.50 | 2.382 | 40.752 | 0.026985997 | 0.461684869 |
| 0.75 | 2.289 | 43.041 | 0.025932388 | 0.487617257 |
| 1.00 | 2.829 | 45.870 | 0.032050120 | 0.519667377 |
| 1.25 | 3.731 | 49.601 | 0.042268999 | 0.561936376 |
| 1.50 | 4.731 | 54.332 | 0.053598133 | 0.615534509 |
| 1.75 | 8.552 | 62.884 | 0.096886754 | 0.712421263 |
| 2.00 | 7.713 | 70.597 | 0.087381611 | 0.799802873 |
| 2.25 | 6.177 | 76.774 | 0.069980061 | 0.869782934 |
| 2.50 | 3.839 | 80.613 | 0.043492545 | 0.913275479 |
| 2.75 | 2.321 | 82.934 | 0.026294920 | 0.939570399 |
| 3.00 | 2.014 | 84.948 | 0.022816876 | 0.962387275 |
| 3.25 | 1.850 | 86.798 | 0.020958898 | 0.983346173 |
| 3.50 | 0.961 | 87.759 | 0.010887298 | 0.994233471 |
| 3.75 | 0.413 | 88.172 | 0.004678932 | 0.998912403 |
| 4.00 | 0.056 | 88.228 | 0.000634432 | 0.999546835 |
| PAN | 0.040 | 88.268 | 0.000453165 | 1.0 |


|  |  |  |  |
| :--- | :---: | :---: | :---: |
| TOTAL WT. | 88.268 | grams |  |
| MEDIAN WT. | 44.134 | grams |  |
| MEAN GRAIN SIZE | 0.85 | phi | 0.5548 mm |

GRAIN SIZE DISTRIBUTION IR-10: 1.1-2.7 ft.


Phi Size

| GRAIN SIZE DISTRIBUTION CHART <br> CORE IR-10: $2.7-3.1 \mathrm{ft}$. |  |  |  |
| :---: | :---: | :---: | :---: |
| PHISIZE SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| <-2.00 0.000 | 0 | 0 | 0 |
| -1.75 0.040 | 0 | 0 | 0 |
| -1.50 0.047 | 0 | 0 | 0 |
| -1.25 0.117 | 0.204 | 0.001546004 | 0.002695596 |
| -1.00 0.127 | 0.331 | 0.001678141 | 0.004373736 |
| -0.75 0.342 | 0.673 | 0.004519087 | 0.008892824 |
| -0.50 0.523 | 1.196 | 0.006910768 | 0.015803591 |
| -0.25 0.712 | 1.908 | 0.009408158 | 0.025211750 |
| $0.00 \quad 1.107$ | 3.015 | 0.014627572 | 0.039839321 |
| $0.25 \quad 1.752$ | 4.767 | 0.023150412 | 0.062989733 |
| $0.50-2.345$ | 7.112 | 0.030986139 | 0.093975872 |
| $0.75 \quad 3.583$ | 10.695 | 0.047344706 | 0.141320578 |
| $1.00 \quad 6.595$ | 17.290 | 0.087144386 | 0.228464964 |
| $1.25 \quad 10.338$ | 27.628 | 0.136603285 | 0.365068249 |
| 1.50 10.348 | 37.976 | 0.136735422 | 0.501803671 |
| $1.75 \quad 15.763$ | 53.739 | 0.208287636 | 0.710091307 |
| $2.00 \quad 11.055$ | 64.794 | 0.146077512 | 0.856168818 |
| $2.25 \quad 6.520$ | 71.314 | 0.086153358 | 0.942322177 |
| $2.50 \quad 2.539$ | 73.853 | 0.033549598 | 0.975871774 |
| 2.750 .849 | 74.702 | 0.011218436 | 0.987090210 |
| 3.00 0.458 | 75.160 | 0.006051877 | 0.993142087 |
| 3.250 .300 | 75.460 | 0.003964112 | 0.997106199 |
| $3.50 \quad 0.115$ | 75.575 | 0.001519576 | 0.998625775 |
| $3.75 \quad 0.055$ | 75.630 | 0.000726754 | 0.999352528 |
| 4.00 $\quad 0.027$ | 75.657 | 0.000356770 | 0.999709298 |
| PAN 0.022 | 75.679 | 0.000290702 | 1.0 |
| TOTAL WT. | 75.679 | grams |  |
| MEDIAN WT. | 37.840 | grams |  |
| MEAN GRAIN SIZE | 1.5 | phi | 0.3536 mm |




GRAIN SIZE DISTRIBUTION IR-10: 3.1-3.8 ft.


GRAIN SIZE DISTRIBUTION CHART
CORE IR-10: 3.8-4.0 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.105 | 0 | 0 | 0 |
| -1.25 | 0.036 | 0.141 | 0.000505874 | 0.001981339 |
| -1.00 | 0.005 | 0.146 | 0.000070260 | 0.002051599 |
| -0.75 | 0.066 | 0.212 | 0.000927435 | 0.002979034 |
| -0.50 | 0.188 | 0.400 | 0.002641785 | 0.005620820 |
| -0.25 | 0.255 | 0.655 | 0.003583272 | 0.009204092 |
| 0.00 | 0.477 | 1.132 | 0.006702827 | 0.015906919 |
| 0.25 | 1.127 | 2.259 | 0.015836659 | 0.031743578 |
| 0.50 | 2.175 | 4.434 | 0.030563206 | 0.062306784 |
| 0.75 | 4.407 | 8.841 | 0.061927379 | 0.124234163 |
| 1.00 | 9.384 | 18.225 | 0.131864426 | 0.256098589 |
| 1.25 | 15.356 | 33.581 | 0.215783261 | 0.471881850 |
| 1.50 | 11.934 | 45.515 | 0.167697150 | 0.639579001 |
| 1.75 | 13.482 | 58.997 | 0.189449722 | 0.829028722 |
| 2.00 | 7.054 | 66.051 | 0.099123152 | 0.928151875 |
| 2.25 | 3.150 | 69.201 | 0.044263954 | 0.972415828 |
| 2.50 | 1.000 | 70.201 | 0.014052049 | 0.986467877 |
| 2.75 | 0.354 | 70.555 | 0.004974425 | 0.991442302 |
| 3.00 | 0.250 | 70.805 | 0.003513012 | 0.994955314 |
| 3.25 | 0.172 | 70.977 | 0.002416952 | 0.997372267 |
| 3.50 | 0.109 | 71.086 | 0.001531673 | 0.998903940 |
| 3.75 | 0.043 | 71.129 | 0.000604238 | 0.999508178 |
| 4.00 | 0.030 | 71.159 | 0.000421561 | 0.999929740 |
| PAN | 0.005 | 71.164 | 0.000070260 |  |


| TOTAL WT. | 71.164 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 35.582 | grams |  |
| MEAN GRAIN SIZE | 1.29 | phi | 0.4090 mm |



| GRAIN SIZE DISTRIB <br> CORE IR-10: 4.0-4.2 ft. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| <-2.00 | 1.141 | 1 | 0 | 0 |
| -1.75 | 0.545 | 2 | 0 | 0 |
| -1.50 | 0.673 | 2 | 0 | 0 |
| -1.25 | 0.990 | 3.349 | 0.012742133 | 0.043104447 |
| -1.00 | 1.368 | 4.717 | 0.017607311 | 0.060711758 |
| -0.75 | 2.262 | 6.979 | 0.029113843 | 0.089825600 |
| -0.50 | 3.578 | 10.557 | 0.046051869 | 0.135877470 |
| -0.25 | 4.340 | 14.897 | 0.055859450 | 0.191736920 |
| 0.00 | 4.696 | 19.593 | 0.060441470 | 0.252178390 |
| 0.25 | 5.955 | 25.548 | 0.076645859 | 0.328824249 |
| 0.50 | 5.517 | 31.065 | 0.071008430 | 0.399832679 |
| 0.75 | 6.008 | 37.073 | 0.077328013 | 0.477160692 |
| 1.00 | 7.030 | 44.103 | 0.090482013 | 0.567642705 |
| 1.25 | 7.331 | 51.434 | 0.094356136 | 0.661998842 |
| 1.50 | 6.073 | 57.507 | 0.078164618 | 0.740163460 |
| 1.75 | 8.247 | 65.754 | 0.106145827 | 0.846309286 |
| 2.00 | 5.745 | 71.499 | 0.073942982 | 0.920252268 |
| 2.25 | 3.529 | 75.028 | 0.045421198 | 0.965673467 |
| 2.50 | 1.465 | 76.493 | 0.018855782 | 0.984529249 |
| 2.75 | 0.517 | 77.010 | 0.006654225 | 0.991183474 |
| 3.00 | 0.294 | 77.304 | 0.003784027 | 0.994967501 |
| 3.25 | 0.192 | 77.496 | 0.002471201 | 0.997438703 |
| 3.50 | 0.091 | 77.587 | 0.001171247 | 0.998609949 |
| 3.75 | 0.058 | 77.645 | 0.000746509 | 0.999356458 |
| 4.00 | 0.024 | 77.669 | 0.000308900 | 0.999665358 |
| PAN | 0.026 | 77.695 | 0.000334642 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 77.695 | grams |  |
|  |  | 38.848 | grams |  |
|  |  | 0.81 | phi | 0.5704 mm |



GRAIN SIZE DISTRIBUTION CHART

## CORE IR-10: $4.2-5.5 \mathrm{ft}$.

PHI SIZE SAMPLE WT. CUM.WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.295 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.672 | 1 | 0 | 0 |
| -1.50 | 0.404 | 1 | 0 | 0 |
| -1.25 | 0.724 | 2.095 | 0.009434454 | 0.027299974 |
| -1.00 | 0.679 | 2.774 | 0.008848058 | 0.036148032 |
| -0.75 | 1.042 | 3.816 | 0.013578316 | 0.049726349 |
| -0.50 | 1.366 | 5.182 | 0.017800365 | 0.067526714 |
| -0.25 | 1.824 | 7.006 | 0.023768569 | 0.091295283 |
| 0.00 | 1.957 | 8.963 | 0.025501694 | 0.116796977 |
| 0.25 | 2.582 | 11.545 | 0.033646078 | 0.150443054 |
| 0.50 | 2.975 | 14.520 | 0.038767266 | 0.189210321 |
| 0.75 | 3.697 | 18.217 | 0.048175658 | 0.237385979 |
| 1.00 | 5.509 | 23.726 | 0.071787855 | 0.309173834 |
| 1.25 | 6.945 | 30.671 | 0.090500391 | 0.399674225 |
| 1.50 | 6.941 | 37.612 | 0.090448267 | 0.490122492 |
| 1.75 | 11.535 | 49.147 | 0.150312744 | 0.640435236 |
| 2.00 | 10.756 | 59.903 | 0.140161585 | 0.780596820 |
| 2.25 | 8.626 | 68.529 | 0.112405525 | 0.893002346 |
| 2.50 | 4.285 | 72.814 | 0.055837894 | 0.948840240 |
| 2.75 | 1.558 | 74.372 | 0.020302320 | 0.969142559 |
| 3.00 | 0.900 | 75.272 | 0.011727912 | 0.980870472 |
| 3.25 | 0.701 | 75.973 | 0.009134741 | 0.990005212 |
| 3.50 | 0.396 | 76.369 | 0.005160281 | 0.995165494 |
| 3.75 | 0.252 | 76.621 | 0.003283815 | 0.998449309 |
| 4.00 | 0.079 | 76.700 | 0.001029450 | 0.999478759 |
| PAN | 0.040 | 76.740 | 0.000521241 | 1.0 |


| TOTAL WT. | 76.740 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 38.370 | grams |  |
| MEAN GRAIN SIZE | 1.52 | phi | 0.3487 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-10: 5.5-5.9 ft.

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 1.449 | 1 | 0 | 0 |
| -1.75 | 0.257 | 2 | 0 | 0 |
| -1.50 | 0.440 | 2 | 0 | 0 |
| -1.25 | 0.832 | 2.978 | 0.010512484 | 0.037627615 |
| -1.00 | 0.626 | 3.604 | 0.007909633 | 0.045537249 |
| -0.75 | 0.913 | 4.517 | 0.011535934 | 0.057073183 |
| -0.50 | 1.316 | 5.833 | 0.016627919 | 0.073701102 |
| -0.25 | 1.253 | 7.086 | 0.015831901 | 0.089533003 |
| 0.00 | 1.303 | 8.389 | 0.016463661 | 0.105996664 |
| 0.25 | 1.624 | 10.013 | 0.020519559 | 0.126516224 |
| 0.50 | 1.725 | 11.738 | 0.021795714 | 0.148311938 |
| 0.75 | 1.973 | 13.711 | 0.024929243 | 0.173241181 |
| 1.00 | 2.612 | 16.323 | 0.033003134 | 0.206244314 |
| 1.25 | 3.086 | 19.409 | 0.038992217 | 0.245236531 |
| 1.50 | 3.398 | 22.807 | 0.042934398 | 0.288170929 |
| 1.75 | 7.025 | 29.832 | 0.088762256 | 0.376933185 |
| 2.00 | 8.503 | 38.335 | 0.107437077 | 0.484370262 |
| 2.25 | 9.822 | 48.157 | 0.124102901 | 0.608473163 |
| 2.50 | 8.427 | 56.584 | 0.106476802 | 0.714949965 |
| 2.75 | 6.241 | 62.825 | 0.078856262 | 0.793806227 |
| 3.00 | 6.019 | 68.844 | 0.076051248 | 0.869857475 |
| 3.25 | 5.181 | 74.025 | 0.065462954 | 0.935320429 |
| 3.50 | 3.112 | 77.137 | 0.039320732 | 0.974641160 |
| 3.75 | 1.594 | 78.731 | 0.020140503 | 0.994781664 |
| 4.00 | 0.296 | 79.027 | 0.003740018 | 0.998521682 |
| PAN | 0.117 | 79.144 | 0.001478318 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 79.144 | grams |  |
|  |  | 39.572 | grams |  |
|  |  | 2.03 | phi | 0.2449 mm |

GRAIN SIZE DISTRIBUTION IR-10: 5.5-5.9 ft.


## GRAIN SIZE DISTRIBUTION CHART

## CORE IR-10: 5.9-6.6 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 21.460 | 21 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 6.109 | 28 | 0 | 0 |
| -1.50 | 7.676 | 35 | 0 | 0 |
| -1.25 | 8.121 | 43.366 | 0.069622098 | 0.371780803 |
| -1.00 | 8.496 | 51.862 | 0.072837008 | 0.444617811 |
| -0.75 | 8.107 | 59.969 | 0.069502075 | 0.514119886 |
| -0.50 | 8.773 | 68.742 | 0.075211755 | 0.589331642 |
| -0.25 | 7.159 | 75.901 | 0.061374781 | 0.650706423 |
| 0.00 | 5.169 | 81.070 | 0.044314324 | 0.695020747 |
| 0.25 | 4.827 | 85.897 | 0.041382326 | 0.736403073 |
| 0.50 | 3.475 | 89.372 | 0.029791502 | 0.766194575 |
| 0.75 | 3.022 | 92.394 | 0.025907891 | 0.792102466 |
| 1.00 | 3.118 | 95.512 | 0.026730908 | 0.818833373 |
| 1.25 | 2.935 | 98.447 | 0.025162031 | 0.843995405 |
| 1.50 | 2.453 | 100.900 | 0.021029800 | 0.865025205 |
| 1.75 | 3.584 | 104.484 | 0.030725970 | 0.895751175 |
| 2.00 | 3.380 | 107.864 | 0.028977058 | 0.924728233 |
| 2.25 | 3.326 | 111.190 | 0.028514111 | 0.953242344 |
| 2.50 | 2.352 | 113.542 | 0.020163918 | 0.973406262 |
| 2.75 | 1.172 | 114.714 | 0.010047666 | 0.983453928 |
| 3.00 | 0.747 | 115.461 | 0.006404101 | 0.989858030 |
| 3.25 | 0.555 | 116.016 | 0.004758067 | 0.994616097 |
| 3.50 | 0.308 | 116.324 | 0.002640513 | 0.997256610 |
| 3.75 | 0.208 | 116.532 | 0.001783204 | 0.999039813 |
| 4.00 | 0.056 | 116.588 | 0.000480093 | 0.999519907 |
| PAN | 0.056 | 116.644 | 0.000480093 | 1.0 |


|  |  |  |  |
| :--- | :---: | :---: | :---: |
| TOTAL WT. | 116.644 | grams |  |
| MEDIAN WT. | 58.322 | grams |  |
| MEAN GRAIN SIZE | -0.8 | phi | 1.7411 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE IR-11: 0-1.1 ft.

PHI SIZE SAMPLE WT. CUM. WT. WT. \%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.077 | 0 | 0 | 0 |
| -1.25 | 0.270 | 0.347 | 0.002837834 | 0.003647142 |
| -1.00 | 0.260 | 0.607 | 0.002732729 | 0.006379870 |
| -0.75 | 0.416 | 1.023 | 0.004372366 | 0.010752236 |
| -0.50 | 0.420 | 1.443 | 0.004414408 | 0.015166644 |
| -.25 | 0.471 | 1.914 | 0.004950443 | 0.020117087 |
| 0.00 | 0.491 | 2.405 | 0.005160653 | 0.025277740 |
| 0.25 | 0.665 | 3.070 | 0.006989479 | 0.032267219 |
| 0.50 | 0.886 | 3.956 | 0.009312298 | 0.041579517 |
| 0.75 | 1.226 | 5.182 | 0.012885867 | 0.054465384 |
| 1.00 | 2.681 | 7.863 | 0.028178636 | 0.082644020 |
| 1.25 | 4.849 | 12.712 | 0.050965389 | 0.133609409 |
| 1.50 | 7.025 | 19.737 | 0.073836225 | 0.207445634 |
| 1.75 | 15.722 | 35.459 | 0.165245998 | 0.372691633 |
| 2.00 | 18.538 | 53.997 | 0.194843551 | 0.567535184 |
| 2.25 | 17.692 | 71.689 | 0.185951673 | 0.753486857 |
| 2.50 | 10.929 | 82.618 | 0.114869197 | 0.868356054 |
| 2.75 | 5.434 | 88.052 | 0.057114028 | 0.925470082 |
| 3.00 | 3.679 | 91.731 | 0.038668110 | 0.964138192 |
| 3.25 | 2.166 | 93.897 | 0.022765732 | 0.986903924 |
| 3.50 | 0.813 | 94.710 | 0.008545032 | 0.995448956 |
| 3.75 | 0.328 | 95.038 | 0.003447442 | 0.998896398 |
| 4.00 | 0.074 | 95.112 | 0.000777777 | 0.999674175 |
| PAN | 0.031 | 95.143 | 0.000325825 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
95.143
47.572
1.91
grams
grams phi
0.2661 mm


GRAIN SIZE DISTRIBUTION CHART
CORE IR-11: 1.1-2.3 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.172 | 0 | 0 | 0 |
| -1.25 | 0.220 | 0.392 | 0.002214193 | 0.003945289 |
| -1.00 | 0.303 | 0.695 | 0.003049548 | 0.006994837 |
| -0.75 | 0.767 | 1.462 | 0.007719482 | 0.014714319 |
| -0.50 | 1.302 | 2.764 | 0.013103997 | 0.027818315 |
| -0.25 | 2.100 | 4.864 | 0.021135478 | 0.048953794 |
| 0.00 | 2.752 | 7.616 | 0.027697541 | 0.076651335 |
| 0.25 | 4.428 | 12.044 | 0.044565666 | 0.121217001 |
| 0.50 | 5.796 | 17.840 | 0.058333920 | 0.179550921 |
| 0.75 | 8.227 | 26.067 | 0.082800753 | 0.262351674 |
| 1.00 | 12.403 | 38.470 | 0.124830161 | 0.387181836 |
| 1.25 | 14.671 | 53.141 | 0.147656478 | 0.534838314 |
| 1.50 | 11.780 | 64.921 | 0.118559969 | 0.653398283 |
| 1.75 | 14.292 | 79.213 | 0.143842027 | 0.797240310 |
| 2.00 | 8.822 | 88.035 | 0.088789138 | 0.886029449 |
| 2.25 | 5.437 | 93.472 | 0.054720760 | 0.940750209 |
| 2.50 | 2.708 | 96.180 | 0.027254703 | 0.968004911 |
| 2.75 | 1.359 | 97.539 | 0.013677674 | 0.981682585 |
| 3.00 | 0.925 | 98.464 | 0.009309675 | 0.990992260 |
| 3.25 | 0.544 | 99.008 | 0.005475095 | 0.996467356 |
| 3.50 | 0.190 | 99.198 | 0.001912258 | 0.998379613 |
| 3.75 | 0.095 | 99.293 | 0.000956129 | 0.999335742 |
| 4.00 | 0.035 | 99.328 | 0.000352258 | 0.999688000 |
| PAN | 0.031 | 99.359 | 0.000312000 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 99.359 | grams |  |
| MEDIAN WT. | 49.680 | grams | phi | 0.4383 mm |
| MEAN GRAIN SIZE | 1.19 |  |  |  |
|  |  |  |  |  |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-11: 2.3-3.2 ft.
PHI SIZE SAMPLE WT. CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0.067 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.000 | 0 | 0 | 0 |
| -1.25 | 0.044 | 0.111 | 0.000440383 | 0.001110967 |
| -1.00 | 0.069 | 0.180 | 0.000690601 | 0.001801567 |
| -0.75 | 0.107 | 0.287 | 0.001070932 | 0.002872499 |
| -0.50 | 0.338 | 0.625 | 0.003382943 | 0.006255442 |
| -0.25 | 0.446 | 1.071 | 0.004463884 | 0.010719326 |
| 0.00 | 0.663 | 1.734 | 0.006635773 | 0.017355099 |
| 0.25 | 1.216 | 2.960 | 0.01270675 | 0.029625774 |
| 0.50 | 2.178 | 5.138 | 0.021798965 | 0.051424740 |
| 0.75 | 3.918 | 9.056 | 0.039214116 | 0.090638856 |
| 1.00 | 7.893 | 16.949 | 0.078998729 | 0.169637585 |
| 1.25 | 14.349 | 31.298 | 0.143614945 | 0.313252530 |
| 1.50 | 14.733 | 46.031 | 0.147458289 | 0.460710818 |
| 1.75 | 22.433 | 68.464 | 0.224525337 | 0.685236155 |
| 2.00 | 14.732 | 83.196 | 0.147448280 | 0.832684435 |
| 2.25 | 8.371 | 91.567 | 0.083782891 | 0.916467327 |
| 2.50 | 4.097 | 95.664 | 0.041005675 | 0.957473002 |
| 2.75 | 2.129 | 97.793 | 0.021308538 | 0.978781540 |
| 3.00 | 1.218 | 99.011 | 0.012190606 | 0.990972146 |
| 3.25 | 0.627 | 99.638 | 0.006275460 | 0.997247605 |
| 3.50 | 0.146 | 99.784 | 0.001461271 | 0.998708877 |
| 3.75 | 0.071 | 99.855 | 0.000710618 | 0.999419495 |
| 4.00 | 0.028 | 99.883 | 0.000280244 | 0.999699739 |
| PAN | 0.030 | 99.913 | 0.000300261 |  |
|  |  |  |  | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
99.913
49.957
1.54
grams
grams
phi $\quad 0.3439 \mathrm{~mm}$

GRAIN SIZE DISTRIBUTION IR-11: 2.3-3.2 ft.


Phi Size

GRAIN SIZE DISTRIBUTION CHART
CORE IR-11: 3.2-4.6 ft.
PHI SIZE SAMPLE WT. CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 3.463 | 3 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 1.912 | 5 | 0 | 0 |
| -1.50 | 2.256 | 8 | 0 | 0 |
| -1.25 | 2.520 | 10.151 | 0.020340132 | 0.081933604 |
| -1.00 | 2.636 | 12.787 | 0.021276424 | 0.103210028 |
| -0.75 | 2.978 | 15.765 | 0.024036871 | 0.127246899 |
| -0.50 | 3.240 | 19.005 | 0.026151599 | 0.153398497 |
| -0.25 | 3.064 | 22.069 | 0.024731018 | 0.178129515 |
| 0.00 | 2.913 | 24.982 | 0.023512224 | 0.201641739 |
| 0.25 | 3.583 | 28.565 | 0.028920117 | 0.230561856 |
| 0.50 | 4.091 | 32.656 | 0.033020429 | 0.263582285 |
| 0.75 | 5.459 | 38.115 | 0.044062215 | 0.307644500 |
| 1.00 | 9.781 | 47.896 | 0.078947156 | 0.386591656 |
| 1.25 | 14.789 | 62.685 | 0.119369133 | 0.505960789 |
| 1.50 | 13.414 | 76.099 | 0.108270847 | 0.614231635 |
| 1.75 | 17.836 | 93.935 | 0.143962936 | 0.758194571 |
| 2.00 | 12.298 | 106.233 | 0.099263074 | 0.857457645 |
| 2.25 | 8.368 | 114.601 | 0.067542153 | 0.924999798 |
| 2.50 | 4.326 | 118.927 | 0.034917227 | 0.959917025 |
| 2.75 | 2.026 | 120.953 | 0.016352821 | 0.976269846 |
| 3.00 | 1.330 | 122.283 | 0.010735070 | 0.987004916 |
| 3.25 | 0.928 | 123.211 | 0.007490334 | 0.994495250 |
| 3.50 | 0.366 | 123.577 | 0.002954162 | 0.997449412 |
| 3.75 | 0.208 | 123.785 | 0.001678868 | 0.999128280 |
| 4.00 | 0.062 | 123.847 | 0.000500432 | 0.999628712 |
| PAN | 0.046 | 123.893 | 0.000371288 | 1.0 |


|  |  |  |  |
| :--- | :---: | :---: | :---: |
| TOTAL WT. | 123.893 | grams |  |
| MEDIAN WT. | 61.947 | grams | 0.4234 mm |
| MEAN GRAIN SIZE | 1.24 | phi |  |



PHI SIZE SAMPLE WT. CUM. WT.

WT.\%
CUM. WT. \%

| $<-2.00$ | 0.813 | 1 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.669 | 1 | 0 | 0 |
| -1.50 | 1.249 | 3 | 0 | 0 |
| -1.25 | 2.569 | 5.300 | 0.022324959 | 0.046057720 |
| -1.00 | 4.008 | 9.308 | 0.034830064 | 0.080887784 |
| -0.75 | 5.810 | 15.118 | 0.050489689 | 0.131377473 |
| -0.50 | 7.773 | 22.891 | 0.067548426 | 0.198925899 |
| -0.25 | 9.489 | 32.380 | 0.082460699 | 0.281386598 |
| 0.00 | 9.550 | 41.930 | 0.082990797 | 0.364377395 |
| 0.25 | 10.237 | 52.167 | 0.088960920 | 0.453338316 |
| 0.50 | 8.643 | 60.810 | 0.075108844 | 0.528447160 |
| 0.75 | 7.964 | 68.774 | 0.069208242 | 0.597655401 |
| 1.00 | 8.206 | 76.980 | 0.071311255 | 0.668966656 |
| 1.25 | 7.397 | 84.377 | 0.064280935 | 0.733247591 |
| 1.50 | 5.463 | 89.840 | 0.047474212 | 0.780721803 |
| 1.75 | 6.863 | 96.703 | 0.059640402 | 0.840362205 |
| 2.00 | 5.426 | 102.129 | 0.047152677 | 0.887514882 |
| 2.25 | 4.548 | 106.677 | 0.039522738 | 0.927037620 |
| 2.50 | 3.120 | 109.797 | 0.027113224 | 0.954150843 |
| 2.75 | 1.967 | 111.764 | 0.017093497 | 0.971244341 |
| 3.00 | 1.449 | 113.213 | 0.012592007 | 0.983836347 |
| 3.25 | 1.033 | 114.246 | 0.008976910 | 0.992813258 |
| 3.50 | 0.438 | 114.684 | 0.003806279 | 0.996619537 |
| 3.75 | 0.228 | 114.912 | 0.001981351 | 0.998600888 |
| 4.00 | 0.075 | 114.987 | 0.000651760 | 0.999252648 |
| PAN | 0.086 | 115.073 | 0.000747352 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
115.073
57.537
0.41
grams
grams
phi
0.7526 mm


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-11: 5.8-6.6 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT. $\% \quad$ CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.193 | 0 | 0 | 0 |
| -1.50 | 0.052 | 0 | 0 | 0 |
| -1.25 | 0.172 | 0.417 | 0.001640955 | 0.003978362 |
| -1.00 | 0.244 | 0.661 | 0.002327867 | 0.006306229 |
| -0.75 | 0.273 | 0.934 | 0.002604539 | 0.008910768 |
| -0.50 | 0.455 | 1.389 | 0.004340899 | 0.013251667 |
| -0.25 | 0.577 | 1.966 | 0.005504832 | 0.018756499 |
| 0.00 | 0.816 | 2.782 | 0.007784997 | 0.026541496 |
| 0.25 | 1.152 | 3.934 | 0.010990584 | 0.037532080 |
| 0.50 | 1.565 | 5.499 | 0.014930784 | 0.052462864 |
| 0.75 | 2.233 | 7.732 | 0.021303796 | 0.073766660 |
| 1.00 | 4.042 | 11.774 | 0.038562447 | 0.112329107 |
| 1.25 | 5.686 | 17.460 | 0.054246926 | 0.166576033 |
| 1.50 | 5.961 | 23.421 | 0.056870546 | 0.223446578 |
| 1.75 | 9.873 | 33.294 | 0.094192736 | 0.317639314 |
| 2.00 | 10.533 | 43.827 | 0.100489424 | 0.418128739 |
| 2.25 | 12.594 | 56.421 | 0.120152265 | 0.538281004 |
| 2.50 | 12.099 | 68.520 | 0.115429749 | 0.653710753 |
| 2.75 | 10.229 | 78.749 | 0.097589132 | 0.751299885 |
| 3.00 | 10.177 | 88.926 | 0.097093029 | 0.848392913 |
| 3.25 | 8.396 | 97.322 | 0.080101510 | 0.928494424 |
| 3.50 | 4.461 | 101.783 | 0.042559890 | 0.971054314 |
| 3.75 | 2.034 | 103.817 | 0.019405249 | 0.990459563 |
| 4.00 | 0.499 | 104.316 | 0.004760678 | 0.995220241 |
| PAN | 0.501 | 104.817 | 0.004779759 | 1.0 |


| TOTAL WT. | 104.817 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 52.409 | grams |  |
| MEAN GRAIN SIZE | 2.17 | phi | 0.2222 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-12: 0-1.0 ft.

PHI SIZE SAMPLE WT. CUM. WT. WT.\%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :--- | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.000 | 0 | 0 | 0 |
| -1.25 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.027 | 0.027 | 0.000439933 | 0.000439933 |
| -0.50 | 0.040 | 0.067 | 0.000651752 | 0.001091685 |
| -0.25 | 0.156 | 0.223 | 0.002541834 | 0.003633520 |
| 0.00 | 0.237 | 0.460 | 0.003861633 | 0.007495153 |
| 0.25 | 0.474 | 0.934 | 0.007723266 | 0.015218419 |
| 0.50 | 0.838 | 1.772 | 0.013654213 | 0.028872631 |
| 0.75 | 1.308 | 3.080 | 0.021312303 | 0.050184935 |
| 1.00 | 2.912 | 5.992 | 0.047447575 | 0.097632509 |
| 1.25 | 5.039 | 11.031 | 0.082104508 | 0.179737018 |
| 1.50 | 6.558 | 17.589 | 0.106854806 | 0.286591824 |
| 1.75 | 13.942 | 31.531 | 0.227168299 | 0.513760123 |
| 2.00 | 14.763 | 46.294 | 0.240545517 | 0.754305639 |
| 2.25 | 10.508 | 56.802 | 0.171215355 | 0.925520995 |
| 2.50 | 3.652 | 60.454 | 0.059504994 | 0.985025989 |
| 2.75 | 0.612 | 61.066 | 0.009971812 | 0.994997800 |
| 3.00 | 0.192 | 61.258 | 0.003128412 | 0.998126212 |
| 3.25 | 0.068 | 61.326 | 0.001107979 | 0.999234191 |
| 3.50 | 0.027 | 61.353 | 0.000439933 | 0.999674124 |
| 3.75 | 0.007 | 61.360 | 0.000114057 | 0.999788180 |
| 4.00 | 0.005 | 61.365 | 0.000081469 | 0.999869650 |
| PAN | 0.008 | 61.373 | 0.000130350 | 1.0 |
|  |  | 61.373 |  |  |
| TOTAL WT. |  | 30.687 | 1.73 | grams |



| GRAIN SIZE DISTRIBUTION CHARTCORE IR-12: $1.0-1.2 \mathrm{ft}$. |  |  |  |
| :---: | :---: | :---: | :---: |
| PHISİE SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| $<-2.00 \quad 0.000$ | 0 | 0 | 0 |
| -1.75 0.000 | 0 | 0 | 0 |
| -1.50 0.000 | 0 | 0 | 0 |
| -1.25 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 0.042 | 0.042 | 0.000704686 | 0.000704686 |
| -0.75 0.099 | 0.141 | 0.001661046 | 0.002365732 |
| -0.50 0.228 | 0.369 | 0.003825439 | 0.006191171 |
| -0.25 0.298 | 0.667 | 0.004999916 | 0.011191087 |
| $0.00 \quad 0.564$ | 1.231 | 0.009462928 | 0.020654016 |
| $0.25 \quad 1.039$ | 2.270 | 0.017432593 | 0.038086609 |
| $0.50 \quad 1.675$ | 3.945 | 0.028103555 | 0.066190165 |
| $0.75 \quad 2.490$ | 6.435 | 0.041777823 | 0.107967987 |
| $1.00 \quad 4.617$ | 11.052 | 0.077465143 | 0.185433130 |
| $1.25 \quad 7.459$ | 18.511 | 0.125148907 | 0.310582037 |
| 1.50 8.305 | 26.816 | 0.139343300 | 0.449925337 |
| $1.75 \quad 13.787$ | 40.603 | 0.231321622 | 0.681246959 |
| $2.00 \quad 10.537$ | 51.140 | 0.176792336 | 0.858039295 |
| $2.25 \quad 5.915$ | 57.055 | 0.099243301 | 0.957282596 |
| $2.50 \quad 1.702$ | 58.757 | 0.028556568 | 0.985839164 |
| $2.75 \quad 0.406$ | 59.163 | 0.006811966 | 0.992651130 |
| $3.00-0.244$ | 59.407 | 0.004093891 | 0.996745021 |
| 3.250 .127 | 59.534 | 0.002130837 | 0.998875858 |
| $3.50 \quad 0.042$ | 59.576 | 0.000704686 | 0.999580544 |
| 3.750 .012 | 59.588 | 0.000201339 | 0.999781883 |
| $4.00-0.004$ | 59.592 | 0.000067113 | 0.999848996 |
| PAN 0.009 | 59.601 | 0.000151004 | 1.0 |
| TOTAL WT. MEDIAN WT. mean grain size | 59.601 | grams |  |
|  | 29.801 | grams |  |
|  | 1.55 | phi | 0.3415 mm |

GRAIN SIZE DISTRIBUTION IR-12: 1.0-1.2 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-12: 1.2-2.0 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.000 | 0 | 0 | 0 |
| -1.50 | 0.000 | 0 | 0 | 0 |
| -1.25 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000000000 | 0.0000000000 |
| -0.75 | 0.030 | 0.030 | 0.000428107 | 0.000428107 |
| -0.50 | 0.040 | 0.070 | 0.000570809 | 0.000998915 |
| -0.25 | 0.126 | 0.196 | 0.001798048 | 0.002796963 |
| 0.00 | 0.248 | 0.444 | 0.003539015 | 0.006335978 |
| 0.25 | 0.697 | 1.141 | 0.009946344 | 0.016282322 |
| 0.50 | 1.451 | 2.592 | 0.020706091 | 0.036988413 |
| 0.75 | 2.713 | 5.305 | 0.038715109 | 0.075703522 |
| 1.00 | 5.598 | 10.903 | 0.079884697 | 0.155588219 |
| 1.25 | 8.793 | 19.696 | 0.125478052 | 0.281066271 |
| 1.50 | 9.097 | 28.793 | 0.129816200 | 0.410882470 |
| 1.75 | 14.918 | 43.711 | 0.212883155 | 0.623765626 |
| 2.00 | 12.886 | 56.597 | 0.183886067 | 0.807651692 |
| 2.25 | 8.913 | 65.510 | 0.127190479 | 0.934842171 |
| 2.50 | 3.425 | 68.935 | 0.048875507 | 0.983717678 |
| 2.75 | 0.681 | 69.616 | 0.009718020 | 0.993435698 |
| 3.00 | 0.249 | 69.865 | 0.003553285 | 0.996988983 |
| 3.25 | 0.111 | 69.976 | 0.001583995 | 0.998572978 |
| 3.50 | 0.049 | 70.025 | 0.000699241 | 0.999272219 |
| 3.75 | 0.027 | 70.052 | 0.000385296 | 0.999657515 |
| 4.00 | 0.009 | 70.061 | 0.000128432 | 0.999785947 |
| PAN | 0.015 | 70.076 | 0.000214053 | 1.0 |
|  |  |  |  |  |


| TOTAL WT. | 70.076 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 35.038 | grams |  |
| MEAN GRAIN SIZE | 1.6 | phi | 0.3299 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-12: 2.0-3.3 ft.

PHI SIZE SAMPLE WT. CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0.247 | 0 |
| :---: | :---: | :---: |
| -1.75 | 0.000 | 0 |
| -1.50 | 0.000 | 0 |
| -1.25 | 0.164 | 0.411 |
| -1.00 | 0.500 | 0.911 |
| -0.75 | 0.795 | 1.706 |
| -0.50 | 1.667 | 3.373 |
| -0.25 | 2.403 | 5.776 |
| 0.00 | 2.971 | 8.747 |
| 0.25 | 4.078 | 12.825 |
| 0.50 | 4.389 | 17.214 |
| 0.75 | 5.159 | 22.373 |
| 1.00 | 7.358 | 29.731 |
| 1.25 | 9.030 | 38.761 |
| 1.50 | 7.927 | 46.688 |
| 1.75 | 9.752 | 56.440 |
| 2.00 | 5.894 | 62.334 |
| 2.25 | 2.901 | 65.235 |
| 2.50 | 0.831 | 66.066 |
| 2.75 | 0.264 | 66.330 |
| 3.00 | 0.176 | 66.506 |
| 3.25 | 0.129 | 66.635 |
| 3.50 | 0.085 | 66.720 |
| 3.75 | 0.073 | 66.793 |
| 4.00 | 0.041 | 66.834 |
| PAN | 0.062 | 66.896 |


| TOTAL WT. | 66.896 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 33.448 | grams |  |
| MEAN GRAIN SIZE | 1.1 | phi | 0.4665 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-12: $3.3-4.6 \mathrm{ft}$.

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 0.120 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.068 | 0 | 0 | 0 |
| -1.50 | 0.518 | 1 | 0 | 0 |
| -1.25 | 0.587 | 1.293 | 0.008631211 | 0.019012190 |
| -1.00 | 0.932 | 2.225 | 0.013704069 | 0.032716258 |
| -0.75 | 1.445 | 3.670 | 0.021247188 | 0.053963446 |
| -0.50 | 2.442 | 6.112 | 0.035907012 | 0.089870458 |
| -0.25 | 2.884 | 8.996 | 0.042406152 | 0.132276610 |
| 0.00 | 3.235 | 12.231 | 0.047567234 | 0.179843844 |
| 0.25 | 4.156 | 16.387 | 0.061109559 | 0.240953403 |
| 0.50 | 4.422 | 20.809 | 0.065020806 | 0.305974209 |
| 0.75 | 5.066 | 25.875 | 0.074490141 | 0.380464350 |
| 1.00 | 7.100 | 32.975 | 0.104397947 | 0.484862298 |
| 1.25 | 7.997 | 40.972 | 0.117587378 | 0.602449676 |
| 1.50 | 7.301 | 48.273 | 0.107353439 | 0.709803114 |
| 1.75 | 8.971 | 57.244 | 0.131909012 | 0.841712126 |
| 2.00 | 5.787 | 63.031 | 0.085091679 | 0.926803805 |
| 2.25 | 3.131 | 66.162 | 0.046038024 | 0.972841830 |
| 2.50 | 1.027 | 67.189 | 0.015100943 | 0.987942772 |
| 2.75 | 0.320 | 67.509 | 0.004705260 | 0.992648032 |
| 3.00 | 0.188 | 67.697 | 0.002764340 | 0.995412372 |
| 3.25 | 0.123 | 67.820 | 0.001808584 | 0.997220956 |
| 3.50 | 0.067 | 67.887 | 0.000985164 | 0.998206120 |
| 3.75 | 0.055 | 67.942 | 0.000808716 | 0.999014836 |
| 4.00 | 0.027 | 67.969 | 0.000397006 | 0.999411843 |
| PAN | 0.040 | 68.009 | 0.000588157 | 1.0 |


| TOTAL WT. | 68.009 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 34.005 | grams |  |
| MEAN GRAIN SIZE | 1.03 | phi | 0.4897 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-13 0-0.6 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. \% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.204 | 0.204 | 0.002437625 | 0.002437625 |
| -1.00 | 0.135 | 0.339 | 0.001613134 | 0.004050760 |
| -0.75 | 0.220 | 0.559 | 0.002628812 | 0.006679572 |
| -0.50 | 0.620 | 1.179 | 0.007408470 | 0.014088041 |
| -0.25 | 1.191 | 2.370 | 0.014231431 | 0.028319472 |
| 0.00 | 1.949 | 4.319 | 0.023288883 | 0.051608355 |
| 0.25 | 3.609 | 7.928 | 0.043124462 | 0.094732817 |
| 0.50 | 4.959 | 12.887 | 0.059255807 | 0.153988624 |
| 0.75 | 7.127 | 20.014 | 0.085161552 | 0.239150177 |
| 1.00 | 10.647 | 30.661 | 0.127222541 | 0.366372718 |
| 1.25 | 12.722 | 43.383 | 0.152017016 | 0.518389733 |
| 1.50 | 9.407 | 52.790 | 0.112405602 | 0.630795335 |
| 1.75 | 11.977 | 64.767 | 0.143114903 | 0.773910238 |
| 2.00 | 9.292 | 74.059 | 0.111031450 | 0.884941688 |
| 2.25 | 6.324 | 80.383 | 0.075566389 | 0.960508078 |
| 2.50 | 2.401 | 82.784 | 0.028689896 | 0.989197973 |
| 2.75 | 0.517 | 83.301 | 0.006177708 | 0.995375681 |
| 3.00 | 0.187 | 83.488 | 0.002234490 | 0.997610171 |
| 3.25 | 0.088 | 83.576 | 0.001051525 | 0.998661696 |
| 3.50 | 0.053 | 83.629 | 0.000633305 | 0.999295000 |
| 3.75 | 0.042 | 83.671 | 0.000501864 | 0.999796865 |
| 4.00 | 0.012 | 83.683 | 0.000143390 | 0.999940254 |
| PAN | 0.005 | 83.688 | 0.000059746 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 83.688 |  | grams |

GRAIN SIZE DISTRIBUTION IR-13: 0-0.6 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-13: 0.6-0.9 ft

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.252 | 2.252 | 0.025175232 | 0.025175232 |
| -1.75 | 1.817 | 4.069 | 0.020312343 | 0.045487574 |
| -1.50 | 2.060 | 6.129 | 0.023028853 | 0.068516428 |
| -1.25 | 3.389 | 9.518 | 0.037885817 | 0.106402245 |
| -1.00 | 4.970 | 14.488 | 0.055559903 | 0.161962148 |
| -0.75 | 6.899 | 21.387 | 0.077124300 | 0.239086448 |
| -0.50 | 8.819 | 30.206 | 0.098588085 | 0.337674533 |
| -0.25 | 9.004 | 39.210 | 0.100656211 | 0.438330744 |
| 0.00 | 7.894 | 47.104 | 0.088247460 | 0.526578203 |
| 0.25 | 7.443 | 54.547 | 0.083205706 | 0.609783909 |
| 0.50 | 5.482 | 60.029 | 0.061283579 | 0.671067488 |
| 0.75 | 4.522 | 64.551 | 0.050551686 | 0.721619174 |
| 1.00 | 4.210 | 68.761 | 0.047063821 | 0.768682996 |
| 1.25 | 3.652 | 72.413 | 0.040825909 | 0.809508904 |
| 1.50 | 2.961 | 75.374 | 0.033101182 | 0.842610086 |
| 1.75 | 4.054 | 79.428 | 0.045319889 | 0.887929974 |
| 2.00 | 3.687 | 83.115 | 0.041217175 | 0.929147150 |
| 2.25 | 3.079 | 86.194 | 0.034420310 | 0.963567460 |
| 2.50 | 1.734 | 87.928 | 0.019384481 | 0.982951941 |
| 2.75 | 0.756 | 88.684 | 0.008451366 | 0.991403307 |
| 3.00 | 0.370 | 89.054 | 0.004136250 | 0.995539557 |
| 3.25 | 0.192 | 89.246 | 0.002146379 | 0.997685936 |
| 3.50 | 0.093 | 89.339 | 0.001039652 | 0.998725588 |
| 3.75 | 0.068 | 89.407 | 0.000760176 | 0.999485763 |
| 4.00 | 0.025 | 89.432 | 0.000279476 | 0.999765240 |
| PAN | 0.021 | 89.453 | 0.000234760 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 89.453 | grams |  |
|  |  | 44.727 | grams |  |
|  |  | -0.08 | phi | 1.0570 mm |

GRAIN SIZE DISTRIBUTION IR-13: 0.6-0.9 ft.


# GRAIN SIZE DISTRIBUTION CHART <br> CORE IR-13: 0.9-1.1 ft 

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.055 | 0.055 | 0.000671994 | 0.000671994 |
| -1.25 | 0.038 | 0.093 | 0.000464287 | 0.001136280 |
| -1.00 | 0.127 | 0.220 | 0.001551695 | 0.002687975 |
| -0.75 | 0.117 | 0.337 | 0.001429514 | 0.004117489 |
| -0.50 | 0.168 | 0.505 | 0.002052635 | 0.006170124 |
| -0.25 | 0.288 | 0.793 | 0.003518804 | 0.009688928 |
| 0.00 | 0.263 | 1.056 | 0.003213352 | 0.012902280 |
| 0.25 | 0.489 | 1.545 | 0.005974635 | 0.018876915 |
| 0.50 | 0.727 | 2.272 | 0.008882535 | 0.027759451 |
| 0.75 | 1.403 | 3.675 | 0.017141950 | 0.044901400 |
| 1.00 | 3.432 | 7.107 | 0.041932410 | 0.086833810 |
| 1.25 | 7.792 | 14.899 | 0.095203186 | 0.182036996 |
| 1.50 | 10.398 | 25.297 | 0.127043472 | 0.309080468 |
| 1.75 | 18.807 | 44.104 | 0.229785206 | 0.538865675 |
| 2.00 | 16.656 | 60.760 | 0.203504142 | 0.742369816 |
| 2.25 | 12.345 | 73.105 | 0.150832050 | 0.893201867 |
| 2.50 | 5.724 | 78.829 | 0.069936222 | 0.963138089 |
| 2.75 | 1.802 | 80.631 | 0.022016959 | 0.985155047 |
| 3.00 | 0.694 | 81.325 | 0.008479339 | 0.993634387 |
| 3.25 | 0.314 | 81.639 | 0.003836473 | 0.997470860 |
| 3.50 | 0.111 | 81.750 | 0.001356206 | 0.998827065 |
| 3.75 | 0.064 | 81.814 | 0.000781956 | 0.999609022 |
| 4.00 | 0.018 | 81.832 | 0.000219925 | 0.999828947 |
| PAN | 0.014 | 81.846 | 0.000171053 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 81.846 | grams |  |
|  |  | 40.923 | grams |  |
|  |  | 1.71 | phi | 0.3057 mm |

GRAIN SIZE DISTRIBUTION IR-13: 0.9-1.1 ft.


Phi Size

## GRAIN SIZE DISTRIBUTION CHART <br> CORE IR-13: 1.1-1.2 ft




## GRAIN SIZE DISTRIBUTION CHART

CORE IR-13: 1.2-3.3 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.008 | 0.008 | 0.000099935 | 0.000099935 |
| 0.00 | 0.030 | 0.038 | 0.000374756 | 0.000474691 |
| 0.25 | 0.098 | 0.136 | 0.001224204 | 0.001698896 |
| 0.50 | 0.358 | 0.494 | 0.004472093 | 0.006170989 |
| 0.75 | 0.952 | 1.466 | 0.011892270 | 0.018063259 |
| 1.00 | 3.170 | 4.616 | 0.039599260 | 0.057662519 |
| 1.25 | 7.742 | 12.358 | 0.096712137 | 0.154374656 |
| 1.50 | 10.940 | 23.298 | 0.136661170 | 0.291035827 |
| 1.75 | 19.935 | 43.233 | 0.249025333 | 0.540061460 |
| 2.00 | 17.097 | 60.330 | 0.213573677 | 0.753635137 |
| 2.25 | 11.478 | 71.808 | 0.143381802 | 0.897016939 |
| 2.50 | 4.936 | 76.744 | 0.061659921 | 0.958676860 |
| 2.75 | 1.696 | 78.440 | 0.021186229 | 0.979863089 |
| 3.00 | 0.836 | 79.276 | 0.010443212 | 0.990306301 |
| 3.25 | 0.473 | 79.749 | 0.00590869 | 0.996214960 |
| 3.50 | 0.165 | 79.914 | 0.002061160 | 0.998276121 |
| 3.75 | 0.087 | 80.001 | 0.001086794 | 0.999362914 |
| 4.00 | 0.030 | 80.031 | 0.000374756 | 0.999737671 |
| PAN | 0.021 | 80.052 | 0.000262329 | 1.0 |



## GRAIN SIZE DISTRIBUTION CHART

## CORE IR-13: 3.3-4.1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.069 | 0.069 | 0.000900196 | 0.000900196 |
| -1.25 | 0.047 | 0.116 | 0.000613177 | 0.001513372 |
| -1.00 | 0.175 | 0.291 | 0.002283105 | 0.003796477 |
| -0.75 | 0.298 | 0.589 | 0.003887802 | 0.007684279 |
| -0.50 | 0.357 | 0.946 | 0.004657534 | 0.012341813 |
| -0.25 | 0.655 | 1.601 | 0.008545336 | 0.020887149 |
| 0.00 | 0.809 | 2.410 | 0.010554468 | 0.031441618 |
| 0.25 | 1.236 | 3.646 | 0.016125245 | 0.047566862 |
| 0.50 | 1.612 | 5.258 | 0.021030659 | 0.068597521 |
| 0.75 | 2.231 | 7.489 | 0.029106327 | 0.097703849 |
| 1.00 | 3.680 | 11.169 | 0.048010437 | 0.145714286 |
| 1.25 | 5.658 | 16.827 | 0.073816047 | 0.219530333 |
| 1.50 | 7.634 | 24.461 | 0.099595564 | 0.319125897 |
| 1.75 | 13.990 | 38.451 | 0.182517939 | 0.501643836 |
| 2.00 | 15.371 | 53.822 | 0.200534899 | 0.702178735 |
| 2.25 | 13.421 | 67.243 | 0.175094586 | 0.877273320 |
| 2.50 | 6.464 | 73.707 | 0.084331376 | 0.961604697 |
| 2.75 | 1.759 | 75.466 | 0.022948467 | 0.984553164 |
| 3.00 | 0.628 | 76.094 | 0.008193085 | 0.992746249 |
| 3.25 | 0.319 | 76.413 | 0.004161774 | 0.996908023 |
| 3.50 | 0.128 | 76.541 | 0.001669928 | 0.998577952 |
| 3.75 | 0.066 | 76.607 | 0.000861057 | 0.999439008 |
| 4.00 | 0.022 | 76.629 | 0.000287019 | 0.999726027 |
| PAN | 0.021 | 76.650 | 0.000273973 | 1.0 |
|  |  |  |  |  |
|  |  | 76.650 | grams |  |
| TOTAL WT. |  | 1.75 |  | phi |
| MEDIAN WT. |  |  |  | 0.2973 mm |
| MEAN GRAIN SIZE |  |  |  |  |
|  |  |  |  |  |



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-13: 4.1-6.4 ft.



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-13: 6.4-7.3 ft.

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.041 | 0.041 | 0.000626863 | 0.000626863 |
| -1.75 | 0.079 | 0.120 | 0.001207859 | 0.001834722 |
| -1.50 | 0.000 | 0.120 | 0.000000000 | 0.001834722 |
| -1.25 | 0.047 | 0.167 | 0.000718599 | 0.002553322 |
| -1.00 | 0.029 | 0.196 | 0.000443391 | 0.002996713 |
| -0.75 | 0.044 | 0.240 | 0.000672731 | 0.003669444 |
| -0.50 | 0.059 | 0.299 | 0.000902072 | 0.004571516 |
| -0.25 | 0.061 | 0.360 | 0.000932650 | 0.005504166 |
| 0.00 | 0.076 | 0.436 | 0.001161991 | 0.006666157 |
| 0.25 | 0.149 | 0.585 | 0.002278113 | 0.008944270 |
| 0.50 | 0.238 | 0.823 | 0.003638866 | 0.012583136 |
| 0.75 | 0.401 | 1.224 | 0.006131030 | 0.018714166 |
| 1.00 | 0.975 | 2.199 | 0.014907117 | 0.033621283 |
| 1.25 | 2.166 | 4.365 | 0.033116734 | 0.066738017 |
| 1.50 | 3.484 | 7.849 | 0.053268099 | 0.120006116 |
| 1.75 | 7.136 | 14.985 | 0.109104809 | 0.229110924 |
| 2.00 | 8.146 | 23.131 | 0.124547053 | 0.353657977 |
| 2.25 | 8.269 | 31.400 | 0.126427643 | 0.480085620 |
| 2.50 | 6.616 | 38.016 | 0.101154346 | 0.581239966 |
| 2.75 | 5.733 | 43.749 | 0.087653849 | 0.668893815 |
| 3.00 | 7.146 | 50.895 | 0.109257702 | 0.778151517 |
| 3.25 | 7.071 | 57.966 | 0.108111001 | 0.886262518 |
| 3.50 | 4.221 | 62.187 | 0.064536350 | 0.950798869 |
| 3.75 | 2.400 | 64.587 | 0.036694442 | 0.987493311 |
| 4.00 | 0.589 | 65.176 | 0.009005428 | 0.996498739 |
| PAN | 0.229 | 65.405 | 0.003501261 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 65.405 | grams |  |
|  |  | 32.703 | grams |  |
|  |  | 2.3 | phi | 0.2031 mm |

GRAIN SIZE DISTRIBUTION IR-13: 6.4-7.3 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 0-0.9 ft.
PHI SIZE.
SAMPLE WT. CUM. WT.
WT.\%
CUM. WT. \%

| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| :--- | ---: | :--- | :--- | ---: |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.024 | 0.024 | 0.000335064 | 0.000335064 |
| -0.50 | 0.019 | 0.043 | 0.000265259 | 0.000600324 |
| -0.25 | 0.067 | 0.110 | 0.000935388 | 0.001535712 |
| 0.00 | 0.111 | 0.221 | 0.001549673 | 0.003085386 |
| 0.25 | 0.254 | 0.475 | 0.003546099 | 0.006631485 |
| 0.50 | 0.513 | 0.988 | 0.007162004 | 0.013793489 |
| 0.75 | 1.144 | 2.132 | 0.015971408 | 0.029764896 |
| 1.00 | 3.107 | 5.239 | 0.043376892 | 0.073141788 |
| 1.25 | 7.234 | 12.473 | 0.100994025 | 0.174135813 |
| 1.50 | 9.007 | 21.480 | 0.125746915 | 0.299882727 |
| 1.75 | 16.967 | 38.447 | 0.236876640 | 0.536759368 |
| 2.00 | 14.439 | 52.886 | 0.201583180 | 0.738342548 |
| 2.25 | 9.502 | 62.388 | 0.132657620 | 0.871000168 |
| 2.50 | 4.499 | 66.887 | 0.062810633 | 0.933810800 |
| 2.75 | 2.190 | 69.077 | 0.030574636 | 0.964385436 |
| 3.00 | 1.365 | 70.442 | 0.019056793 | 0.983442229 |
| 3.25 | 0.727 | 71.169 | 0.010149662 | 0.993591891 |
| 3.50 | 0.288 | 71.457 | 0.004020774 | 0.997612665 |
| 3.75 | 0.115 | 71.572 | 0.001605517 | 0.999218183 |
| 4.00 | 0.026 | 71.598 | 0.000362987 | 0.999581169 |
| PAN | 0.030 | 71.628 | 0.000418831 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
71.628
35.814
1.71
grams
grams
phi
0.3057 mm

## GRAIN SIZE DISTRIBUTION IR-14: 0-0.9 ft.



## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 0.9-2.4 ft.


GRAIN SIZE DISTRIBUTION IR-14: 0.9-2.4 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 2.4-3.0 ft.

| PHISIZE. S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.039 | 0.039 | 0.000457446 | 0.000457446 |
| -1.25 | 0.050 | 0.089 | 0.000586469 | 0.001043915 |
| -1.00 | 0.017 | 0.106 | 0.000199399 | 0.001243314 |
| -0.75 | 0.013 | 0.119 | 0.000152482 | 0.001395796 |
| -0.50 | 0.044 | 0.163 | 0.000516093 | 0.001911889 |
| -0.25 | 0.147 | 0.310 | 0.001724219 | 0.003636108 |
| 0.00 | 0.233 | 0.543 | 0.002732945 | 0.006369053 |
| 0.25 | 0.478 | 1.021 | 0.005606644 | 0.011975697 |
| 0.50 | 0.840 | 1.861 | 0.009852679 | 0.021828376 |
| 0.75 | 1.596 | 3.457 | 0.018720090 | 0.040548466 |
| 1.00 | 3.619 | 7.076 | 0.042448625 | 0.082997091 |
| 1.25 | 7.667 | 14.743 | 0.089929155 | 0.172926246 |
| 1.50 | 11.446 | 26.189 | 0.134254481 | 0.307180726 |
| 1.75 | 20.677 | 46.866 | 0.242528385 | 0.549709111 |
| 2.00 | 14.892 | 61.758 | 0.174673923 | 0.724383035 |
| 2.25 | 9.196 | 70.954 | 0.107863376 | 0.832246411 |
| 2.50 | 6.272 | 77.226 | 0.073566670 | 0.905813081 |
| 2.75 | 4.495 | 81.721 | 0.052723562 | 0.958536643 |
| 3.00 | 2.502 | 84.223 | 0.029346908 | 0.987883551 |
| 3.25 | 0.826 | 85.049 | 0.009688468 | 0.997572018 |
| 3.50 | 0.144 | 85.193 | 0.001689031 | 0.999261049 |
| 3.75 | 0.034 | 85.227 | 0.000398799 | 0.999659848 |
| 4.00 | 0.009 | 85.236 | 0.000105564 | 0.999765412 |
| PAN | 0.020 | 85.256 | 0.000234588 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 85.256 | grams grams | 0.3078 mm |
|  |  | 42.628 |  |  |
|  |  | 1.7 | phi |  |

GRAIN SIZE DISTRIBUTION IR-14: 2.4-3.0 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 3.0-3.4 ft.



GRAIN SIZE DISTRIBUTION CHART
CORE IR-14: 3.4-3.7 ft.

| PHISIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.064 | 0.064 | 0.000733054 | 0.000733054 |
| -1.50 | 0.000 | 0.064 | 0.000000000 | 0.000733054 |
| -1.25 | 0.023 | 0.087 | 0.000263441 | 0.000996495 |
| -1.00 | 0.126 | 0.213 | 0.001443200 | 0.002439695 |
| -0.75 | 0.239 | 0.452 | 0.002737498 | 0.005177193 |
| -0.50 | 0.450 | 0.902 | 0.005154285 | 0.010331478 |
| -0.25 | 0.741 | 1.643 | 0.008487389 | 0.018818867 |
| 0.00 | 1.150 | 2.793 | 0.013172061 | 0.031990928 |
| 0.25 | 1.939 | 4.732 | 0.022209241 | 0.054200170 |
| 0.50 | 2.950 | 7.682 | 0.033789201 | 0.087989371 |
| 0.75 | 4.693 | 12.375 | 0.053753465 | 0.141742836 |
| 1.00 | 8.647 | 21.022 | 0.099042448 | 0.240785284 |
| 1.25 | 15.170 | 36.192 | 0.173756672 | 0.414541956 |
| 1.50 | 12.063 | 48.255 | 0.138169198 | 0.552711154 |
| 1.75 | 16.730 | 64.985 | 0.191624860 | 0.744336014 |
| 2.00 | 9.462 | 74.447 | 0.108377431 | 0.852713445 |
| 2.25 | 5.370 | 79.817 | 0.061507800 | 0.914221245 |
| 2.50 | 3.834 | 83.651 | 0.043914508 | 0.958135752 |
| 2.75 | 2.294 | 85.945 | 0.026275399 | 0.984411152 |
| 3.00 | 0.966 | 86.911 | 0.011064532 | 0.995475683 |
| 3.25 | 0.271 | 87.182 | 0.003104025 | 0.998579708 |
| 3.50 | 0.055 | 87.237 | 0.000629968 | 0.999209676 |
| 3.75 | 0.030 | 87.267 | 0.000343619 | 0.999553295 |
| 4.00 | 0.015 | 87.282 | 0.000171809 | 0.999725105 |
| PAN | 0.024 | 87.306 | 0.000274895 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 87.306 | grams |  |
|  |  | 43.653 | grams |  |
|  |  | 1.4 | phi | 0.3789 mm |

GRAIN SIZE DISTRIBUTION IR-14: 3.4-3.7 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 3.7-5.3 ft.

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.076 | 0.076 | 0.001180986 | 0.001180986 |
| -1.00 | 0.084 | 0.160 | 0.001305300 | 0.002486287 |
| -0.75 | 0.245 | 0.405 | 0.003807126 | 0.006293413 |
| -0.50 | 0.350 | 0.755 | 0.005438752 | 0.011732165 |
| -0.25 | 0.512 | 1.267 | 0.007956117 | 0.019688282 |
| 0.00 | 0.800 | 2.067 | 0.012431433 | 0.032119715 |
| 0.25 | 1.204 | 3.271 | 0.018709306 | 0.050829021 |
| 0.50 | 1.666 | 4.937 | 0.025888459 | 0.076717480 |
| 0.75 | 2.771 | 7.708 | 0.043059376 | 0.119776856 |
| 1.00 | 5.117 | 12.825 | 0.079514553 | 0.199291408 |
| 1.25 | 8.578 | 21.403 | 0.133296039 | 0.332587447 |
| 1.50 | 9.398 | 30.801 | 0.146038258 | 0.478625705 |
| 1.75 | 13.898 | 44.699 | 0.215965068 | 0.694590773 |
| 2.00 | 9.381 | 54.080 | 0.145774090 | 0.840364863 |
| 2.25 | 5.378 | 59.458 | 0.083570308 | 0.923935170 |
| 2.50 | 2.427 | 61.885 | 0.037713859 | 0.961649030 |
| 2.75 | 1.114 | 62.999 | 0.017310770 | 0.978959800 |
| 3.00 | 0.722 | 63.721 | 0.011219368 | 0.990179168 |
| 3.25 | 0.407 | 64.128 | 0.006324491 | 0.996503660 |
| 3.50 | 0.131 | 64.259 | 0.002035647 | 0.998539307 |
| 3.75 | 0.051 | 64.310 | 0.000792504 | 0.999331810 |
| 4.00 | 0.019 | 64.329 | 0.000295247 | 0.999627057 |
| PAN | 0.024 | 64.353 | 0.000372943 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 64.353 | grams |  |
|  |  | 32.177 | grams |  |
|  |  | 1.52 | phi | 0.3487 mm |

GRAIN SIZE DISTRIBUTION IR-14: 3.7-5.3 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 5.3-7.1 ft.
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0.031 | 0.031 | 0.000427751 | 0.000427751 |
| -1.50 | 0.104 | 0.135 | 0.001435037 | 0.001862788 |
| -1.25 | 0.241 | 0.376 | 0.003325422 | 0.005188211 |
| -1.00 | 0.279 | 0.655 | 0.003849763 | 0.009037973 |
| -0.75 | 0.659 | 1.314 | 0.009093167 | 0.018131140 |
| -0.50 | 1.643 | 2.957 | 0.022670825 | 0.040801965 |
| -0.25 | 2.551 | 5.508 | 0.035199801 | 0.076001766 |
| 0.00 | 3.204 | 8.712 | 0.044210178 | 0.120211944 |
| 0.25 | 4.665 | 13.377 | 0.064369688 | 0.184581632 |
| 0.50 | 5.656 | 19.033 | 0.078043934 | 0.262625566 |
| 0.75 | 6.687 | 25.720 | 0.092270118 | 0.354895684 |
| 1.00 | 8.558 | 34.278 | 0.118086985 | 0.472982669 |
| 1.25 | 9.213 | 43.491 | 0.127124959 | 0.600107628 |
| 1.50 | 6.717 | 50.208 | 0.092684071 | 0.692791699 |
| 1.75 | 8.258 | 58.466 | 0.113947456 | 0.806739154 |
| 2.00 | 5.974 | 64.440 | 0.082431836 | 0.889170990 |
| 2.25 | 4.431 | 68.871 | 0.061140854 | 0.950311845 |
| 2.50 | 2.281 | 71.152 | 0.031474225 | 0.981786069 |
| 2.75 | 0.718 | 71.870 | 0.009907275 | 0.991693344 |
| 3.00 | 0.326 | 72.196 | 0.004498289 | 0.996191633 |
| 3.25 | 0.125 | 72.321 | 0.001724804 | 0.997916437 |
| 3.50 | 0.056 | 72.377 | 0.000772712 | 0.998689149 |
| 3.75 | 0.033 | 72.410 | 0.000455348 | 0.999144497 |
| 4.00 | 0.021 | 72.431 | 0.000289767 | 0.999434264 |
| PAN | 0.041 | 72.472 | 0.000565736 | 1.0 |


| TOTAL WT. | 72.472 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 36.236 | grams |  |
| MEAN GRAIN SIZE | 1.05 | phi | 0.4830 mm |

GRAIN SIZE DISTRIBUTION IR-14: 5.3-7.1 ft.


## GRAIN SIZE DISTRIBUTION CHART

CORE IR-14: 7.1-8.0 ft.

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.054 | 0.054 | 0.000848203 | 0.000848203 |
| -1.50 | 0.031 | 0.085 | 0.000486931 | 0.001335134 |
| -1.25 | 0.033 | 0.118 | 0.000518346 | 0.001853481 |
| -1.00 | 0.063 | 0.181 | 0.000989570 | 0.002843051 |
| -0.75 | 0.154 | 0.335 | 0.002418949 | 0.005262001 |
| -0.50 | 0.206 | 0.541 | 0.003235738 | 0.008497738 |
| -0.25 | 0.389 | 0.930 | 0.006110204 | 0.014607942 |
| 0.00 | 0.811 | 1.741 | 0.012738753 | 0.027346695 |
| 0.25 | 1.942 | 3.683 | 0.030503895 | 0.057850591 |
| 0.50 | 3.450 | 7.133 | 0.054190751 | 0.112041342 |
| 0.75 | 6.201 | 13.334 | 0.097401985 | 0.209443327 |
| 1.00 | 10.901 | 24.235 | 0.171227067 | 0.380670395 |
| 1.25 | 12.885 | 37.120 | 0.202390676 | 0.583061071 |
| 1.50 | 8.611 | 45.731 | 0.135256974 | 0.718318045 |
| 1.75 | 8.442 | 54.173 | 0.132602413 | 0.850920457 |
| 2.00 | 4.862 | 59.035 | 0.076369691 | 0.927290148 |
| 2.25 | 2.801 | 61.836 | 0.043996607 | 0.971286755 |
| 2.50 | 1.122 | 62.958 | 0.017623775 | 0.988910530 |
| 2.75 | 0.340 | 63.298 | 0.005340538 | 0.994251068 |
| 3.00 | 0.169 | 63.467 | 0.002654561 | 0.996905630 |
| 3.25 | 0.075 | 63.542 | 0.001178060 | 0.998083689 |
| 3.50 | 0.038 | 63.580 | 0.000596884 | 0.998680573 |
| 3.75 | 0.028 | 63.608 | 0.000439809 | 0.999120382 |
| 4.00 | 0.014 | 63.622 | 0.000219904 | 0.999340287 |
| PAN | 0.042 | 63.664 | 0.000659713 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 63.664 |  | grams |



## GRAIN SIZE DISTRIBUTION CHART

CORE SL-5 : 0-1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. $\%$ |
| :--- | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.086 | 0.086 | 0.001031225 | 0.001031225 |
| -1.75 | 0.000 | 0.086 | 0.000000000 | 0.001031225 |
| -1.50 | 0.118 | 0.204 | 0.001414936 | 0.002446160 |
| -1.25 | 0.134 | 0.338 | 0.001606792 | 0.004052952 |
| -1.00 | 0.196 | 0.534 | 0.002350233 | 0.006403185 |
| -0.75 | 0.601 | 1.135 | 0.007206581 | 0.013609765 |
| -0.50 | 1.347 | 2.482 | 0.016151854 | 0.029761619 |
| -0.25 | 2.390 | 4.872 | 0.028658449 | 0.058420068 |
| 0.00 | 3.255 | 8.127 | 0.039030649 | 0.097450717 |
| 0.25 | 4.787 | 12.914 | 0.057400835 | 0.154851552 |
| 0.50 | 5.343 | 18.257 | 0.064067821 | 0.218919373 |
| 0.75 | 6.479 | 24.736 | 0.077689577 | 0.296608950 |
| 1.00 | 8.374 | 33.110 | 0.100412490 | 0.397021440 |
| 1.25 | 9.023 | 42.133 | 0.108194638 | 0.505216078 |
| 1.50 | 7.198 | 49.331 | 0.086311094 | 0.591527172 |
| 1.75 | 9.876 | 59.207 | 0.118422946 | 0.709950118 |
| 2.00 | 8.918 | 68.125 | 0.106935584 | 0.816885702 |
| 2.25 | 7.634 | 75.759 | 0.091539163 | 0.908424865 |
| 2.50 | 4.450 | 80.209 | 0.053359873 | 0.961784738 |
| 2.75 | 1.827 | 82.036 | 0.021907526 | 0.983692263 |
| 3.00 | 0.855 | 82.891 | 0.010252290 | 0.993944554 |
| 3.25 | 0.335 | 83.226 | 0.004016979 | 0.997961533 |
| 3.50 | 0.096 | 83.322 | 0.001151134 | 0.999112667 |
| 3.75 | 0.033 | 83.355 | 0.000395702 | 0.999508370 |
| 4.00 | 0.014 | 83.369 | 0.000167874 | 0.999676243 |
| PAN | 0.027 | 83.396 | 0.000323757 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
83.396 ,
41.698
1.26
phi
0.4175 mm

## GRAIN SIZE DISTRIBUTION SL-5 : 0-1 ft



Phi Size

## GRAIN SIZE DISTRIBUTION CHART

## CORE SL-5 : 1.4-2.3 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.016 | 0.016 | 0.000211377 | 0.000211377 |
| -1.00 | 0.011 | 0.027 | 0.000145322 | 0.000356699 |
| -0.75 | 0.020 | 0.047 | 0.000264222 | 0.000620921 |
| -0.50 | 0.030 | 0.077 | 0.000396333 | 0.001017254 |
| -0.25 | 0.195 | 0.272 | 0.002576162 | 0.003593416 |
| 0.00 | 0.324 | 0.596 | 0.004280392 | 0.007873808 |
| 0.25 | 0.711 | 1.307 | 0.009393083 | 0.017266890 |
| 0.50 | 1.191 | 2.498 | 0.015734404 | 0.033001295 |
| 0.75 | 2.103 | 4.601 | 0.027782915 | 0.060784210 |
| 1.00 | 4.613 | 9.214 | 0.060942743 | 0.121726953 |
| 1.25 | 8.449 | 17.663 | 0.111620472 | 0.233347425 |
| 1.50 | 10.624 | 28.287 | 0.140354586 | 0.373702011 |
| 1.75 | 18.188 | 46.475 | 0.240283246 | 0.613985256 |
| 2.00 | 15.367 | 61.842 | 0.203014770 | 0.817000026 |
| 2.25 | 9.753 | 71.595 | 0.128847729 | 0.945847755 |
| 2.50 | 3.213 | 74.808 | 0.042447222 | 0.988294977 |
| 2.75 | 0.556 | 75.364 | 0.007345364 | 0.995640341 |
| 3.00 | 0.185 | 75.549 | 0.002444051 | 0.998084392 |
| 3.25 | 0.074 | 75.623 | 0.000977620 | 0.999062013 |
| 3.50 | 0.032 | 75.655 | 0.000422755 | 0.999484768 |
| 3.75 | 0.017 | 75.672 | 0.000224588 | 0.999709356 |
| 4.00 | 0.009 | 75.681 | 0.000118900 | 0.999828256 |
| PAN | 0.013 | 75.694 | 0.000171744 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 75.694 | grams grams phi | 0.3231 mm |
|  |  | 37.847 |  |  |
|  |  | 1.63 |  |  |

GRAIN SIZE DISTRIBUTION SL-5 : 1.4-2.3 ft


GRAIN SIZE DISTRIBUTION CHART
CORE SL-5 : 4.3-5.2 ft

PHI SIZE SAMPLE WT. CUM. WT.

| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| :--- | ---: | ---: | ---: | ---: |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.024 | 0.024 | 0.000360572 | 0.000360572 |
| 0.00 | 0.060 | 0.084 | 0.000901429 | 0.001262000 |
| 0.25 | 0.204 | 0.288 | 0.003064858 | 0.004326858 |
| 0.50 | 0.545 | 0.833 | 0.008187978 | 0.012514836 |
| 0.75 | 1.479 | 2.312 | 0.022220219 | 0.034735055 |
| 1.00 | 4.105 | 6.417 | 0.061672751 | 0.096407806 |
| 1.25 | 8.063 | 14.480 | 0.121137002 | 0.217544809 |
| 1.50 | 10.541 | 25.021 | 0.158366010 | 0.375910819 |
| 1.75 | 15.665 | 40.686 | 0.235348027 | 0.611258845 |
| 2.00 | 11.810 | 52.496 | 0.177431228 | 0.788690074 |
| 2.25 | 7.936 | 60.432 | 0.119228978 | 0.907919052 |
| 2.50 | 3.693 | 64.125 | 0.055482940 | 0.963401992 |
| 2.75 | 1.349 | 65.474 | 0.020267123 | 0.983669116 |
| 3.00 | 0.634 | 66.108 | 0.009525097 | 0.993194213 |
| 3.25 | 0.270 | 66.378 | 0.004056429 | 0.997250642 |
| 3.50 | 0.090 | 66.468 | 0.001352143 | 0.998602785 |
| 3.75 | 0.042 | 66.510 | 0.000631000 | 0.999233786 |
| 4.00 | 0.027 | 66.537 | 0.000405643 | 0.999639428 |
| PAN | 0.024 | 66.561 | 0.000360572 | 1.0 |

CUM. WT. \%
0.000000000
0.000000000
0.000000000
0.000000000
0.000000000
0.000000000
0.000000000
0.000360572
0.004326858
0.012514836
0.034735055
0.096407806
0.217544809
0.375910819
0.611258845
0.788690074
0.907919052
0.963401992
0.983669116
0.993194213
0.997250642
0.998602785
0.999233786
1.0

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE

### 66.561

33.281
1.63
grams
grams
phi $\quad 0.3231 \mathrm{~mm}$




## GRAIN SIZE DISTRIBUTION CHART

CORE SL-6 : 2.6-3.1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.044 | 0.044 | 0.000450358 | 0.000450358 |
| -1.00 | 0.036 | 0.080 | 0.000368475 | 0.000818833 |
| -0.75 | 0.067 | 0.147 | 0.000685773 | 0.001504606 |
| -0.50 | 0.121 | 0.268 | 0.001238485 | 0.002743091 |
| -0.25 | 0.293 | 0.561 | 0.002998976 | 0.005742068 |
| 0.00 | 0.584 | 1.145 | 0.005977482 | 0.011719550 |
| 0.25 | 1.174 | 2.319 | 0.012016377 | 0.023735926 |
| 0.50 | 2.049 | 4.368 | 0.020972364 | 0.044708291 |
| 0.75 | 3.351 | 7.719 | 0.034298874 | 0.079007165 |
| 1.00 | 5.961 | 13.680 | 0.061013306 | 0.140020471 |
| 1.25 | 9.154 | 22.834 | 0.093694985 | 0.233715455 |
| 1.50 | 10.131 | 32.965 | 0.103694985 | 0.337410440 |
| 1.75 | 16.212 | 49.177 | 0.165936540 | 0.503346981 |
| 2.00 | 16.744 | 65.921 | 0.171381781 | 0.674728762 |
| 2.25 | 15.891 | 81.812 | 0.162650972 | 0.837379734 |
| 2.50 | 9.780 | 91.592 | 0.100102354 | 0.937482088 |
| 2.75 | 3.832 | 95.424 | 0.039222108 | 0.976704197 |
| 3.00 | 1.519 | 96.943 | 0.015547595 | 0.992251791 |
| 3.25 | 0.492 | 97.435 | 0.005035824 | 0.997287615 |
| 3.50 | 0.147 | 97.582 | 0.001504606 | 0.998792221 |
| 3.75 | 0.065 | 97.647 | 0.000665302 | 0.999457523 |
| 4.00 | 0.026 | 97.673 | 0.000266121 | 0.999723644 |
| PAN | 0.027 | 97.700 | 0.000276356 | 1.0 |
| TOTAL WT. |  | 97.700 | grams |  |
| MEDIAN WT. |  | 48.850 | grams |  |
| MEAN GRAIN SIZE |  | 1.99 | phi | 0.2517 mm |

GRAIN SIZE DISTRIBUTION SL-6 : 2.6-3.1 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE SL-6 : 3.1-3.8 ft

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 2.452 | 2.452 | 0.024944303 | 0.024944303 |
| -1.75 | 1.125 | 3.577 | 0.011444674 | 0.036388976 |
| -1.50 | 1.829 | 5.406 | 0.018606497 | 0.054995473 |
| -1.25 | 3.916 | 9.322 | 0.039837638 | 0.094833111 |
| -1.00 | 5.189 | 14.511 | 0.052787923 | 0.147621034 |
| -0.75 | 7.564 | 22.075 | 0.076948901 | 0.224569935 |
| -0.50 | 9.632 | 31.707 | 0.097986755 | 0.322556689 |
| -0.25 | 9.854 | 41.561 | 0.100245170 | 0.422801860 |
| 0.00 | 8.769 | 50.330 | 0.089207418 | 0.512009278 |
| 0.25 | 8.418 | 58.748 | 0.085636680 | 0.597645958 |
| 0.50 | 6.240 | 64.988 | 0.063479791 | 0.661125749 |
| 0.75 | 5.057 | 70.045 | 0.051445081 | 0.712570830 |
| 1.00 | 4.604 | 74.649 | 0.046836692 | 0.759407522 |
| 1.25 | 3.663 | 78.312 | 0.037263858 | 0.796671380 |
| 1.50 | 2.910 | 81.222 | 0.029603556 | 0.826274937 |
| 1.75 | 3.825 | 85.047 | 0.038911891 | 0.865186828 |
| 2.00 | 3.903 | 88.950 | 0.039705389 | 0.904892217 |
| 2.25 | 3.998 | 92.948 | 0.040671828 | 0.945564044 |
| 2.50 | 2.848 | 95.796 | 0.028972828 | 0.974536872 |
| 2.75 | 1.384 | 97.180 | 0.014079492 | 0.988616364 |
| 3.00 | 0.614 | 97.794 | 0.006246249 | 0.994862613 |
| 3.25 | 0.255 | 98.049 | 0.002594126 | 0.997456739 |
| 3.50 | 0.107 | 98.156 | 0.001088516 | 0.998545255 |
| 3.75 | 0.066 | 98.222 | 0.000671421 | 0.999216676 |
| 4.00 | 0.028 | 98.250 | 0.000284845 | 0.999501521 |
| PAN | 0.049 | 98.299 | 0.000498479 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 98.299 | grams |  |
|  |  | 49.150 | grams |  |
|  |  | -0.03 | phi | 1.0210 mm |

GRAIN SIZE DISTRIBUTION SL-6 : 3.1-3.8 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE SL-6 : 3.8-4.4 ft

| PHI SIIE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.148 | 0.148 | 0.001573949 | 0.001573949 |
| -1.75 | 0.261 | 0.409 | 0.002775680 | 0.004349629 |
| -1.50 | 0.558 | 0.967 | 0.005934213 | 0.010283843 |
| -1.25 | 0.919 | 1.886 | 0.009773373 | 0.020057215 |
| -1.00 | 1.508 | 3.394 | 0.016037264 | 0.036094479 |
| -0.75 | 3.037 | 6.431 | 0.032297859 | 0.068392339 |
| -0.50 | 4.608 | 11.039 | 0.049005115 | 0.117397454 |
| -0.25 | 6.346 | 17.385 | 0.067488381 | 0.184885836 |
| 0.00 | 6.961 | 24.346 | 0.074028778 | 0.258914613 |
| 0.25 | 8.862 | 33.208 | 0.094245515 | 0.353160128 |
| 0.50 | 8.443 | 41.651 | 0.089789537 | 0.442949666 |
| 0.75 | 9.001 | 50.652 | 0.095723751 | 0.538673416 |
| 1.00 | 9.375 | 60.027 | 0.099701162 | 0.638374579 |
| 1.25 | 8.631 | 68.658 | 0.091788878 | 0.730163457 |
| 1.50 | 6.598 | 75.256 | 0.070168349 | 0.800331805 |
| 1.75 | 6.891 | 82.147 | 0.073284342 | 0.873616148 |
| 2.00 | 5.200 | 87.347 | 0.055300911 | 0.928917059 |
| 2.25 | 3.855 | 91.202 | 0.040997118 | 0.969914177 |
| 2.50 | 1.784 | 92.986 | 0.018972467 | 0.988886644 |
| 2.75 | 0.576 | 93.562 | 0.006125639 | 0.995012283 |
| 3.00 | 0.241 | 93.803 | 0.002562985 | 0.997575268 |
| 3.25 | 0.094 | 93.897 | 0.000999670 | 0.998574938 |
| 3.50 | 0.055 | 93.952 | 0.000584913 | 0.999159852 |
| 3.75 | 0.036 | 93.988 | 0.000382852 | 0.999542704 |
| 4.00 | 0.018 | 94.006 | 0.000191426 | 0.999734130 |
| PAN | 0.025 | 94.031 | 0.000265870 | 1.0 |
| TOTAL WT. |  | 94.031 | grams |  |
| MEDIAN WT. |  | 47.016 | grams |  |
| MEAN GRAIN SIZE |  | 0.65 | phi | 0.6375 mm |

GRAIN SIZE DISTRIBUTION SL-6 : 3.8-4.4 ft


GRAIN SIZE DISTRIBUTION CHART
CORE SL-6 : 4.4-5.3 ft
PHI SIZE SAMPLE WT. CUM.WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.782 | 0.782 | 0.007609002 | 0.007609002 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0.328 | 1.110 | 0.003191500 | 0.010800502 |
| -1.50 | 0.745 | 1.855 | 0.007248986 | 0.018049488 |
| -1.25 | 1.326 | 3.181 | 0.012902221 | 0.030951709 |
| -1.00 | 1.735 | 4.916 | 0.016881866 | 0.047833575 |
| -0.75 | 3.041 | 7.957 | 0.029589484 | 0.077423059 |
| -0.50 | 4.466 | 12.423 | 0.043454993 | 0.120878052 |
| -0.25 | 5.523 | 17.946 | 0.053739795 | 0.174617847 |
| 0.00 | 5.924 | 23.870 | 0.057641598 | 0.232259446 |
| 0.25 | 6.756 | 30.626 | 0.065737110 | 0.297996556 |
| 0.50 | 6.586 | 37.212 | 0.064082979 | 0.362079535 |
| 0.75 | 6.597 | 43.809 | 0.064190011 | 0.426269546 |
| 1.00 | 7.160 | 50.969 | 0.069668103 | 0.495937649 |
| 1.25 | 6.551 | 57.520 | 0.063742423 | 0.559680072 |
| 1.50 | 5.564 | 63.084 | 0.054138733 | 0.613818805 |
| 1.75 | 7.368 | 70.452 | 0.071691981 | 0.685510786 |
| 2.00 | 7.790 | 78.242 | 0.075798118 | 0.761308904 |
| 2.25 | 9.096 | 87.338 | 0.088505736 | 0.849814640 |
| 2.50 | 7.589 | 94.927 | 0.073842352 | 0.923656992 |
| 2.75 | 4.226 | 99.153 | 0.041119749 | 0.964776741 |
| 3.00 | 2.181 | 101.334 | 0.021221527 | 0.985998268 |
| 3.25 | 0.992 | 102.326 | 0.009652341 | 0.995650609 |
| 3.50 | 0.269 | 102.595 | 0.002617419 | 0.998268028 |
| 3.75 | 0.100 | 102.695 | 0.000973018 | 0.999241046 |
| 4.00 | 0.039 | 102.734 | 0.000379477 | 0.999620523 |
| PAN | 0.039 | 102.773 | 0.000379477 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
102.773
51.387
1.02
grams
grams
phi $\quad 0.4931 \mathrm{~mm}$

GRAIN SIZE DISTRIBUTION SL-6 : 4.4-5.3 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE SL-6 : 5.3-7.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.534 | 0.534 | 0.005182001 | 0.005182001 |
| -1.75 | 1.100 | 1.634 | 0.010674533 | 0.015856534 |
| -1.50 | 2.014 | 3.648 | 0.019544100 | 0.035400635 |
| -1.25 | 4.275 | 7.923 | 0.041485119 | 0.076885753 |
| -1.00 | 6.105 | 14.028 | 0.059243661 | 0.136129414 |
| -0.75 | 9.055 | 23.083 | 0.087870819 | 0.224000233 |
| -0.50 | 11.444 | 34.527 | 0.111053965 | 0.335054198 |
| -0.25 | 12.185 | 46.712 | 0.118244719 | 0.453298916 |
| 0.00 | 10.686 | 57.398 | 0.103698241 | 0.556997157 |
| 0.25 | 10.290 | 67.688 | 0.099855409 | 0.656852565 |
| 0.50 | 7.141 | 74.829 | 0.069297130 | 0.726149696 |
| 0.75 | 5.429 | 80.258 | 0.052683675 | 0.778833371 |
| 1.00 | 4.544 | 84.802 | 0.044095527 | 0.822928898 |
| 1.25 | 3.521 | 88.323 | 0.034168211 | 0.857097109 |
| 1.50 | 2.954 | 91.277 | 0.028665974 | 0.885763084 |
| 1.75 | 3.310 | 94.587 | 0.032120642 | 0.917883725 |
| 2.00 | 3.130 | 97.717 | 0.030373900 | 0.948257625 |
| 2.25 | 2.711 | 100.428 | 0.026307873 | 0.974565498 |
| 2.50 | 1.510 | 101.938 | 0.014653223 | 0.989218721 |
| 2.75 | 0.546 | 102.484 | 0.005298450 | 0.994517171 |
| 3.00 | 0.267 | 102.751 | 0.002591000 | 0.997108172 |
| 3.25 | 0.130 | 102.881 | 0.001261536 | 0.998369708 |
| 3.50 | 0.075 | 102.956 | 0.000727809 | 0.999097517 |
| 3.75 | 0.041 | 102.997 | 0.000397869 | 0.999495386 |
| 4.00 | 0.024 | 103.021 | 0.000232899 | 0.999728285 |
| PAN | 0.028 | 103.049 | 0.000271715 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 103.049 51.525 $-0.14$ | grams grams phi | 1.1019 mm |

GRAIN SIZE DISTRIBUTION SL-6 : 5.3-7.0 ft



GRAIN SIZE DISTRIBUTION SL-7 : 0-1.5 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE SL-7 : 1.5-2.6 ft

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 38.345 | 38.345 | 0.294576323 | 0.294576323 |
| -1.75 | 2.744 | 41.089 | 0.021080126 | 0.315656449 |
| -1.50 | 2.793 | 43.882 | 0.021456557 | 0.337113006 |
| -1.25 | 4.021 | 47.903 | 0.030890374 | 0.368003380 |
| -1.00 | 5.072 | 52.975 | 0.038964431 | 0.406967811 |
| -0.75 | 6.635 | 59.610 | 0.050971806 | 0.457939617 |
| -0.50 | 8.280 | 67.890 | 0.063609127 | 0.521548744 |
| -0.25 | 9.483 | 77.373 | 0.072850887 | 0.594399631 |
| 0.00 | 7.771 | 85.144 | 0.059698855 | 0.654098487 |
| 0.25 | 7.495 | 92.639 | 0.057578551 | 0.711677038 |
| 0.50 | 6.072 | 98.711 | 0.046646693 | 0.758323731 |
| 0.75 | 5.511 | 104.222 | 0.042336944 | 0.800660675 |
| 1.00 | 5.829 | 110.051 | 0.044779903 | 0.845440578 |
| 1.25 | 4.409 | 114.460 | 0.033871092 | 0.879311669 |
| 1.50 | 4.056 | 118.516 | 0.031159253 | 0.910470923 |
| 1.75 | 3.856 | 122.372 | 0.029622801 | 0.940093724 |
| 2.00 | 2.550 | 124.922 | 0.019589767 | 0.959683491 |
| 2.25 | 1.796 | 126.718 | 0.013797342 | 0.973480833 |
| 2.50 | 1.122 | 127.840 | 0.008619498 | 0.982100330 |
| 2.75 | 0.647 | 128.487 | 0.004970423 | 0.987070754 |
| 3.00 | 0.516 | 129.003 | 0.003964047 | 0.991034801 |
| 3.25 | 0.436 | 129.439 | 0.003349466 | 0.994384267 |
| 3.50 | 0.211 | 129.650 | 0.001620957 | 0.996005224 |
| 3.75 | 0.146 | 129.796 | 0.001121610 | 0.997126834 |
| 4.00 | 0.081 | 129.877 | 0.000622263 | 0.997749097 |
| PAN | 0.293 | 130.170 | 0.002250903 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | $\begin{gathered} 130.170 \\ 65.085 \\ -1.08 \end{gathered}$ | grams grams phi | 2.1140 mm |




GRAIN SIZE DISTRIBUTION SL-7 : 2.6-3.1 ft


## GRAIN SIZE DISTRIBUTION CHART <br> CORE SL-7 : 3.1-4.8 ft




# GRAIN SIZE DISTRIBUTION CHART <br> CORE SL-7 : 4.8-5.0 ft 

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.103 | 0.103 | 0.001272500 | 0.001272500 |
| -1.75 | 0.436 | 0.539 | 0.005386507 | 0.006659007 |
| -1.50 | 0.664 | 1.203 | 0.008203304 | 0.014862311 |
| -1.25 | 0.611 | 1.814 | 0.007548522 | 0.022410832 |
| -1.00 | 1.003 | 2.817 | 0.012391436 | 0.034802268 |
| -0.75 | 1.226 | 4.043 | 0.015146461 | 0.049948729 |
| -0.50 | 1.463 | 5.506 | 0.018074447 | 0.068023177 |
| -0.25 | 1.421 | 6.927 | 0.017555564 | 0.085578741 |
| 0.00 | 2.095 | 9.022 | 0.025882411 | 0.111461152 |
| 0.25 | 2.385 | 11.407 | 0.029465179 | 0.140926331 |
| 0.50 | 2.665 | 14.072 | 0.032924404 | 0.173850734 |
| 0.75 | 3.493 | 17.565 | 0.043153824 | 0.217004559 |
| 1.00 | 2.488 | 20.053 | 0.030737680 | 0.247742238 |
| 1.25 | 2.401 | 22.454 | 0.029662849 | 0.277405088 |
| 1.50 | 2.480 | 24.934 | 0.030638845 | 0.308043932 |
| 1.75 | 3.020 | 27.954 | 0.037310206 | 0.345354138 |
| 2.00 | 2.476 | 30.430 | 0.030589427 | 0.375943565 |
| 2.25 | 3.110 | 33.540 | 0.038422100 | 0.414365665 |
| 2.50 | - 4.408 | 37.948 | 0.054458075 | 0.468823740 |
| 2.75 | 6.642 | 44.590 | 0.082057744 | 0.550881485 |
| 3.00 | 11.927 | 56.517 | 0.147350605 | 0.698232089 |
| 3.25 | 13.399 | 69.916 | 0.165536242 | 0.863768331 |
| 3.50 | 7.346 | 77.262 | 0.090755223 | 0.954523554 |
| 3.75 | 2.966 | 80.228 | 0.036643070 | 0.991166623 |
| 4.00 | 0.436 | 80.664 | 0.005386507 | 0.996553130 |
| PAN | 0.279 | 80.943 | 0.003446870 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 80.943 | grams |  |
|  |  | 40.472 | grams |  |
|  |  | 2.6 | phi | 0.1649 mm |

GRAIN SIZE DISTRIBUTION SL-7 : 4.8-5.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE SL-7 : 5.0-5.3 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 5.092 | 5.092 | 0.067185645 | 0.067185645 |
| -1.75 | 1.525 | 6.617 | 0.020121388 | 0.087307033 |
| -1.50 | 1.687 | 8.304 | 0.022258873 | 0.109565906 |
| -1.25 | 1.885 | 10.189 | 0.024871355 | 0.134437261 |
| -1.00 | 2.382 | 12.571 | 0.031428948 | 0.165866209 |
| -0.75 | 3.497 | 16.068 | 0.046140652 | 0.212006861 |
| -0.50 | 3.925 | 19.993 | 0.051787835 | 0.263794696 |
| -0.25 | 6.371 | 26.364 | 0.084061222 | 0.347855918 |
| 0.00 | 5.435 | 31.799 | 0.071711308 | 0.419567225 |
| 0.25 | 5.461 | 37.260 | 0.072054361 | 0.491621586 |
| 0.50 | 5.513 | 42.773 | 0.072740467 | 0.564362053 |
| 0.75 | 4.687 | 47.460 | 0.061841932 | 0.626203985 |
| 1.00 | 4.398 | 51.858 | 0.058028764 | 0.684232748 |
| 1.25 | 2.268 | 54.126 | 0.029924792 | 0.714157541 |
| 1.50 | 3.789 | 57.915 | 0.049993403 | 0.764150943 |
| 1.75 | 3.340 | 61.255 | 0.044069138 | 0.808220082 |
| 2.00 | 2.097 | 63.352 | 0.027668558 | 0.835888640 |
| 2.25 | 1.954 | 65.306 | 0.025781765 | 0.861670405 |
| 2.50 | 1.972 | 67.278 | 0.026019264 | 0.887689669 |
| 2.75 | 2.032 | 69.310 | 0.026810925 | 0.914500594 |
| 3.00 | 2.172 | 71.482 | 0.028658134 | 0.943158728 |
| 3.25 | 2.292 | 73.774 | 0.030241457 | 0.973400185 |
| 3.50 | 1.052 | 74.826 | 0.013880459 | 0.987280644 |
| 3.75 | 0.463 | 75.289 | 0.006108985 | 0.993389629 |
| 4.00 | 0.115 | 75.404 | 0.001517351 | 0.994906980 |
| PAN | 0.386 | 75.790 | 0.005093020 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 75.790 | grams |  |
| MEDIAN WT. |  | 37.895 | 0.28 |  |
| MEAN GRAIN SIZE |  |  |  |  |
|  |  |  |  |  |

GRAIN SIZE DISTRIBUTION SL-7 : 5.0-5.3 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE SL-7 : 5.3-5.8 ft

| PHI SIZE S | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.773 | 0.773 | 0.009646896 | 0.009646896 |
| -1.75 | 0.478 | 1.251 | 0.005965351 | 0.015612247 |
| -1.50 | 0.448 | 1.699 | 0.005590957 | 0.021203204 |
| -1.25 | 0.963 | 2.662 | 0.012018061 | 0.033221265 |
| -1.00 | 0.957 | 3.619 | 0.011943182 | 0.045164447 |
| -0.75 | 1.528 | 5.147 | 0.019069156 | 0.064233602 |
| -0.50 | 2.008 | 7.155 | 0.025059466 | 0.089293068 |
| -0.25 | 3.597 | 10.752 | 0.044889891 | 0.134182959 |
| 0.00 | 3.067 | 13.819 | 0.038275589 | 0.172458548 |
| 0.25 | 4.691 | 18.510 | 0.058542807 | 0.231001355 |
| 0.50 | 4.441 | 22.951 | 0.055422854 | 0.286424209 |
| 0.75 | 4.977 | 27.928 | 0.062112034 | 0.348536243 |
| 1.00 | 6.154 | 34.082 | 0.076800775 | 0.425337017 |
| 1.25 | 3.544 | 37.626 | 0.044233452 | 0.469570470 |
| 1.50 | 5.411 | 43.037 | 0.067528273 | 0.537098743 |
| 1.75 | 5.437 | 48.474 | 0.067852748 | 0.604951491 |
| 2.00 | 3.836 | 52.310 | 0.047872566 | 0.652824057 |
| 2.25 | 3.702 | 56.012 | 0.046200271 | 0.699024328 |
| 2.50 | 4.090 | 60.102 | 0.051042439 | 0.750066767 |
| 2.75 | 4.899 | 65.001 | 0.061138608 | 0.811205375 |
| 3.00 | 6.075 | 71.076 | 0.075814869 | 0.887020245 |
| 3.25 | 4.308 | 75.384 | 0.053763038 | 0.940783283 |
| 3.50 | 3.303 | 78.687 | 0.041220825 | 0.982004108 |
| 3.75 | 0.938 | 79.625 | 0.011706065 | 0.993710174 |
| 4.00 | 0.126 | 79.751 | 0.001572457 | 0.995282630 |
| PAN | 0.378 | 80.129 | 0.004717370 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 80.129 | grams |  |
|  |  | 40.065 | grams |  |
|  |  | 1.36 | phi | 0.3896 mm |

GRAIN SIZE DISTRIBUTION SL-7 : 5.3-5.8 ft


## GRAIN SIZE DISTRIBUTION CHART <br> CORE SL-8: 0-0.5 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.210 | 0.210 | 0.002633229 | 0.002633229 |
| -1.75 | 0.095 | 0.305 | 0.001191223 | 0.003824451 |
| -1.50 | 0.260 | 0.565 | 0.003260188 | 0.007084639 |
| -1.25 | 1.325 | 1.890 | 0.016614420 | 0.023699060 |
| -1.00 | 2.799 | 4.689 | 0.035097179 | 0.058796238 |
| -0.75 | 5.844 | 10.533 | 0.073278997 | 0.132075235 |
| -0.50 | 7.960 | 18.493 | 0.099811912 | 0.231887147 |
| -0.25 | 9.624 | 28.117 | 0.120677116 | 0.352564263 |
| 0.00 | 8.100 | 36.217 | 0.101567398 | 0.454131661 |
| 0.25 | 7.984 | 44.201 | 0.100112853 | 0.554244514 |
| 0.50 | 5.427 | 49.628 | 0.068050157 | 0.622294671 |
| 0.75 | 4.203 | 53.831 | 0.052702194 | 0.674996865 |
| 1.00 | 4.129 | 57.960 | 0.051774295 | 0.726771160 |
| 1.25 | 3.827 | 61.787 | 0.047987461 | 0.774758621 |
| 1.50 | 3.647 | 65.434 | 0.045730408 | 0.820489028 |
| 1.75 | 4.266 | 69.700 | 0.053492163 | 0.873981191 |
| 2.00 | 3.197 | 72.897 | 0.040087774 | 0.914068966 |
| 2.25 | 2.474 | 75.371 | 0.031021944 | 0.945090909 |
| 2.50 | 1.811 | 77.182 | 0.022708464 | 0.967799373 |
| 2.75 | 1.188 | 78.370 | 0.014896552 | 0.982695925 |
| 3.00 | 0.793 | 79.163 | 0.009943574 | 0.992639498 |
| 3.25 | 0.389 | 79.552 | 0.004877743 | 0.997517241 |
| 3.50 | 0.116 | 79.668 | 0.001454545 | 0.998971787 |
| 3.75 | 0.039 | 79.707 | 0.000489028 | 0.999460815 |
| 4.00 | 0.021 | 79.728 | 0.000263323 | 0.999724138 |
| PAN | 0.022 | 79.750 | 0.000275862 | 1.0 |
| TOTAL WT. |  | 79.750 | grams |  |
| MEDIAN WT. |  | 39.875 | grams |  |
| MEAN GRAIN SIZE |  | 1.33 | phi | 0.3978 mm |

GRAIN SIZE DISTRIBUTION SL-8 : 0-0.5 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE SL-8 : 0.5-0.8 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.063 | 0.063 | 0.000866885 | 0.000866885 |
| -1.25 | 0.165 | 0.228 | 0.002270413 | 0.003137298 |
| -1.00 | 0.104 | 0.332 | 0.001431048 | 0.004568346 |
| -0.75 | 0.379 | 0.711 | 0.005215070 | 0.009783416 |
| -0.50 | 0.658 | 1.369 | 0.009054132 | 0.018837549 |
| -0.25 | 1.074 | 2.443 | 0.014778325 | 0.033615874 |
| 0.00 | 1.490 | 3.933 | 0.020502518 | 0.054118392 |
| 0.25 | 2.408 | 6.341 | 0.033134271 | 0.087252663 |
| 0.50 | 3.148 | 9.489 | 0.043316730 | 0.130569392 |
| 0.75 | 4.752 | 14.241 | 0.065387897 | 0.195957289 |
| 1.00 | 8.070 | 22.311 | 0.111043840 | 0.307001128 |
| 1.25 | 10.807 | 33.118 | 0.148705177 | 0.455706305 |
| 1.50 | 10.299 | 43.417 | 0.141715056 | 0.597421361 |
| 1.75 | 12.594 | 56.011 | 0.173294438 | 0.770715799 |
| 2.00 | 8.097 | 64.108 | 0.111415362 | 0.882131161 |
| 2.25 | 4.596 | 68.704 | 0.063241324 | 0.945372485 |
| 2.50 | 2.035 | 70.739 | 0.028001761 | 0.973374247 |
| 2.75 | 0.923 | 71.662 | 0.012700553 | 0.986074800 |
| 3.00 | 0.513 | 72.175 | 0.007058921 | 0.993133720 |
| 3.25 | 0.330 | 72.505 | 0.004540826 | 0.997674547 |
| 3.50 | 0.109 | 72.614 | 0.001499849 | 0.999174395 |
| 3.75 | 0.033 | 72.647 | 0.000454083 | 0.999628478 |
| 4.00 | 0.013 | 72.660 | 0.000178881 | 0.999807359 |
| PAN | 0.014 | 72.674 | 0.000192641 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 72.674 | grams |  |
|  |  | 36.337 | grams |  |
|  |  | 0.82 | phi | 1.7654 mm |

GRAIN SIZE DISTRIBUTION SL-8 : 0.5-0.8 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE SL-8 : 0.8-1.9 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 7.699 | 7.699 | 0.079361316 | 0.079361316 |
| -1.75 | 6.324 | 14.023 | 0.065187812 | 0.144549128 |
| -1.50 | 8.396 | 22.419 | 0.086545994 | 0.231095122 |
| -1.25 | 10.203 | 32.622 | 0.105172556 | 0.336267678 |
| -1.00 | 9.786 | 42.408 | 0.100874119 | 0.437141797 |
| -0.75 | 8.250 | 50.658 | 0.085041026 | 0.522182823 |
| -0.50 | 7.509 | 58.167 | 0.077402796 | 0.599585618 |
| -0.25 | 6.499 | 64.666 | 0.066991712 | 0.666577331 |
| 0.00 | 5.189 | 69.855 | 0.053488228 | 0.720065559 |
| 0.25 | 5.100 | 74.955 | 0.052570816 | 0.772636375 |
| 0.50 | 3.771 | 78.726 | 0.038871480 | 0.811507855 |
| 0.75 | 3.191 | 81.917 | 0.032892838 | 0.844400693 |
| 1.00 | 3.037 | 84.954 | 0.031305406 | 0.875706098 |
| 1.25 | 2.423 | 87.377 | 0.024976292 | 0.900682390 |
| 1.50 | 1.941 | 89.318 | 0.020007834 | 0.920690224 |
| 1.75 | 2.086 | 91.404 | 0.021502495 | 0.942192718 |
| 2.00 | 1.547 | 92.951 | 0.015946481 | 0.958139199 |
| 2.25 | 1.213 | 94.164 | 0.012503608 | 0.970642807 |
| 2.50 | 0.905 | 95.069 | 0.009328743 | 0.979971550 |
| 2.75 | 0.672 | 95.741 | 0.006926978 | 0.986898528 |
| 3.00 | 0.593 | 96.334 | 0.006112646 | 0.993011174 |
| 3.25 | 0.366 | 96.700 | 0.003772729 | 0.996783903 |
| 3.50 | 0.145 | 96.845 | 0.001494660 | 0.998278563 |
| 3.75 | 0.079 | 96.924 | 0.000814332 | 0.999092896 |
| 4.00 | 0.047 | 96.971 | 0.000484476 | 0.999577372 |
| PAN | 0.041 | 97.012 | 0.000422628 | 1.0 |
| TOTAL WT. |  | 97.012 | grams |  |
| MEDIAN WT. |  | 48.506 | grams |  |
| MEAN GRAIN SIZE |  | 0.93 | phi | 0.5249 mm |

GRAIN SIZE DISTRIBUTION SL-8 : 0.8-1.9 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE SL-8 : 1.9-2.2 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.056 | 0.056 | 0.000562441 | 0.000562441 |
| -1.75 | 0.044 | 0.100 | 0.000441918 | 0.001004359 |
| -1.50 | 0.031 | 0.131 | 0.000311351 | 0.001315710 |
| -1.25 | 0.073 | 0.204 | 0.000733182 | 0.002048892 |
| -1.00 | 0.049 | 0.253 | 0.000492136 | 0.002541028 |
| -0.75 | 0.310 | - 0.563 | 0.003113513 | 0.005654541 |
| -0.50 | 0.743 | 1.306 | 0.007462387 | 0.013116927 |
| -0.25 | 1.573 | 2.879 | 0.015798566 | 0.028915493 |
| 0.00 | 3.538 | 6.417 | 0.035534219 | 0.064449712 |
| 0.25 | 8.018 | 14.435 | 0.080529498 | 0.144979210 |
| 0.50 | 11.094 | 25.529 | 0.111423578 | 0.256402788 |
| 0.75 | 13.616 | 39.145 | 0.136753510 | 0.393156298 |
| 1.00 | 14.863 | 54.008 | 0.149277866 | 0.542434164 |
| 1.25 | 13.226 | 67.234 | 0.132836510 | 0.675270675 |
| 1.50 | 6.426 | 73.660 | 0.064540104 | 0.739810779 |
| 1.75 | 10.281 | 83.941 | 0.103258140 | 0.843068919 |
| 2.00 | 5.635 | 89.576 | 0.056595625 | 0.899664544 |
| 2.25 | 3.345 | 92.921 | 0.033595806 | 0.933260350 |
| 2.50 | 1.956 | 94.877 | 0.019645260 | 0.952905610 |
| 2.75 | 1.550 | 96.427 | 0.015567563 | 0.968473174 |
| 3.00 | 1.542 | 97.969 | 0.015487215 | 0.983960388 |
| 3.25 | 1.120 | 99.089 | 0.011248820 | 0.995209208 |
| 3.50 | 0.339 | 99.428 | 0.003404777 | 0.998613985 |
| 3.75 | 0.085 | 99.513 | 0.000853705 | 0.999467690 |
| 4.00 | 0.031 | 99.544 | 0.000311351 | 0.999779041 |
| PAN | 0.022 | 99.566 | 0.000220959 | 1.0 |
| TOTAL WT. |  | 99.566 | grams |  |
| MEDIAN WT. |  | 49.783 | grams |  |
| MEAN GRAIN SIZE |  | 0.93 | phi | 0.5249 mm |

GRAIN SIZE DISTRIBUTION SL-8 : 1.9-2.2 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART CORE SL-8 : 2.2-2.4 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.128 | 0.128 | 0.001652189 | 0.001652189 |
| -1.75 | 0.354 | 0.482 | 0.004569334 | 0.006221522 |
| -1.50 | 0.783 | 1.265 | 0.010106747 | 0.016328269 |
| -1.25 | 2.028 | 3.293 | 0.026176862 | 0.042505131 |
| -1.00 | 2.831 | 6.124 | 0.036541763 | 0.079046894 |
| -0.75 | 4.359 | 10.483 | 0.056264763 | 0.135311657 |
| -0.50 | 5.466 | 15.949 | 0.070553612 | 0.205865269 |
| -0.25 | 5.752 | 21.701 | 0.074245221 | 0.280110490 |
| 0.00 | 5.251 | 26.952 | 0.067778452 | 0.347888942 |
| 0.25 | 5.522 | 32.474 | 0.071276445 | 0.419165387 |
| 0.50 | 4.671 | 37.145 | 0.060291973 | 0.479457359 |
| 0.75 | 4.974 | 42.119 | 0.064203013 | 0.543660372 |
| 1.00 | 5.780 | 47.899 | 0.074606637 | 0.618267009 |
| 1.25 | 5.236 | 53.135 | 0.067584836 | 0.685851845 |
| 1.50 | 4.360 | 57.495 | 0.056277671 | 0.742129516 |
| 1.75 | 4.990 | 62.485 | 0.064409536 | 0.806539052 |
| 2.00 | 3.810 | 66.295 | 0.049178423 | 0.855717476 |
| 2.25 | 3.038 | 69.333 | 0.039213662 | 0.894931137 |
| 2.50 | 2.321 | 71.654 | 0.029958824 | 0.924889962 |
| 2.75 | 1.909 | 73.563 | 0.024640843 | 0.949530804 |
| 3.00 | 1.800 | 75.363 | 0.023233901 | 0.972764705 |
| 3.25 | 1.377 | 76.740 | 0.017773934 | 0.990538639 |
| 3.50 | 0.455 | 77.195 | 0.005873014 | 0.996411653 |
| 3.75 | 0.150 | 77.345 | 0.001936158 | 0.998347811 |
| 4.00 | 0.069 | 77.414 | 0.000890633 | 0.999238444 |
| PAN | 0.059 | 77.473 | 0.000761556 | 1.0 |
| TOTAL WT. |  | 77.473 | grams |  |
| MEDIAN WT. |  | 38.737 | grams |  |
| MEAN GRAIN SIZE |  | 0.58 | phi | 0.6690 mm |

GRAIN SIZE DISTRIBUTION SL-8 : 2.2-2.4 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE SL-8 : 2.4-4.5 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.036 | 0.036 | 0.000375250 | 0.000375250 |
| -1.00 | 0.014 | 0.050 | 0.000145931 | 0.000521181 |
| -0.75 | 0.095 | 0.145 | 0.000990243 | 0.001511424 |
| -0.50 | 0.172 | 0.317 | 0.001792862 | 0.003304286 |
| -0.25 | 0.367 | 0.684 | 0.003825467 | 0.007129753 |
| 0.00 | 0.656 | 1.340 | 0.006837892 | 0.013967645 |
| 0.25 | 1.571 | 2.911 | 0.016375500 | 0.030343145 |
| 0.50 | 2.904 | 5.815 | 0.030270180 | 0.060613326 |
| 0.75 | 5.782 | 11.597 | 0.060269346 | 0.120882672 |
| 1.00 | 11.886 | 23.483 | 0.123895097 | 0.244777769 |
| 1.25 | 18.309 | 41.792 | 0.190845981 | 0.435623749 |
| 1.50 | 16.485 | 58.277 | 0.171833306 | 0.607457055 |
| 1.75 | 18.417 | 76.694 | 0.191971731 | 0.799428786 |
| 2.00 | 10.707 | 87.401 | 0.111605654 | 0.911034440 |
| 2.25 | 5.002 | 92.403 | 0.052138926 | 0.963173366 |
| 2.50 | 1.867 | 94.270 | 0.019460891 | 0.982634256 |
| 2.75 | 0.719 | 94.989 | 0.007494580 | 0.990128836 |
| 3.00 | 0.517 | 95.506 | 0.005389009 | 0.995517845 |
| 3.25 | 0.253 | 95.759 | 0.002637175 | 0.998155020 |
| 3.50 | 0.098 | 95.857 | 0.001021514 | 0.999176534 |
| 3.75 | 0.038 | 95.895 | 0.000396097 | 0.999572632 |
| 4.00 | 0.021 | 95.916 | 0.000218896 | 0.999791528 |
| PAN | 0.020 | 95.936 | 0.000208472 | 1.0 |
| TOTAL WT. |  | 95.936 | grams |  |
| MEDIAN WT. |  | 47.968 | grams |  |
| MEAN GRAIN SIZE |  | 1.34 | phi | 0.3950 mm |

GRAIN SIZE DISTRIBUTION SL-8 : 2.4-4.5 ft


GRAIN SIZE DISTRIBUTION CHART
CORE SL-8 : 4.5-6.0 ft
PHI SIZE SAMPLE WT. CUM.WT. WT.\% CUM. WT. \%

| $<-2.00$ | 46.082 | 46.082 | 0.369979045 | 0.369979045 |
| :--- | :---: | :---: | :---: | ---: |
| -1.75 | 4.886 | 50.968 | 0.039228280 | 0.409207325 |
| -1.50 | 4.880 | 55.848 | 0.039180108 | 0.448387433 |
| -1.25 | 5.584 | 61.432 | 0.044832320 | 0.493219754 |
| -1.00 | 4.881 | 66.313 | 0.039188137 | 0.532407891 |
| -0.75 | 5.554 | 71.867 | 0.044591459 | 0.576999350 |
| -0.50 | 5.856 | 77.723 | 0.047016130 | 0.624015479 |
| -0.25 | 5.447 | 83.170 | 0.043732387 | 0.667747866 |
| 0.00 | 4.601 | 87.771 | 0.036940098 | 0.704687964 |
| 0.25 | 5.086 | 92.857 | 0.040834022 | 0.745521987 |
| 0.50 | 4.482 | 97.339 | 0.035984681 | 0.781506668 |
| 0.75 | 4.395 | 101.734 | 0.035286183 | 0.816792851 |
| 1.00 | 4.703 | 106.437 | 0.037759026 | 0.854551878 |
| 1.25 | 4.045 | 110.482 | 0.032476135 | 0.887028012 |
| 1.50 | 3.228 | 113.710 | 0.025916678 | 0.912944690 |
| 1.75 | 3.197 | 116.907 | 0.025667788 | 0.938612478 |
| 2.00 | 2.140 | 119.047 | 0.017181441 | 0.955793919 |
| 2.25 | 1.552 | 120.599 | 0.012460559 | 0.968254478 |
| 2.50 | 1.089 | 121.688 | 0.008743266 | 0.976997744 |
| 2.75 | 0.776 | 122.464 | 0.006230279 | 0.983228023 |
| 3.00 | 0.709 | 123.173 | 0.005692356 | 0.988920379 |
| 3.25 | 0.634 | 123.807 | 0.005090203 | 0.994010582 |
| 3.50 | 0.312 | 124.119 | 0.002504958 | 0.996515540 |
| 3.75 | 0.184 | 124.303 | 0.001477283 | 0.997992822 |
| 4.00 | 0.126 | 124.429 | 0.001011618 | 0.999004440 |
| PAN | 0.124 | 124.553 | 0.000995560 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
124.553
62.277
-1.21
grams
grams
phi
2.3134 mm

## GRAIN SIZE DISTRIBUTION SL-8 : 4.5-6.0 ft





# GRAIN SIZE DISTRIBUTION CHART 

CORE SL-9 : 0.5-2.1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. $\%$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.009 | 0.009 | 0.000076742 | 0.000076742 |
| -1.50 | 0.027 | 0.036 | 0.000230226 | 0.000306968 |
| -1.25 | 0.081 | 0.117 | 0.000690678 | 0.000997647 |
| -1.00 | 0.106 | 0.223 | 0.000903851 | 0.001901497 |
| -0.75 | 0.187 | 0.410 | 0.001594529 | 0.003496026 |
| -0.50 | 0.396 | 0.806 | 0.003376650 | 0.006872676 |
| -0.25 | 0.870 | 1.676 | 0.007418398 | 0.014291074 |
| 0.00 | 1.432 | 3.108 | 0.012210512 | 0.026501586 |
| 0.25 | 3.527 | 6.635 | 0.030074355 | 0.056575941 |
| 0.50 | 3.896 | 10.531 | 0.033220778 | 0.089796719 |
| 0.75 | 5.736 | 16.267 | 0.048910263 | 0.138706982 |
| 1.00 | 7.248 | 23.515 | 0.061802926 | 0.200509908 |
| 1.25 | 5.142 | 28.657 | 0.043845288 | 0.244355196 |
| 1.50 | 10.541 | 39.198 | 0.089881988 | 0.334237184 |
| 1.75 | 17.868 | 57.066 | 0.152358539 | 0.486595723 |
| 2.00 | 19.149 | 76.215 | 0.163281490 | 0.649877213 |
| 2.25 | 18.673 | 94.888 | 0.159222688 | 0.809099901 |
| 2.50 | 13.065 | 107.953 | 0.111403868 | 0.920503769 |
| 2.75 | 5.924 | 113.877 | 0.050513319 | 0.971017088 |
| 3.00 | 2.429 | 116.306 | 0.020711825 | 0.991728913 |
| 3.25 | 0.705 | 117.011 | 0.006011460 | 0.997740373 |
| 3.50 | 0.094 | 117.105 | 0.000801528 | 0.998541901 |
| 3.75 | 0.049 | 117.154 | 0.000417818 | 0.998959719 |
| 4.00 | 0.030 | 117.184 | 0.000255807 | 0.999215526 |
| PAN | 0.092 | 117.276 | 0.000784474 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 117.276 | 58.638 |  |
| MEDIAN WT. |  | 1.77 |  | grams |
| MEAN GRAIN SIZE |  |  |  |  |
|  |  |  |  | 0.2932 |



# GRAIN SIZE DISTRIBUTION CHART 

## CORE SL-9 : 2.1-2.6 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 2.035 | 2.035 | 0.017002398 | 0.017002398 |
| -1.75 | 3.395 | 5.430 | 0.028365180 | 0.045367578 |
| -1.50 | 5.838 | 11.268 | 0.048776412 | 0.094143990 |
| -1.25 | 6.919 | 18.187 | 0.057808153 | 0.151952143 |
| -1.00 | 8.616 | 26.803 | 0.071986565 | 0.223938708 |
| -0.75 | 12.604 | 39.407 | 0.105306252 | 0.329244960 |
| -0.50 | 12.302 | 51.709 | 0.102783046 | 0.432028006 |
| -0.25 | 13.741 | 65.450 | 0.114805872 | 0.546833878 |
| 0.00 | 9.101 | 74.551 | 0.076038734 | 0.622872612 |
| 0.25 | 8.663 | 83.214 | 0.072379250 | 0.695251861 |
| 0.50 | 5.497 | 88.711 | 0.045927362 | 0.741179223 |
| 0.75 | 3.555 | 92.266 | 0.029701978 | 0.770881200 |
| 1.00 | 3.712 | 95.978 | 0.031013711 | 0.801894911 |
| 1.25 | 2.134 | 98.112 | 0.017829542 | 0.819724453 |
| 1.50 | 4.190 | 102.302 | 0.035007394 | 0.854731847 |
| 1.75 | 5.009 | 107.311 | 0.041850128 | 0.896581975 |
| 2.00 | 4.289 | 111.600 | 0.035834538 | 0.932416513 |
| 2.25 | 3.577 | 115.177 | 0.029885787 | 0.962302300 |
| 2.50 | 2.145 | 117.322 | 0.017921446 | 0.980223747 |
| 2.75 | 0.927 | 118.249 | 0.007745073 | 0.987968819 |
| 3.00 | 0.409 | 118.658 | 0.003417190 | 0.991386009 |
| 3.25 | 0.253 | 118.911 | 0.002113812 | 0.993499820 |
| 3.50 | 0.148 | 119.059 | 0.001236538 | 0.994736358 |
| 3.75 | 0.122 | 119.181 | 0.001019308 | 0.995755667 |
| 4.00 | 0.082 | 119.263 | 0.000685109 | 0.996440776 |
| PAN | 0.426 | 119.689 | 0.003559224 | 1.0 |
|  |  |  |  |  |
| WOTAL WT. |  | 119.689 | grams |  |
| MEDIAN WT. |  | 59.845 | grams |  |
| MEAN GRAIN SIZE |  | -0.35 | 6 | phi |
|  |  |  |  | 1.2746 mm |

GRAIN SIZE DISTRIBUTION SL-9 : 2.1-2.6 ft


Phi Size

# GRAIN SIZE DISTRIBUTION CHART 

CORE SL-9 : 2.6-3.4 ft
PHI SIZE SAMPLE WT. CUM.WT. WT.\%

| $<-2.00$ | 0.889 | 0.889 | 0.007262360 | 0.007262360 |
| :--- | :---: | :---: | :---: | :---: |
| -1.75 | 1.076 | 1.965 | 0.008789988 | 0.016052348 |
| -1.50 | 1.291 | 3.256 | 0.010546352 | 0.026598699 |
| -1.25 | 1.985 | 5.241 | 0.016215730 | 0.042814430 |
| -1.00 | 1.987 | 7.228 | 0.016232069 | 0.059046499 |
| -0.75 | 2.938 | 10.166 | 0.024000915 | 0.083047414 |
| -0.50 | 5.521 | 15.687 | 0.045101787 | 0.128149201 |
| -0.25 | 8.674 | 24.361 | 0.070859066 | 0.199008267 |
| 0.00 | 7.370 | 31.731 | 0.060206516 | 0.259214783 |
| 0.25 | 10.750 | 42.481 | 0.087818188 | 0.347032971 |
| 0.50 | 9.320 | 51.801 | 0.076136327 | 0.423169297 |
| 0.75 | 9.560 | 61.361 | 0.078096919 | 0.501266216 |
| 1.00 | 10.515 | 71.876 | 0.085898441 | 0.587164657 |
| 1.25 | 5.465 | 77.341 | 0.044644316 | 0.631808973 |
| 1.50 | 11.808 | 89.149 | 0.096461111 | 0.728270104 |
| 1.75 | 12.983 | 102.132 | 0.106059863 | 0.834329968 |
| 2.00 | 8.802 | 110.934 | 0.071904715 | 0.906234683 |
| 2.25 | 5.995 | 116.929 | 0.048973957 | 0.955208640 |
| 2.50 | 3.094 | 120.023 | 0.025275300 | 0.980483939 |
| 2.75 | 1.257 | 121.280 | 0.010268601 | 0.990752541 |
| 3.00 | 0.550 | 121.830 | 0.004493024 | 0.995245564 |
| 3.25 | 0.224 | 122.054 | 0.001829886 | 0.997075450 |
| 3.50 | 0.074 | 122.128 | 0.000604516 | 0.997679966 |
| 3.75 | 0.054 | 122.182 | 0.000441133 | 0.998121099 |
| 4.00 | 0.039 | 122.221 | 0.000318596 | 0.998439695 |
| PAN | 0.191 | 122.412 | 0.001560305 | 1.0 |


|  |  |  |  |
| :--- | :---: | :---: | :--- |
| TOTAL WT. | 122.412 | grams |  |
| MEDIAN WT. | 61.206 | grams |  |
| MEAN GRAIN SIZE | 0.75 | phi | 0.5946 mm |
|  |  |  |  |



## GRAIN SIZE DISTRIBUTION CHART

CORE SL-9 : 3.4-4.3 ft

PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 9.034 | 9.034 | 0.077282371 | 0.077282371 |
| :--- | ---: | :---: | ---: | ---: |
| -1.75 | 3.691 | 12.725 | 0.031575075 | 0.108857446 |
| -1.50 | 5.049 | 17.774 | 0.043192239 | 0.152049685 |
| -1.25 | 6.446 | 24.220 | 0.055143033 | 0.207192718 |
| -1.00 | 6.533 | 30.753 | 0.055887284 | 0.263080003 |
| -0.75 | 7.720 | 38.473 | 0.066041610 | 0.329121612 |
| -0.50 | 8.477 | 46.950 | 0.072517451 | 0.401639064 |
| -0.25 | 8.552 | 55.502 | 0.073159047 | 0.474798111 |
| 0.00 | 6.594 | 62.096 | 0.056409116 | 0.531207227 |
| 0.25 | 7.005 | 69.101 | 0.059925062 | 0.591132289 |
| 0.50 | 6.430 | 75.531 | 0.055006159 | 0.646138448 |
| 0.75 | 5.864 | 81.395 | 0.050164249 | 0.696302696 |
| 1.00 | 3.758 | 85.153 | 0.032148234 | 0.728450931 |
| 1.25 | 6.073 | 91.226 | 0.051952163 | 0.780403093 |
| 1.50 | 6.638 | 97.864 | 0.056785519 | 0.837188612 |
| 1.75 | 6.696 | 104.560 | 0.057281686 | 0.894470298 |
| 2.00 | 4.186 | 108.746 | 0.035809609 | 0.930279907 |
| 2.25 | 2.767 | 111.513 | 0.023670613 | 0.953950520 |
| 2.50 | 1.754 | 113.267 | 0.015004791 | 0.968955311 |
| 2.75 | 1.254 | 114.521 | 0.010727484 | 0.979682795 |
| 3.00 | 1.021 | 115.542 | 0.008734260 | 0.988417054 |
| 3.25 | 0.768 | 116.310 | 0.006569943 | 0.994986997 |
| 3.50 | 0.206 | 116.516 | 0.001762250 | 0.996749247 |
| 3.75 | 0.100 | 116.616 | 0.000855461 | 0.997604708 |
| 4.00 | 0.043 | 116.659 | 0.000367848 | 0.997972557 |
| PAN | 0.237 | 116.896 | 0.002027443 | 1.0 |


| TOTAL WT. | 116.896 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 58.448 | grams |  |
| MEAN GRAIN SIZE | -0.14 | phi | 1.1019 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE M-4 : 0-0.5 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.072 | 0.072 | 0.000745180 | 0.000745180 |
| -1.75 | 0.067 | 0.139 | 0.000693431 | 0.001438611 |
| -1.50 | 0.021 | 0.160 | 0.000217344 | 0.001655955 |
| -1.25 | 0.037 | 0.197 | 0.000382940 | 0.002038894 |
| -1.00 | 0.116 | 0.313 | 0.001200567 | 0.003239461 |
| -0.75 | 0.214 | 0.527 | 0.002214839 | 0.005454301 |
| -0.50 | 0.252 | 0.779 | 0.002608129 | 0.008062429 |
| -0.25 | 0.419 | 1.198 | 0.004336531 | 0.012398961 |
| 0.00 | 0.713 | 1.911 | 0.007379348 | 0.019778309 |
| 0.25 | 1.509 | 3.420 | 0.015617723 | 0.035396032 |
| 0.50 | 2.688 | 6.108 | 0.027820039 | 0.063216071 |
| 0.75 | 4.927 | 11.035 | 0.050993055 | 0.114209126 |
| 1.00 | 10.925 | 21.960 | 0.113070658 | 0.227279784 |
| 1.25 | 19.395 | 41.355 | 0.200732760 | 0.428012544 |
| 1.50 | 18.001 | 59.356 | 0.186305255 | 0.614317798 |
| 1.75 | 18.742 | 78.098 | 0.193974395 | 0.808292193 |
| 2.00 | 11.242 | 89.340 | 0.116351518 | 0.924643711 |
| 2.25 | 5.464 | 94.804 | 0.056550853 | 0.981194564 |
| 2.50 | 1.401 | 96.205 | 0.014499953 | 0.995694518 |
| 2.75 | 0.257 | 96.462 | 0.002659877 | 0.998354395 |
| 3.00 | 0.082 | 96.544 | 0.000848677 | 0.999203072 |
| 3.25 | 0.028 | 96.572 | 0.000289792 | 0.999492864 |
| 3.50 | 0.024 | 96.596 | 0.000248393 | 0.999741257 |
| 3.75 | 0.011 | 96.607 | 0.000113847 | 0.999855104 |
| 4.00 | 0.006 | 96.613 | 0.000062098 | 0.999917202 |
| PAN | 0.008 | 96.621 | 0.000082798 | 1.0 |
| TOTAL WT. |  | 96.621 | grams |  |
| MEDIAN WT. |  | 48.311 | grams |  |
| MEAN GRAIN SIZE |  | 1.35 | phi | 0.3923 mm |

GRAIN SIZE DISTRIBUTION M-4 : 0-0.5 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-4 : 0.5-2.3 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.166 | 0.166 | 0.001745164 | 0.001745164 |
| -1.75 | 0.244 | 0.410 | 0.002565181 | 0.004310345 |
| -1.50 | 0.047 | 0.457 | 0.000494113 | 0.004804458 |
| -1.25 | 0.683 | 1.140 | 0.007180404 | 0.011984861 |
| -1.00 | 1.196 | 2.336 | 0.012573591 | 0.024558452 |
| -0.75 | 1.934 | 4.270 | 0.020332212 | 0.044890664 |
| -0.50 | 2.979 | 7.249 | 0.031318335 | 0.076208999 |
| -0.25 | 4.205 | 11.454 | 0.044207317 | 0.120416316 |
| 0.00 | 5.341 | 16.795 | 0.056150126 | 0.176566442 |
| 0.25 | 8.338 | 25.133 | 0.087657696 | 0.264224138 |
| 0.50 | 9.559 | 34.692 | 0.100494113 | 0.364718251 |
| 0.75 | 11.528 | 46.220 | 0.121194281 | 0.485912532 |
| 1.00 | 14.460 | 60.680 | 0.152018503 | 0.637931034 |
| 1.25 | 15.101 | 75.781 | 0.158757359 | 0.796688394 |
| 1.50 | 9.915 | 85.696 | 0.104236754 | 0.900925147 |
| 1.75 | 6.023 | 91.719 | 0.063320017 | 0.964245164 |
| 2.00 | 1.971 | 93.690 | 0.020721194 | 0.984966358 |
| 2.25 | 0.745 | 94.435 | 0.007832212 | 0.992798570 |
| 2.50 | 0.274 | 94.709 | 0.002880572 | 0.995679142 |
| 2.75 | 0.112 | 94.821 | 0.001177460 | 0.996856602 |
| 3.00 | 0.080 | 94.901 | 0.000841043 | 0.997697645 |
| 3.25 | 0.063 | 94.964 | 0.000662321 | 0.998359966 |
| 3.50 | 0.050 | 95.014 | 0.000525652 | 0.998885618 |
| 3.75 | 0.039 | 95.053 | 0.000410008 | 0.999295627 |
| 4.00 | 0.033 | 95.086 | 0.000346930 | 0.999642557 |
| PAN | 0.034 | 95.120 | 0.000357443 | 1.0 |
| TOTAL WT. |  | 95.120 | grams |  |
| MEDIAN WT. |  | 47.560 | grams |  |
| MEAN GRAIN SIZE |  | 0.77 | phi | 0.5864 mm |

GRAIN SIZE DISTRIBUTION M-4 : 0.5-2.3 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-4 : 2.3-3.1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.710 | 0.710 | 0.006730815 | 0.006730815 |
| -1.75 | 0.528 | 1.238 | 0.005005451 | 0.011736266 |
| -1.50 | 0.957 | 2.195 | 0.009072380 | 0.020808646 |
| -1.25 | 1.423 | 3.618 | 0.013490070 | 0.034298715 |
| -1.00 | 2.349 | 5.967 | 0.022268569 | 0.056567284 |
| -0.75 | 3.694 | 9.661 | 0.035019197 | 0.091586481 |
| -0.50 | 5.369 | 15.030 | 0.050898232 | 0.142484713 |
| -0.25 | 6.686 | 21.716 | 0.063383419 | 0.205868133 |
| 0.00 | 7.671 | 29.387 | 0.072721240 | 0.278589373 |
| 0.25 | 10.545 | 39.932 | 0.099966820 | 0.378556193 |
| 0.50 | 11.022 | 50.954 | 0.104488790 | 0.483044983 |
| 0.75 | 12.316 | 63.270 | 0.116755937 | 0.599800920 |
| 1.00 | 14.009 | 77.279 | 0.132805612 | 0.732606532 |
| 1.25 | 12.905 | 90.184 | 0.122339669 | 0.854946201 |
| 1.50 | 7.629 | 97.813 | 0.072323079 | 0.927269280 |
| 1.75 | 4.171 | 101.984 | 0.039541167 | 0.966810447 |
| 2.00 | 1.475 | 103.459 | 0.013983031 | 0.980793478 |
| 2.25 | 0.741 | 104.200 | 0.007024695 | 0.987818173 |
| 2.50 | 0.414 | 104.614 | 0.003924729 | 0.991742902 |
| 2.75 | 0.224 | 104.838 | 0.002123525 | 0.993866427 |
| 3.00 | 0.181 | 105.019 | 0.001715884 | 0.995582310 |
| 3.25 | 0.135 | 105.154 | 0.001279803 | 0.996862113 |
| 3.50 | 0.099 | 105.253 | 0.000938522 | 0.997800635 |
| 3.75 | 0.092 | 105.345 | 0.000872162 | 0.998672797 |
| 4.00 | 0.072 | 105.417 | 0.000682562 | 0.999355359 |
| PAN | 0.068 | 105.485 | 0.000644641 | 1.0 |
| TOTAL WT. |  | 105.485 | grams |  |
| MEDIAN WT. |  | 52.743 | grams |  |
| MEAN GRAIN SIZE |  | 0.54 | phi | 0.6878 mm |

GRAIN SIZE DISTRIBUTION M-4 : 2.3-3.1 ft


# GRAIN SIZE DISTRIBUTION CHART 

CORE M-4 : 3.1-3.7 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.251 | 0.251 | 0.002407697 | 0.002407697 |
| -1.75 | 0.179 | 0.430 | 0.001717043 | 0.004124740 |
| -1.50 | 0.103 | 0.533 | 0.000988019 | 0.005112759 |
| -1.25 | 0.061 | 0.594 | 0.000585138 | 0.005697896 |
| -1.00 | 0.298 | 0.892 | 0.002858541 | 0.008556437 |
| -0.75 | 0.550 | 1.442 | 0.005275830 | 0.013832267 |
| -0.50 | 1.045 | 2.487 | 0.010024077 | 0.023856344 |
| -0.25 | 1.599 | 4.086 | 0.015338277 | 0.039194621 |
| 0.00 | 2.182 | 6.268 | 0.020930656 | 0.060125277 |
| 0.25 | 3.813 | 10.081 | 0.036575890 | 0.096701167 |
| 0.50 | 6.115 | 16.196 | 0.058657637 | 0.155358804 |
| 0.75 | 9.771 | 25.967 | 0.093727518 | 0.249086322 |
| 1.00 | 18.587 | 44.554 | 0.178294276 | 0.427380598 |
| 1.25 | 25.408 | 69.962 | 0.243724160 | 0.671104759 |
| 1.50 | 17.678 | 87.640 | 0.169574768 | 0.840679527 |
| 1.75 | 11.604 | 99.244 | 0.111310420 | 0.951989947 |
| 2.00 | 3.407 | 102.651 | 0.032681369 | 0.984671316 |
| 2.25 | 0.924 | 103.575 | 0.008863394 | 0.993534710 |
| 2.50 | 0.302 | 103.877 | 0.002896910 | 0.996431620 |
| 2.75 | 0.111 | 103.988 | 0.001064758 | 0.997496379 |
| 3.00 | 0.073 | 104.061 | 0.000700247 | 0.998196625 |
| 3.25 | 0.060 | 104.121 | 0.000575545 | 0.998772170 |
| 3.50 | 0.039 | 104.160 | 0.000374104 | 0.999146275 |
| 3.75 | 0.035 | 104.195 | 0.000335735 | 0.999482009 |
| 4.00 | 0.025 | 104.220 | 0.000239810 | 0.999721820 |
| PAN | 0.029 | 104.249 | 0.000278180 | 1.0 |
| TOTAL WT. |  | 104.249 | grams |  |
| MEDIAN WT. |  | 52.125 | grams |  |
| MEAN GRAIN SIZE |  | 1.07 | phi | 0.4763 mm |

GRAIN SIZE DISTRIBUTION M-4 : 3.1-3.7 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-4 : 3.7-4.5 ft
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 4.541 | 4.541 | 0.045149039 | 0.045149039 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 1.568 | 6.109 | 0.015589890 | 0.060738929 |
| -1.50 | 2.558 | 8.667 | 0.025432997 | 0.086171926 |
| -1.25 | 2.448 | 11.115 | 0.024339319 | 0.110511245 |
| -1.00 | 3.702 | 14.817 | 0.036807254 | 0.147318499 |
| -0.75 | 4.370 | 19.187 | 0.043448866 | 0.190767365 |
| -0.50 | 5.962 | 25.149 | 0.059277377 | 0.250044741 |
| -0.25 | 7.278 | 32.427 | 0.072361749 | 0.322406490 |
| 0.00 | 7.515 | 39.942 | 0.074718129 | 0.397124620 |
| 0.25 | 10.505 | 50.447 | 0.104446300 | 0.501570920 |
| 0.50 | 10.407 | 60.854 | 0.103471932 | 0.605042852 |
| 0.75 | 10.567 | 71.421 | 0.105062737 | 0.710105590 |
| 1.00 | 10.226 | 81.647 | 0.101672334 | 0.811777924 |
| 1.25 | 7.906 | 89.553 | 0.078605659 | 0.890383583 |
| 1.50 | 4.593 | 94.146 | 0.045666050 | 0.936049633 |
| 1.75 | 2.748 | 96.894 | 0.027322078 | 0.963371712 |
| 2.00 | 1.239 | 98.133 | 0.012318797 | 0.975690509 |
| 2.25 | 0.723 | 98.856 | 0.007188451 | 0.982878960 |
| 2.50 | 0.468 | 99.324 | 0.004653105 | 0.987532065 |
| 2.75 | 0.286 | 99.610 | 0.002843564 | 0.990375629 |
| 3.00 | 0.238 | 99.848 | 0.002366323 | 0.992741952 |
| 3.25 | 0.224 | 100.072 | 0.002227127 | 0.994969079 |
| 3.50 | 0.176 | 100.248 | 0.001749886 | 0.996718964 |
| 3.75 | 0.147 | 100.395 | 0.001461552 | 0.998180517 |
| 4.00 | 0.096 | 100.491 | 0.000954483 | 0.999135000 |
| PAN | 0.087 | 100.578 | 0.000865000 | 1.0 |


| TOTAL WT. | 100.578 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 50.289 | grams |  |
| MEAN GRAIN SIZE | 0.25 | phi | 0.8409 mm |

GRAIN SIZE DISTRIBUTION M-4 : 3.7-4.5 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-4 : 4.5-5.5 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. $\%$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 1.544 | 1.544 | 0.014684623 | 0.014684623 |
| -1.75 | 2.288 | 3.832 | 0.021760633 | 0.036445256 |
| -1.50 | 0.541 | 4.373 | 0.005145325 | 0.041590581 |
| -1.25 | 1.196 | 5.569 | 0.011374876 | 0.052965457 |
| -1.00 | 1.638 | 7.207 | 0.015578635 | 0.068544092 |
| -0.75 | 2.250 | 9.457 | 0.021399224 | 0.089943316 |
| -0.50 | 3.920 | 13.377 | 0.037282203 | 0.127225519 |
| -0.25 | 5.504 | 18.881 | 0.052347257 | 0.179572776 |
| 0.00 | 6.628 | 25.509 | 0.063037358 | 0.242610135 |
| 0.25 | 10.283 | 35.792 | 0.097799209 | 0.340409343 |
| 0.50 | 11.584 | 47.376 | 0.110172716 | 0.450582059 |
| 0.75 | 13.434 | 60.810 | 0.127767633 | 0.578349692 |
| 1.00 | 15.246 | 76.056 | 0.145001141 | 0.723350833 |
| 1.25 | 13.826 | 89.882 | 0.131495853 | 0.854846686 |
| 1.50 | 7.408 | 97.290 | 0.070455756 | 0.925302442 |
| 1.75 | 5.360 | 102.650 | 0.050977707 | 0.976280149 |
| 2.00 | 1.080 | 103.730 | 0.010271627 | 0.986551777 |
| 2.25 | 0.481 | 104.211 | 0.004574679 | 0.991126455 |
| 2.50 | 0.278 | 104.489 | 0.002643993 | 0.993770448 |
| 2.75 | 0.159 | 104.648 | 0.001512212 | 0.995282660 |
| 3.00 | 0.126 | 104.774 | 0.001198357 | 0.996481017 |
| 3.25 | 0.100 | 104.874 | 0.000951077 | 0.997432093 |
| 3.50 | 0.075 | 104.949 | 0.000713307 | 0.998145401 |
| 3.75 | 0.071 | 105.020 | 0.000675264 | 0.998820665 |
| 4.00 | 0.058 | 105.078 | 0.000551624 | 0.999372289 |
| PAN | 0.066 | 105.144 | 0.000627711 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  |  | 105.144 |  |
| MEDIAN WT. |  |  | 0.572 |  |
| MEAN GRAIN SIZE |  |  |  | grams |
|  |  |  |  |  |

GRAIN SIZE DISTRIBUTION M-4 : 4.5-5.5 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-4 : 5.5-6.8 ft
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 3.197 | 3.197 | 0.035088682 | 0.035088682 |
| :--- | ---: | :--- | :--- | ---: |
| -1.75 | 0.590 | 3.787 | 0.006475547 | 0.041564229 |
| -1.50 | 0.493 | 4.280 | 0.005410923 | 0.046975151 |
| -1.25 | 0.857 | 5.137 | 0.009406006 | 0.056381157 |
| -1.00 | 1.032 | 6.169 | 0.011326719 | 0.067707876 |
| -0.75 | 1.823 | 7.992 | 0.020008341 | 0.087716217 |
| -0.50 | 2.776 | 10.768 | 0.030467995 | 0.118184213 |
| -0.25 | 4.063 | 14.831 | 0.044593467 | 0.162777680 |
| 0.00 | 4.949 | 19.780 | 0.054317763 | 0.217095443 |
| 0.25 | 7.757 | 27.537 | 0.085136974 | 0.302232417 |
| 0.50 | 8.482 | 36.019 | 0.093094214 | 0.395326631 |
| 0.75 | 8.838 | 44.857 | 0.097001493 | 0.492328124 |
| 1.00 | 9.465 | 54.322 | 0.103883133 | 0.596211256 |
| 1.25 | 9.579 | 63.901 | 0.105134340 | 0.701345597 |
| 1.50 | 8.015 | 71.916 | 0.087968654 | 0.789314251 |
| 1.75 | 7.460 | 79.376 | 0.081877250 | 0.871191501 |
| 2.00 | 4.318 | 83.694 | 0.047392221 | 0.918583721 |
| 2.25 | 2.654 | 86.348 | 0.029128984 | 0.947712705 |
| 2.50 | 1.519 | 87.867 | 0.016671789 | 0.964384494 |
| 2.75 | 0.953 | 88.820 | 0.010459654 | 0.974844148 |
| 3.00 | 0.696 | 89.516 | 0.007638950 | 0.982483098 |
| 3.25 | 0.596 | 90.112 | 0.006541400 | 0.989024497 |
| 3.50 | 0.392 | 90.504 | 0.004302397 | 0.993326894 |
| 3.75 | 0.323 | 90.827 | 0.003545087 | 0.996871982 |
| 4.00 | 0.150 | 90.977 | 0.001646325 | 0.998518307 |
| PAN | 0.135 | 91.112 | 0.001481693 |  |

TOTAL WT.<br>MEDIAN WT.<br>MEAN GRAIN SIZE

91.112 grams
45.556
0.77
phi
0.5864 mm

GRAIN SIZE DISTRIBUTION M-4 : 5.5-6.8 ft


Phi Size

CORE M-4 : 6.8-7.1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.050 | 0.050 | 0.000567750 | 0.000567750 |
| -1.75 | 0.036 | 0.086 | 0.000408780 | 0.000976529 |
| -1.50 | 0.073 | 0.159 | 0.000828914 | 0.001805444 |
| -1.25 | 0.209 | 0.368 | 0.002373193 | 0.004178637 |
| -1.00 | 0.238 | 0.606 | 0.002702488 | 0.006881125 |
| -0.75 | 0.537 | 1.143 | 0.006097630 | 0.012978755 |
| -0.50 | 0.960 | 2.103 | 0.010900791 | 0.023879546 |
| -0.25 | 1.553 | 3.656 | 0.017634301 | 0.041513847 |
| 0.00 | 2.070 | 5.726 | 0.023504832 | 0.065018679 |
| 0.25 | 3.573 | 9.299 | 0.040571383 | 0.105590062 |
| 0.50 | 4.257 | 13.556 | 0.048338197 | 0.153928259 |
| 0.75 | 5.036 | 18.592 | 0.057183735 | 0.211111994 |
| 1.00 | 6.425 | 25.017 | 0.072955818 | 0.284067812 |
| 1.25 | 6.426 | 31.443 | 0.072967173 | 0.357034985 |
| 1.50 | 6.016 | 37.459 | 0.068311626 | 0.425346611 |
| 1.75 | 6.598 | 44.057 | 0.074920231 | 0.500266842 |
| 2.00 | 5.176 | 49.233 | 0.058773434 | 0.559040276 |
| 2.25 | 4.927 | 54.160 | 0.055946041 | 0.614986317 |
| 2.50 | 5.032 | 59.192 | 0.057138315 | 0.672124632 |
| 2.75 | 4.991 | 64.183 | 0.056672761 | 0.728797393 |
| 3.00 | 5.661 | 69.844 | 0.064280605 | 0.793077997 |
| 3.25 | 5.981 | 75.825 | 0.067914202 | 0.860992199 |
| 3.50 | 5.582 | 81.407 | 0.063383560 | 0.924375759 |
| 3.75 | 4.579 | 85.986 | 0.051994504 | 0.976370264 |
| 4.00 | 1.541 | 87.527 | 0.017498041 | 0.993868305 |
| PAN | 0.540 | 88.067 | 0.006131695 | 1.0 |
| TOTAL WT. |  | 88.067 | grams |  |
| MEDIAN WT. |  | 44.034 | grams |  |
| MEAN GRAIN SIZE |  | 1.75 | phi | 0.2973 mm |

GRAIN SIZE DISTRIBUTION M-4 : 6.8-7.1 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 0-0.7 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.034 | 0.034 | 0.000442184 | 0.000442184 |
| -1.50 | 0.000 | 0.034 | 0.000000000 | 0.000442184 |
| -1.25 | 0.030 | 0.064 | 0.000390163 | 0.000832347 |
| -1.00 | 0.055 | 0.119 | 0.000715298 | 0.001547645 |
| -0.75 | 0.275 | 0.394 | 0.003576491 | 0.005124137 |
| -0.50 | 0.482 | 0.876 | 0.006268614 | 0.011392751 |
| -0.25 | 0.974 | 1.850 | 0.012667282 | 0.024060033 |
| 0.00 | 1.905 | 3.755 | 0.024775331 | 0.048835364 |
| 0.25 | 4.201 | 7.956 | 0.054635783 | 0.103471147 |
| 0.50 | 6.640 | 14.596 | 0.086356010 | 0.189827158 |
| 0.75 | 10.082 | 24.678 | 0.131120677 | 0.320947835 |
| 1.00 | 14.363 | 39.041 | 0.186796894 | 0.507744730 |
| 1.25 | 15.665 | 54.706 | 0.203729955 | 0.711474685 |
| 1.50 | 11.472 | 66.178 | 0.149198216 | 0.860672901 |
| 1.75 | 7.257 | 73.435 | 0.094380357 | 0.955053257 |
| 2.00 | 2.172 | 75.607 | 0.028247779 | 0.983301037 |
| 2.25 | 0.679 | 76.286 | 0.008830682 | 0.992131719 |
| 2.50 | 0.258 | 76.544 | 0.003355399 | 0.995487118 |
| 2.75 | 0.102 | 76.646 | 0.001326553 | 0.996813671 |
| 3.00 | 0.073 | 76.719 | 0.000949396 | 0.997763067 |
| 3.25 | 0.047 | 76.766 | 0.000611255 | 0.998374322 |
| 3.50 | 0.080 | 76.846 | 0.001040434 | 0.999414756 |
| 3.75 | 0.021 | 76.867 | 0.000273114 | 0.999687870 |
| 4.00 | 0.010 | 76.877 | 0.000130054 | 0.999817924 |
| PAN | 0.014 | 76.891 | 0.000182076 | 1.0 |
| TOTAL WT. |  | 76.891 | grams |  |
| MEDIAN WT. |  | 38.446 | grams |  |
| MEAN GRAIN SIZE |  | 0.99 | phi | 0.5035 mm |

GRAIN SIZE DISTRIBUTION M-5 : 0-0.7 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 0.7-1.7 ft
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.147 | 0.147 | 0.001269595 | 0.001269595 |
| :--- | ---: | :--- | :--- | ---: |
| -1.75 | 0.109 | 0.256 | 0.000941400 | 0.002210995 |
| -1.50 | 0.254 | 0.510 | 0.002193721 | 0.004404716 |
| -1.25 | 0.093 | 0.603 | 0.000803213 | 0.005207928 |
| -1.00 | 0.153 | 0.756 | 0.001321415 | 0.006529343 |
| -0.75 | 0.414 | 1.170 | 0.003575593 | 0.010104936 |
| -0.50 | 0.751 | 1.921 | 0.006486160 | 0.016591096 |
| -0.25 | 1.417 | 3.338 | 0.012238200 | 0.028829296 |
| 0.00 | 2.430 | 5.768 | 0.020987175 | 0.049816470 |
| 0.25 | 4.497 | 10.265 | 0.038839228 | 0.088655698 |
| 0.50 | 6.703 | 16.968 | 0.057891782 | 0.146547480 |
| 0.75 | 10.038 | 27.006 | 0.086695168 | 0.233242648 |
| 1.00 | 16.368 | 43.374 | 0.141365462 | 0.374608110 |
| 1.25 | 22.215 | 65.589 | 0.191864231 | 0.566472341 |
| 1.50 | 19.419 | 85.008 | 0.167716025 | 0.734188366 |
| 1.75 | 18.736 | 103.744 | 0.161817161 | 0.896005527 |
| 2.00 | 8.277 | 112.021 | 0.071485944 | 0.967491471 |
| 2.25 | 2.596 | 114.617 | 0.022420866 | 0.989912338 |
| 2.50 | 0.681 | 115.298 | 0.005881591 | 0.995793928 |
| 2.75 | 0.196 | 115.494 | 0.001692793 | 0.997486721 |
| 3.00 | 0.091 | 115.585 | 0.000785939 | 0.998272661 |
| 3.25 | 0.058 | 115.643 | 0.000500928 | 0.998773589 |
| 3.50 | 0.045 | 115.688 | 0.000388651 | 0.999162240 |
| 3.75 | 0.037 | 115.725 | 0.000319558 | 0.999481798 |
| 4.00 | 0.029 | 115.754 | 0.000250464 | 0.999732262 |
| PAN | 0.031 | 115.785 | 0.000267738 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
115.785 grams
57.893 grams
1.16 phi

GRAIN SIZE DISTRIBUTION M-5 : 0.7-1.7 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 1.7-2.1 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.146 | 0.146 | 0.002233133 | 0.002233133 |
| -1.75 | 0.000 | 0.146 | 0.000000000 | 0.002233133 |
| -1.50 | 0.049 | 0.195 | 0.000749476 | 0.002982609 |
| -1.25 | 0.165 | 0.360 | 0.002523746 | 0.005506355 |
| -1.00 | 0.186 | 0.546 | 0.002844950 | 0.008351305 |
| -0.75 | 0.317 | 0.863 | 0.004848652 | 0.013199957 |
| -0.50 | 0.654 | 1.517 | 0.010003212 | 0.023203169 |
| -0.25 | 1.138 | 2.655 | 0.017406201 | 0.040609370 |
| 0.00 | 1.717 | 4.372 | 0.026262255 | 0.066871625 |
| 0.25 | 2.963 | 7.335 | 0.045320363 | 0.112191988 |
| 0.50 | 3.945 | 11.280 | 0.060340476 | 0.172532465 |
| 0.75 | 5.428 | 16.708 | 0.083023601 | 0.255556065 |
| 1.00 | 8.467 | 25.175 | 0.129506416 | 0.385062482 |
| 1.25 | 11.150 | 36.325 | 0.170544058 | 0.555606540 |
| 1.50 | 10.571 | 46.896 | 0.161688004 | 0.717294544 |
| 1.75 | 10.697 | 57.593 | 0.163615228 | 0.880909772 |
| 2.00 | 5.118 | 62.711 | 0.078282017 | 0.959191789 |
| 2.25 | 1.801 | 64.512 | 0.027547072 | 0.986738861 |
| 2.50 | 0.559 | 65.071 | 0.008550146 | 0.995289007 |
| 2.75 | 0.161 | 65.232 | 0.002462564 | 0.997751572 |
| 3.00 | 0.058 | 65.290 | 0.000887135 | 0.998638707 |
| 3.25 | 0.029 | 65.319 | 0.000443568 | 0.999082274 |
| 3.50 | 0.021 | 65.340 | 0.000321204 | 0.999403478 |
| 3.75 | 0.013 | 65.353 | 0.000198841 | 0.999602319 |
| 4.00 | 0.010 | 65.363 | 0.000152954 | 0.999755273 |
| PAN | 0.016 | 65.379 | 0.000244727 | 1.0 |
| TOTAL WT. |  | 65.379 | grams |  |
| MEDIAN WT. |  | 32.690 | grams |  |
| MEAN GRAIN SIZE |  | 1.17 | phi | 0.4444 mm |

GRAIN SIZE DISTRIBUTION M-5 : 1.7-2.1 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 2.1-2.6 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.032 | 0.032 | 0.000452527 | 0.000452527 |
| -1.00 | 0.240 | 0.272 | 0.003393953 | 0.003846480 |
| -0.75 | 0.598 | 0.870 | 0.008456600 | 0.012303080 |
| -0.50 | 1.178 | 2.048 | 0.016658653 | 0.028961733 |
| -0.25 | 3.204 | 5.252 | 0.045309274 | 0.074271007 |
| 0.00 | 5.820 | 11.072 | 0.082303363 | 0.156574370 |
| 0.25 | 12.151 | 23.223 | 0.171833018 | 0.328407388 |
| 0.50 | 14.389 | 37.612 | 0.203481630 | 0.531889018 |
| 0.75 | 13.144 | 50.756 | 0.185875498 | 0.717764516 |
| 1.00 | 9.254 | 60.010 | 0.130865175 | 0.848629691 |
| 1.25 | 5.020 | 65.030 | 0.070990186 | 0.919619877 |
| 1.50 | 2.316 | 67.346 | 0.032751647 | 0.952371525 |
| 1.75 | 1.520 | 68.866 | 0.021495036 | 0.973866561 |
| 2.00 | 0.742 | 69.608 | 0.010492972 | 0.984359533 |
| 2.25 | 0.415 | 70.023 | 0.005868711 | 0.990228243 |
| 2.50 | 0.319 | 70.342 | 0.004511129 | 0.994739373 |
| 2.75 | 0.114 | 70.456 | 0.001612128 | 0.996351500 |
| 3.00 | 0.076 | 70.532 | 0.001074752 | 0.997426252 |
| 3.25 | 0.058 | 70.590 | 0.000820205 | 0.998246458 |
| 3.50 | 0.042 | 70.632 | 0.000593942 | 0.998840399 |
| 3.75 | 0.034 | 70.666 | 0.000480810 | 0.999321209 |
| 4.00 | 0.021 | 70.687 | 0.000296971 | 0.999618180 |
| PAN | 0.027 | 70.714 | 0.000381820 | 1.0 |
| TOTAL WT. |  | 70.714 | grams |  |
| MEDIAN WT. |  | 35.357 | grams |  |
| MEAN GRAIN SIZE |  | 0.46 | phi | 0.7270 mm |

GRAIN SIZE DISTRIBUTION M-5 : 2.1-2.6 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 2.6-4.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.031 | 0.031 | 0.000397441 | 0.000397441 |
| -1.00 | 0.028 | 0.059 | 0.000358979 | 0.000756420 |
| -0.75 | 0.070 | 0.129 | 0.000897447 | 0.001653867 |
| -0.50 | 0.226 | 0.355 | 0.002897473 | 0.004551340 |
| -0.25 | 0.524 | 0.879 | 0.006718035 | 0.011269375 |
| 0.00 | 1.252 | 2.131 | 0.016051488 | 0.027320863 |
| 0.25 | 3.323 | 5.454 | 0.042603110 | 0.069923973 |
| 0.50 | 6.471 | 11.925 | 0.082962602 | 0.152886575 |
| 0.75 | 11.445 | 23.370 | 0.146732650 | 0.299619226 |
| 1.00 | 16.408 | 39.778 | 0.210361671 | 0.509980897 |
| 1.25 | 16.251 | 56.029 | 0.208348825 | 0.718329722 |
| 1.50 | 9.676 | 65.705 | 0.124052872 | 0.842382595 |
| 1.75 | 7.130 | 72.835 | 0.091411428 | 0.933794023 |
| 2.00 | 2.998 | 75.833 | 0.038436390 | 0.972230413 |
| 2.25 | 1.282 | 77.115 | 0.016436108 | 0.988666521 |
| 2.50 | 0.510 | 77.625 | 0.006538545 | 0.995205067 |
| 2.75 | 0.156 | 77.781 | 0.002000026 | 0.997205092 |
| 3.00 | 0.074 | 77.855 | 0.000948730 | 0.998153822 |
| 3.25 | 0.045 | 77.900 | 0.000576930 | 0.998730753 |
| 3.50 | 0.036 | 77.936 | 0.000461544 | 0.999192297 |
| 3.75 | 0.024 | 77.960 | 0.000307696 | 0.999499994 |
| 4.00 | 0.022 | 77.982 | 0.000282055 | 0.999782048 |
| PAN | 0.017 | 77.999 | 0.000217952 | 1.0 |
| TOTAL WT. |  | 77.999 | grams |  |
| MEDIAN WT. |  | 39.000 | grams |  |
| MEAN GRAIN SIZE |  | 0.99 | phi | 0.5035 mm |

GRAIN SIZE DISTRIBUTION M-5 : 2.6-4.0 ft


Phl Size

GRAIN SIZE DISTRIBUTION CHART
CORE M-5 : 4.0-5.1 ft
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.038 | 0.038 | 0.000441855 | 0.000441855 |
| :--- | ---: | ---: | ---: | ---: |
| -1.75 | 0.105 | 0.143 | 0.001220916 | 0.001662771 |
| -1.50 | 0.348 | 0.491 | 0.004046465 | 0.005709236 |
| -1.25 | 0.393 | 0.884 | 0.004569714 | 0.010278950 |
| -1.00 | 0.597 | 1.481 | 0.006941780 | 0.017220730 |
| -0.75 | 1.228 | 2.709 | 0.014278904 | 0.031499634 |
| -0.50 | 2.249 | 4.958 | 0.026150859 | 0.057650492 |
| -0.25 | 2.892 | 7.850 | 0.033627516 | 0.091278008 |
| 0.00 | 3.341 | 11.191 | 0.038848385 | 0.130126394 |
| 0.25 | 5.382 | 16.573 | 0.062580668 | 0.192707062 |
| 0.50 | 5.880 | 22.453 | 0.068371298 | 0.261078360 |
| 0.75 | 6.991 | 29.444 | 0.081289752 | 0.342368112 |
| 1.00 | 9.517 | 38.961 | 0.110661504 | 0.453029616 |
| 1.25 | 11.628 | 50.589 | 0.135207730 | 0.588237346 |
| 1.50 | 10.335 | 60.924 | 0.120173021 | 0.708410367 |
| 1.75 | 10.781 | 71.705 | 0.125359007 | 0.833769375 |
| 2.00 | 6.234 | 77.939 | 0.072487529 | 0.906256904 |
| 2.25 | 3.931 | 81.870 | 0.045708771 | 0.951965675 |
| 2.50 | 2.509 | 84.379 | 0.029174079 | 0.981139754 |
| 2.75 | 0.864 | 85.243 | 0.010046395 | 0.991186149 |
| 3.00 | 0.300 | 85.543 | 0.003488332 | 0.994674481 |
| 3.25 | 0.143 | 85.686 | 0.001662771 | 0.996337252 |
| 3.50 | 0.107 | 85.793 | 0.001244172 | 0.997581423 |
| 3.75 | 0.081 | 85.874 | 0.000941850 | 0.998523273 |
| 4.00 | 0.061 | 85.935 | 0.000709294 | 0.999232567 |
| PAN | 0.066 | 86.001 | 0.000767433 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
86.001
43.001
1.09
grams
grams
phi $\quad 0.4698 \mathrm{~mm}$

GRAIN SIZE DISTRIBUTION M-5 : 4.0-5.1 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 5.1-5.6 ft
PHI SIZE

| $<-2.00$ | 0.634 |
| :--- | :--- |
| -1.75 | 0.393 |
| -1.50 | 0.199 |
| -1.25 | 0.397 |
| -1.00 | 0.604 |
| -0.75 | 0.948 |
| -0.50 | 1.678 |
| -0.25 | 2.113 |
| 0.00 | 2.305 |
| 0.25 | 3.221 |
| 0.50 | 3.541 |
| 0.75 | 3.975 |
| 1.00 | 5.413 |
| 1.25 | 6.356 |
| 1.50 | 6.183 |
| 1.75 | 7.272 |
| 2.00 | 5.641 |
| 2.25 | 5.628 |
| 2.50 | 5.858 |
| 2.75 | 2.902 |
| 3.00 | 1.071 |
| 3.25 | 0.531 |
| 3.50 | 0.300 |
| 3.75 | 0.162 |
| 4.00 | 0.100 |
| PAN | 0.102 |

TOTAL WT.
MEDIAN WT. MEAN GRAIN SIZE

$$
\begin{array}{ll}
67.527 & \text { grams } \\
33.764 & \text { grams }
\end{array}
$$

$$
1.33 \quad \mathrm{phi} \quad 0.3978 \mathrm{~mm}
$$

GRAIN SIZE DISTRIBUTION M-5 : 5.1-5.6 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 5.6-6.3 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 1.194 | 1.194 | 0.011645826 | 0.011645826 |
| -1.75 | 0.226 | 1.420 | 0.002204319 | 0.013850145 |
| -1.50 | 0.187 | 1.607 | 0.001823928 | 0.015674073 |
| -1.25 | 0.459 | 2.066 | 0.004476913 | 0.020150986 |
| -1.00 | 0.432 | 2.498 | 0.004213565 | 0.024364551 |
| -0.75 | 0.647 | 3.145 | 0.006310594 | 0.030675146 |
| -0.50 | 0.808 | 3.953 | 0.007880928 | 0.038556074 |
| -0.25 | 1.092 | 5.045 | 0.010650957 | 0.049207030 |
| 0.00 | 1.122 | 6.167 | 0.010943566 | 0.060150596 |
| 0.25 | 1.688 | 7.855 | 0.016464116 | 0.076614712 |
| 0.50 | 1.816 | 9.671 | 0.017712580 | 0.094327293 |
| 0.75 | 2.426 | 12.097 | 0.023662291 | 0.117989583 |
| 1.00 | 3.657 | 15.754 | 0.035669001 | 0.153658584 |
| 1.25 | 4.863 | 20.617 | 0.047431871 | 0.201090455 |
| 1.50 | 5.688 | 26.305 | 0.055478610 | 0.256569065 |
| 1.75 | 9.307 | 35.612 | 0.090776974 | 0.347346039 |
| 2.00 | 10.098 | 45.710 | 0.098492090 | 0.445838129 |
| 2.25 | 11.639 | 57.349 | 0.113522424 | 0.559360552 |
| 2.50 | 11.300 | 68.649 | 0.110215945 | 0.669576498 |
| 2.75 | 8.144 | 76.793 | 0.079433510 | 0.749010007 |
| 3.00 | 8.286 | 85.079 | 0.080818524 | 0.829828531 |
| 3.25 | 9.707 | 94.786 | 0.094678423 | 0.924506954 |
| 3.50 | 5.825 | 100.611 | 0.056814857 | 0.981321811 |
| 3.75 | 1.559 | 102.170 | 0.015205899 | 0.996527710 |
| 4.00 | 0.220 | 102.390 | 0.002145797 | 0.998673507 |
| PAN | 0.136 | 102.526 | 0.001326493 | 1.0 |
| TOTAL WT. |  | 102.526 | grams |  |
| MEDIAN WT. |  | 51.263 | grams |  |
| MEAN GRAIN SIZE |  | 2.12 | phi | 0.2300 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE M-5 : 6.3-7.1 ft

PHI SIZE
$<-2.00$
-1.75
-1.50
-1.25
-1.00
$-0.75$
-0.50
-0.25
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
3.00
3.25
3.50
3.75
4.00

PAN

SAMPLE WT. CUM. WT.
WT.\%

| 0.002466945 | 0.002466945 |
| :--- | ---: |
| 0.001178787 | 0.003645732 |
| 0.000170134 | 0.003815866 |
| 0.001130177 | 0.004946043 |
| 0.002041610 | 0.006987653 |
| 0.002223897 | 0.009211550 |
| 0.004010305 | 0.013221855 |
| 0.004204744 | 0.017426599 |
| 0.004800214 | 0.022226813 |
| 0.006124830 | 0.028351643 |
| 0.007619580 | 0.035971223 |
| 0.010280964 | 0.046252187 |
| 0.016442252 | 0.062694439 |
| 0.022226813 | 0.084921252 |
| 0.023028874 | 0.107950126 |
| 0.04684523 | 0.152634649 |
| 0.051477737 | 0.204112386 |
| 0.066972098 | 0.271084484 |
| 0.077082928 | 0.348167412 |
| 0.079890142 | 0.42805554 |
| 0.133385184 | 0.561442738 |
| 0.223240327 | 0.784683064 |
| 0.160655260 | 0.945338324 |
| 0.048463932 | 0.993802255 |
| 0.004751604 | 0.998553860 |
| 0.001446140 | 1.0 |

82.288
41.144
2.88
grams grams
phi
0.1358 mm

GRAIN SIZE DISTRIBUTION M-5 : 6.3-7.1 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

## CORE M-5 : 7.1-7.3 ft

PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 7.986 | 7.986 | 0.098916207 | 0.098916207 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.823 | 8.809 | 0.010193844 | 0.109110051 |
| -1.50 | 0.827 | 9.636 | 0.010243389 | 0.119353440 |
| -1.25 | 1.187 | 10.823 | 0.014702422 | 0.134055862 |
| -1.00 | 1.133 | 11.956 | 0.014033567 | 0.148089428 |
| -0.75 | 1.549 | 13.505 | 0.019186227 | 0.167275655 |
| -0.50 | 1.550 | 15.055 | 0.019198613 | 0.186474268 |
| -0.25 | 1.851 | 16.906 | 0.022926859 | 0.209401127 |
| 0.00 | 1.966 | 18.872 | 0.024351273 | 0.233752400 |
| 0.25 | 2.485 | 21.357 | 0.030779711 | 0.264532111 |
| 0.50 | 2.550 | 23.907 | 0.031584815 | 0.296116926 |
| 0.75 | 3.022 | 26.929 | 0.037431102 | 0.333548027 |
| 1.00 | 4.196 | 31.125 | 0.051972503 | 0.385520530 |
| 1.25 | 4.830 | 35.955 | 0.059825355 | 0.445345885 |
| 1.50 | 4.558 | 40.513 | 0.056456308 | 0.501802192 |
| 1.75 | 6.257 | 46.770 | 0.077500464 | 0.579302657 |
| 2.00 | 6.105 | 52.875 | 0.075617762 | 0.654920419 |
| 2.25 | 6.268 | 59.143 | 0.077636713 | 0.732557131 |
| 2.50 | 5.690 | 64.833 | 0.070477488 | 0.803034619 |
| 2.75 | 3.970 | 68.803 | 0.049173221 | 0.852207840 |
| 3.00 | 3.689 | 72.492 | 0.045692698 | 0.897900539 |
| 3.25 | 4.485 | 76.977 | 0.055552115 | 0.953452654 |
| 3.50 | 2.767 | 79.744 | 0.034272620 | 0.987725274 |
| 3.75 | 0.788 | 80.532 | 0.009760327 | 0.997485601 |
| 4.00 | 0.126 | 80.658 | 0.001560661 | 0.999046262 |
| PAN | 0.077 | 80.735 | 0.000953738 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 80.735 |  | grams |
| MEDIAN WT. |  | 40.368 | grams |  |
| MEAN GRAIN SIZE |  |  |  | 0.3560 mm |
|  |  |  |  |  |

GRAIN SIZE DISTRIBUTION M-5 : 7.1-7.3 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

CORE M-5 : 7.3-7.4 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.203 | 0.203 | 0.002598766 | 0.002598766 |
| -1.75 | 0.000 | 0.203 | 0.000000000 | 0.002598766 |
| -1.50 | 0.031 | 0.234 | 0.000396856 | 0.002995622 |
| -1.25 | 0.023 | 0.257 | 0.000294441 | 0.003290063 |
| -1.00 | 0.155 | 0.412 | 0.001984279 | 0.005274343 |
| -0.75 | 0.048 | 0.460 | 0.000614487 | 0.005888829 |
| -0.50 | 0.244 | 0.704 | 0.003123640 | 0.009012469 |
| -0.25 | 0.208 | 0.912 | 0.002662775 | 0.011675244 |
| 0.00 | 0.320 | 1.232 | 0.004096577 | 0.015771821 |
| 0.25 | 0.484 | 1.716 | 0.006196072 | 0.021967893 |
| 0.50 | 0.685 | 2.401 | 0.008769235 | 0.030737128 |
| 0.75 | 0.892 | 3.293 | 0.011419208 | 0.042156336 |
| 1.00 | 1.469 | 4.762 | 0.018805848 | 0.060962183 |
| 1.25 | 2.139 | 6.901 | 0.027383056 | 0.088345239 |
| 1.50 | 2.640 | 9.541 | 0.033796759 | 0.122141998 |
| 1.75 | 5.690 | 15.231 | 0.072842256 | 0.194984254 |
| 2.00 | 7.246 | 22.477 | 0.092761861 | 0.287746115 |
| 2.25 | 9.012 | 31.489 | 0.115369844 | 0.403115959 |
| 2.50 | 9.863 | 41.352 | 0.126264178 | 0.529380137 |
| 2.75 | 8.443 | 49.795 | 0.108085618 | 0.637465755 |
| 3.00 | 9.421 | 59.216 | 0.120605781 | 0.758071536 |
| 3.25 | 10.633 | 69.849 | 0.136121566 | 0.894193102 |
| 3.50 | 6.237 | 76.086 | 0.079844842 | 0.974037945 |
| 3.75 | 1.740 | 77.826 | 0.022275136 | 0.996313081 |
| 4.00 | 0.185 | 78.011 | 0.002368333 | 0.998681414 |
| PAN | 0.103 | 78.114 | 0.001318586 | 1.0 |
| TOTAL WT. |  | 78.114 | grams |  |
| MEDIAN WT. |  | 39.057 | grams |  |
| MEAN GRAIN SIZE |  | 2.44 | phi | 0.1843 mm |

GRAIN SIZE DISTRIBUTION M-5 : 7.3-7.4 ft


Phi Size

GRAIN SIZE DISTRIBUTION CHART
CORE M-5 : 7.4-7.7 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 1.228 | 1.228 | 0.011059875 | 0.011059875 |
| -1.75 | 0.380 | 1.608 | 0.003422437 | 0.014482311 |
| -1.50 | 0.253 | 1.861 | 0.002278622 | 0.016760934 |
| -1.25 | 0.308 | 2.169 | 0.002773975 | 0.019534909 |
| -1.00 | 0.528 | 2.697 | 0.004755386 | 0.024290295 |
| -0.75 | 0.801 | 3.498 | 0.007214136 | 0.031504431 |
| -0.50 | 1.078 | 4.576 | 0.009708913 | 0.041213344 |
| -0.25 | 1.558 | 6.134 | 0.014031991 | 0.055245335 |
| 0.00 | 1.847 | 7.981 | 0.016634844 | 0.071880179 |
| 0.25 | 2.966 | 10.947 | 0.026713020 | 0.098593198 |
| 0.50 | 3.516 | 14.463 | 0.031666547 | 0.130259745 |
| 0.75 | 4.846 | 19.309 | 0.043645075 | 0.173904820 |
| 1.00 | 7.532 | 26.841 | 0.067836299 | 0.241741120 |
| 1.25 | 9.965 | 36.806 | 0.089748901 | 0.331490021 |
| 1.50 | 10.028 | 46.834 | 0.090316305 | 0.421806326 |
| 1.75 | 13.118 | 59.952 | 0.118146120 | 0.539952446 |
| 2.00 | 11.821 | 71.773 | 0.106464803 | 0.646417249 |
| 2.25 | 11.644 | 83.417 | 0.104870668 | 0.751287917 |
| 2.50 | 9.799 | 93.216 | 0.088253837 | 0.839541754 |
| 2.75 | 6.214 | 99.430 | 0.055965848 | 0.895507601 |
| 3.00 | 4.663 | 104.093 | 0.041996902 | 0.937504503 |
| 3.25 | 4.128 | 108.221 | 0.037178471 | 0.974682974 |
| 3.50 | 1.974 | 110.195 | 0.017778658 | 0.992461633 |
| 3.75 | 0.576 | 110.771 | 0.005187694 | 0.997649326 |
| 4.00 | 0.145 | 110.916 | 0.001305930 | 0.998955256 |
| PAN | 0.116 | 111.032 | 0.001044744 | 1.0 |
| TOTAL WT. |  | 111.032 | grams |  |
| MEDIAN WT. |  | 55.516 | grams |  |
| MEAN GRAIN SIZE |  | 1.67 | phi | 0.3143 mm |

GRAIN SIZE DISTRIBUTION M-5 : 7.4-7.7 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART <br> CORE M-6 : 0-0.5 ft

PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.541 | 0.541 | 0.006138868 | 0.006138868 |
| :--- | :---: | :---: | :---: | ---: |
| -1.75 | 0.000 | 0.541 | 0.000000000 | 0.006138868 |
| -1.50 | 0.000 | 0.541 | 0.000000000 | 0.006138868 |
| -1.25 | 0.019 | 0.560 | 0.000215598 | 0.006354466 |
| -1.00 | 0.015 | 0.575 | 0.000170209 | 0.006524675 |
| -0.75 | 0.061 | 0.636 | 0.000692183 | 0.007216857 |
| -0.50 | 0.027 | 0.663 | 0.000306376 | 0.007523234 |
| -0.25 | 0.080 | 0.743 | 0.000907781 | 0.008431014 |
| 0.00 | 0.191 | 0.934 | 0.002167327 | 0.010598341 |
| 0.25 | 0.618 | 1.552 | 0.007012607 | 0.017610948 |
| 0.50 | 1.368 | 2.920 | 0.015523052 | 0.033134000 |
| 0.75 | 2.614 | 5.534 | 0.029661738 | 0.062795738 |
| 1.00 | 5.822 | 11.356 | 0.066063749 | 0.128859487 |
| 1.25 | 8.918 | 20.274 | 0.101194866 | 0.230054353 |
| 1.50 | 8.994 | 29.268 | 0.102057258 | 0.332111612 |
| 1.75 | 15.093 | 44.361 | 0.171264198 | 0.503375810 |
| 2.00 | 15.459 | 59.820 | 0.175417295 | 0.678793105 |
| 2.25 | 13.411 | 73.231 | 0.152178107 | 0.830971212 |
| 2.50 | 8.432 | 81.663 | 0.095680098 | 0.926651310 |
| 2.75 | 3.533 | 85.196 | 0.040089870 | 0.966741180 |
| 3.00 | 1.734 | 86.930 | 0.019676149 | 0.986417330 |
| 3.25 | 0.857 | 87.787 | 0.009724602 | 0.996141932 |
| 3.50 | 0.239 | 88.026 | 0.002711995 | 0.998853927 |
| 3.75 | 0.050 | 88.076 | 0.000567363 | 0.999421290 |
| 4.00 | 0.022 | 88.098 | 0.000249640 | 0.999670929 |
| PAN | 0.029 | 88.127 | 0.000329071 | 1.0 |


| TOTAL WT. | 88.127 | grams |  |
| :--- | :---: | :---: | :--- |
| MEDIAN WT. | 44.064 | grams |  |
| MEAN GRAIN SIZE | 1.75 | phi | 0.2973 mm |

GRAIN SIZE DISTRIBUTION M-6 : 0-0.5 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

## CORE M-6 : 0.5-1.2 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 3.553 | 3.553 | 0.042149594 | 0.042149594 |
| -1.75 | 1.176 | 4.729 | 0.013951005 | 0.056100599 |
| -1.50 | 1.199 | 5.928 | 0.014223857 | 0.070324456 |
| -1.25 | 2.045 | 7.973 | 0.024260039 | 0.094584495 |
| -1.00 | 1.940 | 9.913 | 0.023014414 | 0.117598909 |
| -0.75 | 2.924 | 12.837 | 0.034687704 | 0.152286612 |
| -0.50 | 3.927 | 16.764 | 0.046586393 | 0.198873006 |
| -0.25 | 4.968 | 21.732 | 0.058935880 | 0.257808885 |
| 0.00 | 4.751 | 26.483 | 0.056361587 | 0.314170473 |
| 0.25 | 6.329 | 32.812 | 0.075081559 | 0.389252032 |
| 0.50 | 5.847 | 38.659 | 0.069363545 | 0.458615576 |
| 0.75 | 6.503 | 45.162 | 0.077145738 | 0.535761314 |
| 1.00 | 7.999 | 53.161 | 0.094892936 | 0.630654250 |
| 1.25 | 8.626 | 61.787 | 0.102331099 | 0.732985349 |
| 1.50 | 6.692 | 68.479 | 0.079387864 | 0.812373213 |
| 1.75 | 7.014 | 75.493 | 0.083207782 | 0.895580995 |
| 2.00 | 4.049 | 79.542 | 0.048033691 | 0.943614687 |
| 2.25 | 2.198 | 81.740 | 0.026075093 | 0.969689780 |
| 2.50 | 1.179 | 82.919 | 0.013986595 | 0.983676375 |
| 2.75 | 0.588 | 83.507 | 0.006975503 | 0.990651877 |
| 3.00 | 0.373 | 83.880 | 0.004424936 | 0.995076814 |
| 3.25 | 0.199 | 84.079 | 0.002360757 | 0.997437570 |
| 3.50 | 0.105 | 84.184 | 0.001245625 | 0.998683196 |
| 3.75 | 0.046 | 84.230 | 0.000545703 | 0.999228899 |
| 4.00 | 0.028 | 84.258 | 0.000332167 | 0.999561065 |
| PAN | 0.037 | 84.295 | 0.000438935 | 1.0 |
| TOTAL WT. |  | 84.295 | grams |  |
| MEDIAN WT. |  | 42.148 | grams |  |
| MEAN GRAIN SIZE |  | 0.63 | phi | 0.6462 mm |

GRAIN SIZE DISTRIBUTION M-6 : 0.5-1.2 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

## CORE M-6 : 1.2-2.6 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.669 | 0.669 | 0.007833357 | 0.007833357 |
| -1.75 | 0.412 | 1.081 | 0.004824130 | 0.012657487 |
| -1.50 | 0.334 | 1.415 | 0.003910824 | 0.016568311 |
| -1.25 | 0.689 | 2.104 | 0.008067538 | 0.024635848 |
| -1.00 | 0.749 | 2.853 | 0.008770081 | 0.033405929 |
| -0.75 | 1.984 | 4.837 | 0.023230762 | 0.056636691 |
| -0.50 | 3.738 | 8.575 | 0.043768442 | 0.100405133 |
| -0.25 | 6.034 | 14.609 | 0.070652428 | 0.171057562 |
| 0.00 | 8.540 | 23.149 | 0.099995316 | 0.271052878 |
| 0.25 | 13.583 | 36.732 | 0.159044073 | 0.430096951 |
| 0.50 | 13.028 | 49.760 | 0.152545548 | 0.582642499 |
| 0.75 | 11.149 | 60.909 | 0.130544237 | 0.713186736 |
| 1.00 | 8.576 | 69.485 | 0.100416842 | 0.813603578 |
| 1.25 | 5.208 | 74.693 | 0.060980750 | 0.874584329 |
| 1.50 | 2.632 | 77.325 | 0.030818229 | 0.905402557 |
| 1.75 | 2.466 | 79.791 | 0.028874526 | 0.934277083 |
| 2.00 | 1.776 | 81.567 | 0.020795279 | 0.955072362 |
| 2.25 | 1.397 | 82.964 | 0.016357548 | 0.971429910 |
| 2.50 | 0.910 | 83.874 | 0.010655239 | 0.982085148 |
| 2.75 | 0.450 | 84.324 | 0.005269074 | 0.987354222 |
| 3.00 | 0.337 | 84.661 | 0.003945951 | 0.991300173 |
| 3.25 | 0.306 | 84.967 | 0.003582970 | 0.994883144 |
| 3.50 | 0.228 | 85.195 | 0.002669664 | 0.997552808 |
| 3.75 | 0.103 | 85.298 | 0.001206033 | 0.998758840 |
| 4.00 | 0.056 | 85.354 | 0.000655707 | 0.999414547 |
| PAN | 0.050 | 85.404 | 0.000585453 | 1.0 |
| TOTAL WT. |  | 85.404 | grams |  |
| MEDIAN WT. |  | 42.702 | grams |  |
| MEAN GRAIN SIZE |  | 0.36 | phi | 0.7792 mm |

GRAIN SIZE DISTRIBUTION M-6 : 1.2-2.6 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-6 : 2.6-3.6 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.277 | 0.277 | 0.004063073 | 0.004063073 |
| -1.75 | 0.812 | 1.089 | 0.011910524 | 0.015973597 |
| -1.50 | 0.755 | 1.844 | 0.011074441 | 0.027048038 |
| -1.25 | 0.763 | 2.607 | 0.011191786 | 0.038239824 |
| -1.00 | 1.491 | 4.098 | 0.021870187 | 0.060110011 |
| -0.75 | 2.351 | 6.449 | 0.034484782 | 0.094594793 |
| -0.50 | 4.650 | 11.099 | 0.068206821 | 0.162801613 |
| -0.25 | 6.886 | 17.985 | 0.101004767 | 0.263806381 |
| 0.00 | 8.377 | 26.362 | 0.122874954 | 0.386681335 |
| 0.25 | 10.046 | 36.408 | 0.147356069 | 0.534037404 |
| 0.50 | 7.537 | 43.945 | 0.110553722 | 0.644591126 |
| 0.75 | 5.859 | 49.804 | 0.085940594 | 0.730531720 |
| 1.00 | 4.753 | 54.557 | 0.069717638 | 0.800249358 |
| 1.25 | 3.222 | 57.779 | 0.047260726 | 0.847510084 |
| 1.50 | 1.958 | 59.737 | 0.028720205 | 0.876230290 |
| 1.75 | 2.336 | 62.073 | 0.034264760 | 0.910495050 |
| 2.00 | 1.871 | 63.944 | 0.027444078 | 0.937939127 |
| 2.25 | 1.641 | 65.585 | 0.024070407 | 0.962009534 |
| 2.50 | 1.145 | 66.730 | 0.016795013 | 0.978804547 |
| 2.75 | 0.538 | 67.268 | 0.007891456 | 0.986696003 |
| 3.00 | 0.317 | 67.585 | 0.004649798 | 0.991345801 |
| 3.25 | 0.190 | 67.775 | 0.002786945 | 0.994132747 |
| 3.50 | 0.138 | 67.913 | 0.002024202 | 0.996156949 |
| 3.75 | 0.094 | 68.007 | 0.001378805 | 0.997535754 |
| 4.00 | 0.084 | 68.091 | 0.001232123 | 0.998767877 |
| PAN | 0.084 | 68.175 | 0.001232123 | 1.0 |
| TOTAL WT. |  | 68.175 | grams |  |
| MEDIAN WT. |  | 34.088 | grams |  |
| MEAN GRAIN SIZE |  | 0.19 | phi | 0.8766 mm |

GRAIN SIZE DISTRIBUTION M-6 : 2.6-3.6 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE M-6 : 3.6-3.9 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 2.867 | 2.867 | 0.038993540 | 0.038993540 |
| -1.75 | 1.093 | 3.960 | 0.014865692 | 0.053859232 |
| -1.50 | 0.694 | 4.654 | 0.009438966 | 0.063298198 |
| -1.25 | 0.970 | 5.624 | 0.013192792 | 0.076490989 |
| -1.00 | 1.208 | 6.832 | 0.016429786 | 0.092920775 |
| -0.75 | 1.812 | 8.644 | 0.024644679 | 0.117565454 |
| -0.50 | 2.801 | 11.445 | 0.038095886 | 0.155661340 |
| -0.25 | 4.086 | 15.531 | 0.055572934 | 0.211234274 |
| 0.00 | 5.223 | 20.754 | 0.071037062 | 0.282271336 |
| 0.25 | 8.671 | 29.425 | 0.117932676 | 0.400204012 |
| 0.50 | 8.793 | 38.218 | 0.119591976 | 0.519795988 |
| 0.75 | 9.248 | 47.466 | 0.125780347 | 0.645576335 |
| 1.00 | 9.122 | 56.588 | 0.124066644 | 0.769642979 |
| 1.25 | 7.123 | 63.711 | 0.096878613 | 0.866521591 |
| 1.50 | 4.013 | 67.724 | 0.054580075 | 0.921101666 |
| 1.75 | 2.890 | 70.614 | 0.039306358 | 0.960408024 |
| 2.00 | 1.308 | 71.922 | 0.017789867 | 0.978197892 |
| 2.25 | 0.684 | 72.606 | 0.009302958 | 0.987500850 |
| 2.50 | 0.330 | 72.936 | 0.004488269 | 0.991989119 |
| 2.75 | 0.155 | 73.091 | 0.002108126 | 0.994097246 |
| 3.00 | 0.115 | 73.206 | 0.001564094 | 0.995661340 |
| 3.25 | 0.082 | 73.288 | 0.001115267 | 0.996776607 |
| 3.50 | 0.077 | 73.365 | 0.001047263 | 0.997823869 |
| 3.75 | 0.065 | 73.430 | 0.000884053 | 0.998707922 |
| 4.00 | 0.042 | 73.472 | 0.000571234 | 0.999279157 |
| PAN | 0.053 | 73.525 | 0.000720843 | 1.0 |
| TOTAL WT. |  | 73.525 | grams |  |
| MEDIAN WT. |  | 36.763 | grams |  |
| MEAN GRAIN SIZE |  | 0.46 | phi | 0.7270 mm |

GRAIN SIZE DISTRIBUTION M-6 : 3.6-3.9 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE M-6 : 3.9-4.6 ft
PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 2.989 | 2.989 | 0.038180030 | 0.038180030 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 2.239 | 5.228 | 0.028599895 | 0.066779925 |
| -1.50 | 1.140 | 6.368 | 0.014561805 | 0.081341730 |
| -1.25 | 1.928 | 8.296 | 0.024627333 | 0.105969063 |
| -1.00 | 2.178 | 10.474 | 0.027820711 | 0.133789774 |
| -0.75 | 3.194 | 13.668 | 0.040798600 | 0.174588374 |
| -0.50 | 4.637 | 18.305 | 0.059230779 | 0.233819153 |
| -0.25 | 5.551 | 23.856 | 0.070905770 | 0.304724922 |
| 0.00 | 6.171 | 30.027 | 0.078825348 | 0.383550270 |
| 0.25 | 7.726 | 37.753 | 0.098688160 | 0.482238430 |
| 0.50 | 6.542 | 44.295 | 0.083564321 | 0.565802751 |
| 0.75 | 6.099 | 50.394 | 0.077905655 | 0.643708406 |
| 1.00 | 6.064 | 56.458 | 0.077458582 | 0.721166988 |
| 1.25 | 5.088 | 61.546 | 0.064991633 | 0.786158621 |
| 1.50 | 3.717 | 65.263 | 0.047479147 | 0.833637769 |
| 1.75 | 4.182 | 69.445 | 0.053418831 | 0.887056599 |
| 2.00 | 3.053 | 72.498 | 0.038997535 | 0.926054134 |
| 2.25 | 2.320 | 74.818 | 0.029634550 | 0.955688684 |
| 2.50 | 1.564 | 76.382 | 0.019977774 | 0.975666458 |
| 2.75 | 0.707 | 77.089 | 0.009030874 | 0.984697332 |
| 3.00 | 0.419 | 77.508 | 0.005352102 | 0.990049433 |
| 3.25 | 0.244 | 77.752 | 0.003116737 | 0.993166171 |
| 3.50 | 0.185 | 77.937 | 0.002363100 | 0.995529271 |
| 3.75 | 0.133 | 78.070 | 0.001698877 | 0.997228148 |
| 4.00 | 0.102 | 78.172 | 0.001302898 | 0.998531046 |
| PAN | 0.115 | 78.287 | 0.001468954 | 1.0 |


| TOTAL WT. | 78.287 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 39.144 | grams |  |
| MEAN GRAIN SIZE | 0.3 | phi | 0.8123 mm |

GRAIN SIZE DISTRIBUTION M-6 : 3.9-4.6 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

## CORE M-6 : 4.6-5.5 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.804 | 2.804 | 0.033309179 | 0.033309179 |
| -1.75 | 0.670 | 3.474 | 0.007959041 | 0.041268220 |
| -1.50 | 0.675 | 4.149 | 0.008018436 | 0.049286656 |
| -1.25 | 1.142 | 5.291 | 0.013566007 | 0.062852663 |
| -1.00 | 1.641 | 6.932 | 0.019493710 | 0.082346373 |
| -0.75 | 1.999 | 8.931 | 0.023746451 | 0.106092824 |
| -0.50 | 3.434 | 12.365 | 0.040793053 | 0.146885877 |
| -0.25 | 5.001 | 17.366 | 0.059407705 | 0.206293582 |
| 0.00 | 5.591 | 22.957 | 0.066416412 | 0.272709994 |
| 0.25 | 7.532 | 30.489 | 0.089473872 | 0.362183866 |
| 0.50 | 7.259 | 37.748 | 0.086230860 | 0.448414725 |
| 0.75 | 7.348 | 45.096 | 0.087288105 | 0.535702831 |
| 1.00 | 7.795 | 52.891 | 0.092598092 | 0.628300923 |
| 1.25 | 7.310 | 60.201 | 0.086836697 | 0.715137620 |
| 1.50 | 6.128 | 66.329 | 0.072795524 | 0.787933144 |
| 1.75 | 6.304 | 72.633 | 0.074886257 | 0.862819401 |
| 2.00 | 4.573 | 77.206 | 0.054323422 | 0.917142823 |
| 2.25 | 3.261 | 80.467 | 0.038737957 | 0.955880781 |
| 2.50 | 1.905 | 82.372 | 0.022629810 | 0.978510590 |
| 2.75 | 0.724 | 83.096 | 0.008600516 | 0.987111106 |
| 3.00 | 0.373 | 83.469 | 0.004430929 | 0.991542034 |
| 3.25 | 0.238 | 83.707 | 0.002827241 | 0.994369276 |
| 3.50 | 0.154 | 83.861 | 0.001829391 | 0.996198667 |
| 3.75 | 0.123 | 83.984 | 0.001461137 | 0.997659804 |
| 4.00 | 0.094 | 84.078 | 0.001116642 | 0.998776446 |
| PAN | 0.103 | 84.181 | 0.001223554 | 1.0 |
| TOTAL WT. |  | 84.181 | grams |  |
| MEDIAN WT. |  | 42.091 | grams |  |
| MEAN GRAIN SIZE |  | 0.65 | phi | 0.6373 mm |

## GRAIN SIZE DISTRIBUTION M-6 : 4.6-5.5 ft



Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 0-0.3 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT. | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. $\%$ |
|  |  |  |  |  | 0 | 0 |
| -2.0 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0.042 | 0 | 0.04200 | 0.042 | 0.006043165 | 0.006043165 |
| -1.00 | 0.026 | 0 | 0.02600 | 0.068 | 0.003741007 | 0.009784173 |
| -0.75 | 0.061 | 0 | 0.06100 | 0.129 | 0.008776978 | 0.018561151 |
| -0.50 | 0.095 | 0 | 0.09500 | 0.224 | 0.013669065 | 0.032230216 |
| -0.25 | 0.171 | 0.004 | 0.16700 | 0.391 | 0.024028777 | 0.056258993 |
| 0.00 | 0.252 | 0.036 | 0.21600 | 0.607 | 0.031079137 | 0.087338129 |
| 0.25 | 0.442 | 0.113 | 0.32900 | 0.936 | 0.047338129 | 0.134676259 |
| 0.50 | 0.832 | 0.372 | 0.46000 | 1.396 | 0.066187050 | 0.200863309 |
| 0.75 | 1.492 | 0.908 | 0.58400 | 1.980 | 0.084028777 | 0.284892086 |
| 1.00 | 3.422 | 2.597 | 0.82500 | 2.805 | 0.118705036 | 0.403597122 |
| 1.25 | 6.292 | 5.435 | 0.85700 | 3.662 | 0.123309353 | 0.526906475 |
| 1.50 | 7.430 | 6.743 | 0.68700 | 4.349 | 0.098848921 | 0.625755396 |
| 1.75 | 13.741 | 12.988 | 0.75300 | 5.102 | 0.108345324 | 0.734100719 |
| 2.00 | 10.785 | 10.001 | 0.78400 | 5.886 | 0.112805755 | 0.846906475 |
| 2.25 | 5.428 | 4.805 | 0.62300 | 6.509 | 0.089640288 | 0.936546763 |
| 2.50 | 1.326 | 0.905 | 0.42100 | 6.930 | 0.060575540 | 0.997122302 |
| 2.75 | 0.171 | 0.125 | 0.04600 | 6.976 | 0.006618705 | 1.0 |
| 3.00 | 0.044 | 0.048 | 0 | 6.972 | 0 | 1.0 |
| 3.25 | 0.015 | 0.023 | 0 | 6.964 | 0 | 1.0 |
| 3.50 | 0.006 | 0.011 | 0 | 6.959 | 0 | 1.0 |
| 3.75 | 0.003 | 0.008 | 0 | 6.954 | 0 | 1.0 |
| 4.00 | 0.003 | 0.007 | 0 | 6.950 | 0 | 1.0 |
| PAN | 0 | 0.000 | 0 | 0.000 | 0 | 1.0 |
|  |  |  | 52.079 |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT. |  |  |  |  |  |  |
| CARBONATE |  | 13.945 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 0-0.3 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 0.3-0.9 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 0.3-0.9 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 0.9-2.0 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 0.9 - 2.0 ft .


CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 2.0-2.6 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT. | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.325 | 0 | 0.325 | 0.325 | 0.014310246 | 0.014310246 |
| -1.75 | 0.035 | 0 | 0.035 | 0.360 | 0.001541103 | 0.015851350 |
| -1.50 | 0 | 0 | 0 | 0.360 | 0 | 0.015851350 |
| -1.25 | 0.208 | 0 | 0.208 | 0.568 | 0.009158558 | 0.02500997 |
| -1.00 | 0.280 | 0 | 0.280 | 0.848 | 0.012328827 | 0.037338735 |
| -0.75 | 0.406 | 0 | 0.406 | 1.254 | 0.017876800 | 0.055215534 |
| -0.50 | 0.733 | 0.042 | 0.691 | 1.945 | 0.030425785 | 0.085641319 |
| -0.25 | 1.077 | 0.082 | 0.995 | 2.940 | 0.043811369 | 0.129452688 |
| 0.00 | 1.600 | 0.149 | 1.451 | 4.391 | 0.063889745 | 0.193342433 |
| 0.25 | 2.783 | 0.544 | 2.239 | 6.630 | 0.098586588 | 0.291929021 |
| 0.50 | 3.532 | 1.351 | 2.181 | 8.811 | 0.096032759 | 0.387961781 |
| 0.75 | 4.831 | 2.569 | 2.262 | 11.073 | 0.099599313 | 0.487561094 |
| 1.00 | 6.998 | 4.570 | 2.428 | 13.501 | 0.106908547 | 0.594469640 |
| 1.25 | 8.355 | 5.863 | 2.492 | 15.993 | 0.109726564 | 0.704196204 |
| 1.50 | 7.305 | 5.607 | 1.698 | 17.691 | 0.074765532 | 0.778961737 |
| 1.75 | 9.552 | 7.770 | 1.782 | 19.473 | 0.078464180 | 0.857425917 |
| 2.00 | 7.389 | 6.072 | 1.317 | 20.790 | 0.057989520 | 0.915415437 |
| 2.25 | 5.764 | 4.774 | 0.990 | 21.780 | 0.043591211 | 0.959006649 |
| 2.50 | 3.322 | 2.636 | 0.686 | 22.466 | 0.030205627 | 0.989212276 |
| 2.75 | 1.116 | 0.876 | 0.240 | 22.706 | 0.010567566 | 0.999779842 |
| 3.00 | 0.302 | 0.266 | 0.036 | 22.742 | 0.001585135 | 1.0 |
| 3.25 | 0.061 | 0.069 | 0 | 22.734 | 0 | 1.0 |
| 3.50 | 0.017 | 0.022 | 0 | 22.729 | 0 | 1.0 |
| 3.75 | 0.012 | 0.021 | 0 | 22.720 | 0 | 1.0 |
| 4.00 | 0.006 | 0.015 | 0 | 22.711 | 0 | 0 |
| PAN | 0 | 0.000 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  | 1.0 |
| TOTAL WT. |  | 66.009 |  |  |  |  |
| CO3 WT. |  | 22.711 |  |  |  |  |
|  |  | 34.406 |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 2.0-2.6 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 2.6-3.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3WT. | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.069 | 0 | 0.069 | 0.069 | 0.002734189 | 0.002734189 |
| -1.75 | 0 | 0 | 0 | 0.069 | 0 | 0.002734189 |
| -1.50 | 0.346 | 0 | 0.346 | 0.415 | 0.013710572 | 0.016444761 |
| -1.25 | 0.296 | 0 | 0.296 | 0.711 | 0.011729276 | 0.028174037 |
| -1.00 | 0.846 | 0 | 0.846 | 1.557 | 0.033523538 | 0.061697575 |
| -0.75 | 1.149 | 0 | 1.149 | 2.706 | 0.045530195 | 0.10722777 |
| -0.50 | 2.103 | 0.047 | 2.056 | 4.762 | 0.081470915 | 0.188698684 |
| -0.25 | 3.1 | 0.241 | 2.859 | 7.621 | 0.113290537 | 0.301989222 |
| 0.00 | 3.862 | 0.579 | 3.283 | 10.904 | 0.130091932 | 0.432081154 |
| 0.25 | 4.913 | 1.43 | 3.483 | 14.387 | 0.138017118 | 0.570098272 |
| 0.50 | 4.961 | 2.315 | 2.646 | 17.033 | 0.104850214 | 0.674948486 |
| 0.75 | 5.372 | 3.098 | 2.274 | 19.307 | 0.090109368 | 0.765057854 |
| 1.00 | 6.11 | 4.166 | 1.944 | 21.251 | 0.07703281 | 0.842090664 |
| 1.25 | 5.862 | 4.417 | 1.445 | 22.696 | 0.057259471 | 0.899350135 |
| 1.50 | 4.277 | 3.618 | 0.659 | 23.355 | 0.026113489 | 0.925463623 |
| 1.75 | 5.116 | 4.192 | 0.924 | 24.279 | 0.03661436 | 0.962077984 |
| 2.00 | 3.169 | 2.586 | 0.583 | 24.862 | 0.023101918 | 0.985179902 |
| 2.25 | 1.748 | 1.447 | 0.301 | 25.163 | 0.011927405 | 0.997107307 |
| 2.50 | 0.75 | 0.655 | 0.095 | 25.258 | 0 | 1.0 |
| 2.75 | 0.27 | 0.245 | 0.025 | 25.283 | 0 | 1.0 |
| 3.00 | 0.117 | 0.123 | 0 | 25.277 | 0 | 1.0 |
| 3.25 | 0.051 | 0.057 | 0 | 25.271 | 0 | 1.0 |
| 3.50 | 0.019 | 0.027 | 0 | 25.263 | 0 | 1.0 |
| 3.75 | 0 | 0.018 | 0 | 25.245 | 0 | 1.0 |
| 4.00 | 0.013 | 0.022 | 0 | 25.236 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  | 54.519 |  |  |  |
| TOTAL WT. |  | 25.236 |  |  |  |  |
| CO3 WT. |  |  |  |  |  |  |
| CARBONATE |  | 46.288 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 2.6-3.0 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

## CORE IR-5: 3.0-3.3 ft.

| $\mathrm{PHI}$ SIZE | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT. } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0.208 | 0 | 0.208 | 0.208 | 0.008526687 | 0.008526687 |
| -1.25 | 0.319 | 0 | 0.319 | 0.527 | 0.013076986 | 0.021603673 |
| -1.00 | 0.426 | 0 | 0.426 | 0.953 | 0.017463311 | 0.039066984 |
| -0.75 | 0.854 | 0.011 | 0.843 | 1.796 | 0.034557678 | 0.073624662 |
| -0.50 | 1.420 | 0.041 | 1.379 | 3.175 | 0.056530294 | 0.130154956 |
| -0.25 | 2.188 | 0.142 | 2.046 | 5.221 | 0.083873084 | 0.214028040 |
| 0.00 | 2.601 | 0.382 | 2.219 | 7.440 | 0.090964991 | 0.304993031 |
| 0.25 | 3.697 | 0.894 | 2.803 | 10.243 | 0.114905305 | 0.419898336 |
| 0.50 | 3.907 | 1.715 | 2.192 | 12.435 | 0.089858162 | 0.509756497 |
| 0.75 | 4.560 | 2.597 | 1.963 | 14.398 | 0.080470608 | 0.590227105 |
| 1.00 | 6.036 | 4.075 | 1.961 | 16.359 | 0.080388620 | 0.670615725 |
| 1.25 | 7.103 | 5.119 | 1.984 | 18.343 | 0.081331475 | 0.751947200 |
| 1.50 | 6.279 | 4.817 | 1.462 | 19.805 | 0.059932770 | 0.811879970 |
| 1.75 | 8.934 | 7.339 | 1.595 | 21.400 | 0.065384931 | 0.877264901 |
| 2.00 | 7.367 | 6.193 | 1.174 | 22.574 | 0.048126589 | 0.925391490 |
| 2.25 | 5.707 | 4.822 | 0.885 | 23.459 | 0.036279413 | 0.961670903 |
| 2.50 | 2.915 | 2.271 | 0.644 | 24.103 | 0.026399934 | 0.988070837 |
| 2.75 | 1.033 | 0.760 | 0.273 | 24.376 | 0.011191277 | 0.999262114 |
| 3.00 | 0.325 | 0.284 | 0.041 | 24.417 | 0.001680741 | 1.0 |
| 3.25 | 0.081 | 0.083 | 0 | 24.415 | 0 | 1.0 |
| 3.50 | 0.022 | 0.026 | 0 | 24.411 | 0 | 1.0 |
| 3.75 | 0.016 | 0.022 | 0 | 24.405 | 0 | 1.0 |
| 4.00 | 0.009 | 0.020 | 0 | 24.394 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 66.007 |  |  |  |  |
| CO3 WT. |  | 24.394 |  |  |  |  |
| \% CARBONA |  | 36.957 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 3.0-3.3 ft.


CORE IR-5: 3.3-3.7 ft.

| PHI <br> SIZE | $\begin{gathered} \text { TOTAL } \\ W T . \end{gathered}$ | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } . \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0.038 | 0 | 0.038 | 0.038 | 0.002816901 | 0.002816901 |
| -1.50 | 0 | 0 | 0 | 0.038 | 0 | 0.002816901 |
| -1.25 | 0.019 | 0 | 0.019 | 0.057 | 0.001408451 | 0.004225352 |
| -1.00 | 0.033 | 0 | 0.033 | 0.090 | 0.002446256 | 0.006671609 |
| -0.75 | 0.120 | 0 | 0.120 | 0.210 | 0.008895478 | 0.015567087 |
| -0.50 | 0.208 | 0 | 0.208 | 0.418 | 0.015418829 | 0.030985915 |
| -0.25 | 0.268 | 0.005 | 0.263 | 0.681 | 0.019495923 | 0.050481838 |
| 0.00 | 0.358 | 0.017 | 0.341 | 1.022 | 0.025277984 | 0.075759822 |
| 0.25 | 0.624 | 0.121 | 0.503 | 1.525 | 0.037286879 | 0.113046701 |
| 0.50 | 0.861 | 0.281 | 0.580 | 2.105 | 0.042994811 | 0.156041512 |
| 0.75 | 1.261 | 0.625 | 0.636 | 2.741 | 0.047146034 | 0.203187546 |
| 1.00 | 2.347 | 1.497 | 0.850 | 3.591 | 0.063009637 | 0.266197183 |
| 1.25 | 3.756 | 2.811 | 0.945 | 4.536 | 0.070051890 | 0.336249073 |
| 1.50 | 4.744 | 3.633 | 1.111 | 5.647 | 0.082357302 | 0.418606375 |
| 1.75 | 9.475 | 7.923 | 1.552 | 7.199 | 0.115048184 | 0.533654559 |
| 2.00 | 11:700 | 9.808 | 1.892 | 9.091 | 0.140252039 | 0.673906597 |
| 2.25 | 13.152 | 11.187 | 1.965 | 11.056 | 0.145663454 | 0.819570052 |
| 2.50 | 9.241 | 7.724 | 1.517 | 12.573 | 0.112453669 | 0.932023721 |
| 2.75 | 3.945 | 3.252 | 0.693 | 13.266 | 0.051371386 | 0.983395107 |
| 3.00 | 1.306 | 1.100 | 0.206 | 13.472 | 0.015270571 | 0.998665678 |
| 3.25 | 0.295 | 0.263 | 0.032 | 13.504 | 0.002372128 | 1.001037806 |
| 3.50 | 0.047 | 0.051 | 0 | 13.500 | 0 | 1.0 |
| 3.75 | 0.021 | 0.028 | 0 | 13.493 | 0 | 1.0 |
| 4.00 | 0.014 | 0.017 | 0 | 13.490 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 63.833 |  |  |  |  |
| CO3 WT. |  | 13.490 |  |  |  |  |
| SAMPLE \% CA | BONATE | 21.133 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 3.3-3.7 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 3.7-4.0 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT. | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 29.466 | 0 | 29.466 | 29.466 | 0.728472892 | 0.728472892 |
| -1.75 | 0.776 | 0 | 0.776 | 30.242 | 0.019184652 | 0.747657544 |
| -1.50 | 0.452 | 0 | 0.452 | 30.694 | 0.011174566 | 0.758832110 |
| -1.25 | 0.667 | 0 | 0.667 | 31.361 | 0.016489901 | 0.775322010 |
| -1.00 | 0.515 | 0 | 0.515 | 31.876 | 0.012732082 | 0.788054093 |
| -0.75 | 0.583 | 0 | 0.583 | 32.459 | 0.014413212 | 0.802467305 |
| -0.50 | 0.547 | 0 | 0.547 | 33.006 | 0.013523202 | 0.815990507 |
| -0.25 | 0.647 | 0.003 | 0.644 | 33.650 | 0.015921284 | 0.831911790 |
| 0.00 | 0.560 | 0.049 | 0.511 | 34.161 | 0.012633192 | 0.844544983 |
| 0.25 | 0.622 | 0.120 | 0.502 | 34.663 | 0.012410690 | 0.856955673 |
| 0.50 | 0.820 | 0.236 | 0.584 | 35.247 | 0.014437934 | 0.871393607 |
| 0.75 | 0.859 | 0.475 | 0.384 | 35.631 | 0.009493436 | 0.880887043 |
| 1.00 | 1.196 | 1.025 | 0.171 | 35.802 | 0.004227546 | 0.885114589 |
| 1.25 | 1.805 | 1.584 | 0.221 | 36.023 | 0.005463670 | 0.890578259 |
| 1.50 | 2.273 | 1.547 | 0.726 | 36.749 | 0.017948528 | 0.908526787 |
| 1.75 | 3.993 | 3.154 | 0.839 | 37.588 | 0.020742169 | 0.929268956 |
| 2.00 | 4.459 | 3.985 | 0.474 | 38.062 | 0.011718460 | 0.940987416 |
| 2.25 | 5.317 | 4.484 | 0.833 | 38.895 | 0.020593834 | 0.961581250 |
| 2.50 | 4.292 | 3.564 | 0.728 | 39.623 | 0.017997973 | 0.979579223 |
| 2.75 | 2.321 | 1.927 | 0.394 | 40.017 | 0.009740661 | 0.989319884 |
| 3.00 | 1.207 | 1.021 | 0.186 | 40.203 | 0.004598383 | 0.993918267 |
| 3.25 | 0.657 | 0.543 | 0.114 | 40.317 | 0.002818364 | 0.996736631 |
| 3.50 | 0.249 | 0.235 | 0.014 | 40.331 | 0.000346115 | 0.997082746 |
| 3.75 | 0.237 | 0.173 | 0.064 | 40.395 | 0.001582239 | 0.998664986 |
| 4.00 | 0.118 | 0.064 | 0.054 | 40.449 | 0.001335014 | 1 |
| PAN | 0 | 0.000 | 0 | 0 |  | 1 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 64.638 |  |  |  |  |
| CO3 WT. |  | 40.449 |  |  |  |  |
| \% CARBONATE |  | 62.578 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 3.7-4.0 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 4.0-4.6 ft.

| PHI SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. } \end{gathered}$ | $\begin{gathered} \hline \text { CO3 WT. } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.099 | 0 | 0.099 | 0.099 | 0.007638300 | 0.007638300 |
| -1.75 | 0.056 | 0 | 0.056 | 0.155 | 0.004320654 | 0.011958954 |
| -1.50 | 0.124 | 0 | 0.124 | 0.279 | 0.009567163 | 0.021526117 |
| -1.25 | 0.165 | 0 | 0.165 | 0.444 | 0.012730499 | 0.034256616 |
| -1.00 | 0.225 | 0 | 0.225 | 0.669 | 0.017359772 | 0.051616388 |
| -0.75 | 0.315 | 0 | 0.315 | 0.984 | 0.024303680 | 0.075920068 |
| -0.50 | 0.460 | 0.021 | 0.439 | 1.423 | 0.033870843 | 0.109790911 |
| -0.25 | 0.714 | 0.032 | 0.682 | 2.105 | 0.052619397 | 0.162410308 |
| 0.00 | 0.749 | 0.094 | 0.655 | 2.760 | 0.050536224 | 0.212946532 |
| 0.25 | 1.367 | 0.334 | 1.033 | 3.793 | 0.079700640 | 0.292647172 |
| 0.50 | 1.877 | 0.868 | 1.009 | 4.802 | 0.077848931 | 0.370496104 |
| 0.75 | 3.094 | 1.925 | 1.169 | 5.971 | 0.090193658 | 0.460689762 |
| 1.00 | 5.269 | 3.911 | 1.358 | 7.329 | 0.104775866 | 0.565465628 |
| 1.25 | 7.136 | 5.477 | 1.659 | 8.988 | 0.127999383 | 0.693465010 |
| 1.50 | 6.084 | 5.306 | 0.778 | 9.766 | 0.060026233 | 0.753491243 |
| 1.75 | 8.155 | 7.233 | 0.922 | 10.688 | 0.071136486 | 0.824627729 |
| 2.00 | 6.423 | 5.813 | 0.610 | 11.298 | 0.047064270 | 0.871691999 |
| 2.25 | 5.462 | 4.815 | 0.647 | 11.945 | 0.049918988 | 0.921610987 |
| 2.50 | 3.306 | 2.823 | 0.483 | 12.428 | 0.037265643 | 0.958876630 |
| 2.75 | 1.464 | 1.146 | 0.318 | 12.746 | 0.024535144 | 0.983411774 |
| 3.00 | 0.728 | 0.626 | 0.102 | 12.848 | 0.007869763 | 0.991281537 |
| 3.25 | 0.487 | 0.417 | 0.070 | 12.918 | 0.005400818 | 0.996682355 |
| 3.50 | 0.220 | 0.225 | 0 | 12.913 | 0 | 0.996296582 |
| 3.75 | 0.205 | 0.172 | 0.033 | 12.946 | 0.002546100 | 0.998842682 |
| 4.00 | 0.076 | 0.061 | 0.015 | 12.961 | 0.001157318 | 1 |
| PAN | 0.000 | 0 | 0.000 | 0.000 | 0 | 1 |
| TOTAL WT. |  | 54.260 |  |  |  |  |
| CO3 WT. |  | 12.961 |  |  |  |  |
| \% CARBONA |  | 23.887 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 4.0-4.6 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-5: 4.6-5.6 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
| C-2.00 | 0.714 | 0 | 0.714 | 0.714 | 0.035233161 | 0.035233161 |
| -1.75 | 0.292 | 0 | 0.292 | 1.006 | 0.014409080 | 0.049642240 |
| -1.50 | 0.167 | 0 | 0.167 | 1.173 | 0.008240809 | 0.057883050 |
| -1.25 | 0.297 | 0 | 0.297 | 1.470 | 0.014655811 | 0.072538860 |
| -1.00 | 0.457 | 0 | 0.457 | 1.927 | 0.022551197 | 0.095090057 |
| -0.75 | 0.545 | 0.017 | 0.528 | 2.455 | 0.026054774 | 0.121144831 |
| -0.50 | 0.772 | 0.008 | 0.764 | 3.219 | 0.037700469 | 0.158845300 |
| -0.25 | 1.049 | 0.029 | 1.020 | 4.239 | 0.050333087 | 0.209178386 |
| 0.00 | 1.228 | 0.134 | 1.094 | 5.333 | 0.053984703 | 0.263163089 |
| 0.25 | 2.277 | 0.539 | 1.738 | 7.071 | 0.085763632 | 0.348926721 |
| 0.50 | 2.995 | 1.261 | 1.734 | 8.805 | 0.085566247 | 0.434492968 |
| 0.75 | 4.795 | 2.815 | 1.980 | 10.785 | 0.097705403 | 0.532198372 |
| 1.00 | 7.830 | 5.499 | 2.331 | 13.116 | 0.115025907 | 0.647224278 |
| 1.25 | 10.119 | 7.629 | 2.490 | 15.606 | 0.122871947 | 0.770096225 |
| 1.50 | 7.605 | 6.364 | 1.241 | 16.847 | 0.061238589 | 0.831334814 |
| 1.75 | 8.948 | 7.634 | 1.314 | 18.161 | 0.064840859 | 0.896175672 |
| 2.00 | 5.879 | 5.185 | 0.694 | 18.855 | 0.034246237 | 0.930421910 |
| 2.25 | 4.342 | 3.823 | 0.519 | 19.374 | 0.025610659 | 0.956032568 |
| 2.50 | 2.453 | 2.022 | 0.431 | 19.805 | 0.021268196 | 0.977300765 |
| 2.75 | 1.137 | 0.935 | 0.202 | 20.007 | 0.009967925 | 0.987268690 |
| 3.00 | 0.768 | 0.687 | 0.081 | 20.088 | 0.003997039 | 0.991265729 |
| 3.25 | 0.678 | 0.570 | 0.108 | 20.196 | 0.005329386 | 0.996595115 |
| 3.50 | 0.348 | 0.297 | 0.051 | 20.247 | 0.002516654 | 0.999111769 |
| 3.75 | 0.230 | 0.217 | 0.013 | 20.260 | 0.000641500 | 0.999753269 |
| 4.00 | 0.073 | 0.068 | 0.005 | 20.265 | 0.000246731 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 65.998 |  |  |  |  |
| CO3 WT. |  | 20.265 |  |  |  |  |
| CARBONATE |  |  | 30.705 |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 4.6-5.6 ft.


Phi Size


CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 5.6-6.0 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-5: 6.0-7.1 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-5: 6.0-7.1 ft.


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-6: 0-1.6 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  | 0 | 0 |
| $<-2.00$ | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0.011 | 0.011 | 0.000663370 |
| -1.00 | 0.011 | 0 | 0.021 | 0.032 | 0.001266433 | 0.000663370 |
| -0.75 | 0.021 | 0 | 0.068 | 0.100 | 0.004100832 | 0.006030636 |
| -0.50 | 0.068 | 0 | 0.130 | 0.230 | 0.007839826 | 0.013870462 |
| -0.25 | 0.141 | 0.011 | 0.025 | 0.255 | 0.485 | 0.015378121 |
| 0.00 | 0.280 | 0.0 .029248583 |  |  |  |  |
| 0.25 | 0.634 | 0.132 | 0.502 | 0.987 | 0.030273791 | 0.059522374 |
| 0.50 | 1.237 | 0.418 | 0.819 | 1.806 | 0.049390906 | 0.108913279 |
| 0.75 | 2.525 | 1.317 | 1.208 | 3.014 | 0.072850078 | 0.181763358 |
| 1.00 | 5.381 | 3.267 | 2.114 | 5.128 | 0.127487637 | 0.309250995 |
| 1.25 | 8.161 | 5.797 | 2.364 | 7.492 | 0.142564226 | 0.451815221 |
| 1.50 | 8.570 | 6.897 | 1.673 | 9.165 | 0.100892534 | 0.552707755 |
| 1.75 | 15.450 | 12.357 | 3.093 | 12.258 | 0.186527560 | 0.739235315 |
| 2.00 | 11.848 | 9.605 | 2.243 | 14.501 | 0.135267157 | 0.874502473 |
| 2.25 | 6.506 | 5.070 | 1.436 | 15.937 | 0.086599928 | 0.961102400 |
| 2.50 | 2.004 | 1.437 | 0.567 | 16.504 | 0.034193704 | 0.995296104 |
| 2.75 | 0.541 | 0.455 | 0.086 | 16.590 | 0.005186347 | 1.0 |
| 3.00 | 0.203 | 0.206 | -0.003 | 16.587 | 0 | 1.0 |
| 3.25 | 0.088 | 0.082 | 0.006 | 16.593 | 0.000361838 | 1.0 |
| 3.50 | 0.035 | 0.039 | -0.004 | 16.589 | 0 | 1.0 |
| 3.75 | 0.024 | 0.026 | -0.002 | 16.587 | 0 | 1.0 |
| 4.00 | 0.011 | 0.016 | -0.005 | 16.582 | 0 | 0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  | 1.0 |
| TOTAL WT. |  | 63.739 |  |  |  |  |
| CO3 WT. |  | 16.582 |  |  |  |  |
| CARBONATE |  | 26.015 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 0-1.6 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-6: 1.6-3.5 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 1.6-3.5 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-6: 3.5-3.9 ft.

| $\mathrm{PHI}$ SIZE | TOTAL WT. | DIGESTED <br> WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3WT } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.25 | 0.001 | 0 | 0.001 | 0.001 | 0.000109661 | 0.000109661 |
| 0.00 | 0.004 | 0 | 0.004 | 0.005 | 0.000438645 | 0.000548306 |
| 0.25 | 0.013 | 0.004 | 0.009 | 0.014 | 0.000986950 | 0.001535256 |
| 0.50 | 0.027 | 0.013 | 0.014 | 0.028 | 0.001535256 | 0.003070512 |
| 0.75 | 0.056 | 0.029 | 0.027 | 0.055 | 0.002960851 | 0.006031363 |
| 1.00 | 0.298 | 0.148 | 0.150 | 0.205 | 0.016449172 | 0.022480535 |
| 1.25 | 1.439 | 0.933 | 0.506 | 0.711 | 0.055488540 | 0.077969076 |
| 1.50 | 3.146 | 2.136 | 1.010 | 1.721 | 0.110757759 | 0.188726834 |
| 1.75 | 7.744 | 6.379 | 1.365 | 3.086 | 0.149687466 | 0.338414300 |
| 2.00 | 9.889 | 8.035 | 1.854 | 4.940 | 0.203311767 | 0.541726066 |
| 2.25 | 10.627 | 8.644 | 1.983 | 6.923 | 0.217458055 | 0.759184121 |
| 2.50 | 6.794 | 5.359 | 1.435 | 8.358 | 0.157363746 | 0.916547867 |
| 2.75 | 2.389 | 1.909 | 0.480 | 8.838 | 0 | 0.969185218 |
| 3.00 | 0.942 | 0.745 | 0.197 | 9.035 | 0 | 0.990788464 |
| 3.25 | 0.354 | 0.282 | 0.072 | 9.107 | 0 | 0.998684066 |
| 3.50 | 0.100 | 0.093 | 0.007 | 9.114 | 0 | 0.999451694 |
| 3.75 | 0.053 | 0.050 | 0.003 | 9.117 | 0 | 0.999780678 |
| 4.00 | 0.017 | 0.015 | 0.002 | 9.119 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 43.893 |  |  |  |  |
| CO3 WT. |  | 9.119 |  |  |  |  |
| \% CARBONA |  | 20.776 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 3.5-3.9 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-6: 3.9-4.3 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 5.280 | 0 | 5.28 | 5.28 | 0.175194107 | 0.175194107 |
| -1.75 | 0.341 | 0 | 0.341 | 5.621 | 0.011314619 | 0.186508727 |
| -1.50 | 0.495 | 0 | 0.495 | 6.116 | 0.016424448 | 0.202933174 |
| -1.25 | 0.460 | 0 | 0.46 | 6.576 | 0.015263123 | 0.218196297 |
| -1.00 | 0.648 | 0 | 0.648 | 7.224 | 0.021501095 | 0.239697392 |
| -0.75 | 0.937 | 0 | 0.937 | 8.161 | 0.031090318 | 0.270787710 |
| -0.50 | 1.492 | 0.019 | 1.473 | 9.634 | 0.048875174 | 0.319662884 |
| -0.25 | 1.741 | 0.021 | 1.720 | 11.354 | 0.057070808 | 0.376733692 |
| 0.00 | 1.487 | 0.068 | 1.419 | 12.773 | 0.047083416 | 0.423817108 |
| 0.25 | 1.651 | 0.156 | 1.495 | 14.268 | 0.049605150 | 0.473422258 |
| 0.50 | 1.657 | 0.253 | 1.404 | 15.672 | 0.046585706 | 0.520007963 |
| 0.75 | 1.935 | 0.481 | 1.454 | 17.126 | 0.048244741 | 0.568252704 |
| 1.00 | 3.169 | 1.295 | 1.874 | 19.000 | 0.062180636 | 0.630433340 |
| 1.25 | 5.551 | 3.254 | 2.297 | 21.297 | 0.076216073 | 0.706649413 |
| 1.50 | 5.898 | 4.290 | 1.608 | 22.905 | 0.053354569 | 0.760003982 |
| 1.75 | 8.961 | 6.853 | 2.108 | 25.013 | 0.069944920 | 0.829948902 |
| 2.00 | 7.733 | 6.187 | 1.546 | 26.559 | 0.051297365 | 0.881246267 |
| 2.25 | 6.728 | 5.525 | 1.203 | 27.762 | 0.039916385 | 0.921162652 |
| 2.50 | 4.949 | 3.325 | 1.624 | 29.386 | 0.053885460 | 0.975048112 |
| 2.75 | 1.921 | 1.495 | 0.426 | 29.812 | 0.014134979 | 0.989183091 |
| 3.00 | 1.004 | 0.826 | 0.178 | 29.990 | 0.005906165 | 0.995089256 |
| 3.25 | 0.496 | 0.391 | 0.105 | 30.095 | 0.003483974 | 0.998573230 |
| 3.50 | 0.164 | 0.134 | 0.030 | 30.125 | 0.000995421 | 0.999568651 |
| 3.75 | 0.102 | 0.092 | 0.010 | 30.135 | 0.000331807 | 0.999900458 |
| 4.00 | 0.040 | 0.037 | 0.003 | 30.138 | 0.000099542 | 1.0 |
| PAN | 0 | 0 | 0 | 0 |  | 0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 64.84 |  |  |  |  |
| CO3 WT. |  | 30.138 |  |  |  |  |
|  |  |  |  |  |  |  |
| \% CARBONATE |  | 46.481 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 3.9-4.3 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-6: 4.3-5.1 ft.

| PHI |  | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | - | WT. | WT. | WT. | WT. | \% | WT. \% |
| $<-2.00$ |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.75 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.50 |  | 0.008 | 0 | 0.008 | 0.008 | 0.000582030 | 0.000582030 |
| -0.25 |  | 0.011 | 0 | 0.011 | 0.019 | 0.000800291 | 0.001382321 |
| 0.00 |  | 0.044 | 0 | 0.044 | 0.063 | 0.003201164 | 0.004583485 |
| 0.25 |  | 0.098 | 0.011 | 0.087 | 0.150 | 0.006329574 | 0.010913059 |
| 0.50 |  | 0.183 | 0.035 | 0.148 | 0.298 | 0.010767552 | 0.021680611 |
| 0.75 |  | 0.391 | 0.127 | 0.264 | 0.562 | 0.019206984 | 0.040887595 |
| 1.00 |  | 1.252 | 0.651 | 0.601 | 1.163 | 0.043724991 | 0.084612586 |
| 1.25 |  | 3.759 | 2.356 | 1.403 | 2.566 | 0.102073481 | 0.186686068 |
| 1.50 |  | 5.796 | 4.389 | 1.407 | 3.973 | 0.102364496 | 0.289050564 |
| 1.75 |  | 13.484 | 10.895 | 2.589 | 6.562 | 0.188359403 | 0.477409967 |
| 2.00 |  | 14.433 | 11.682 | 2.751 | 9.313 | 0.200145507 | 0.677555475 |
| 2.25 |  | 12.816 | 10.521 | 2.295 | 11.608 | 0.166969807 | 0.844525282 |
| 2.50 |  | 6.753 | 5.341 | 1.412 | 13.020 | 0.102728265 | 0.947253547 |
| 2.75 |  | 2.061 | 1.615 | 0.446 | 13.466 | 0.032448163 | 0.979701710 |
| 3.00 |  | 1.014 | 0.849 | 0.165 | 13.631 | 0.012004365 | 0.991706075 |
| 3.25 |  | 0.670 | 0.609 | 0.061 | 13.692 | 0.004437977 | 0.996144052 |
| 3.50 |  | 0.291 | 0.258 | 0.033 | 13.725 | 0.002400873 | 0.998544925 |
| 3.75 |  | 0.150 | 0.133 | 0.017 | 13.742 | 0.001236813 | 0.999781739 |
| 4.00 |  | 0.035 | 0.032 | 0.003 | 13.745 | 0.000218261 | 1.0 |
| PAN |  | 0 | 0 | 0 | 0 | 0 | 1.0 |


| TOTAL WT. | 63.249 |
| :--- | ---: |
| CO3 WT. | 13.745 |
| \% CARBONATE | 21.732 |

CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 4.3-5.1 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-6: 5.1-5.9 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  | 0 | 0 |
| $<-2.00$ | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0.022 | 0.022 | 0.001712062 |
| -1.25 | 0.022 | 0 | 0.018 | 0.04 | 0.001400778 | 0.003112062 |
| -1.00 | 0.018 | 0 | 0.019 | 0.059 | 0.001478599 | 0.00459144 |
| -0.75 | 0.019 | 0 | 0.037 | 0.096 | 0.002879377 | 0.007470817 |
| -0.50 | 0.037 | 0 | 0.041 | 0.137 | 0.003190661 | 0.010661479 |
| -0.25 | 0.042 | 0.001 | 0.011 | 0.078 | 0.215 | 0.006070039 |
| 0.00 | 0.089 | 0.019 | 0.016731518 |  |  |  |
| 0.25 | 0.211 | 0.019 | 0.192 | 0.407 | 0.014941634 | 0.031673152 |
| 0.50 | 0.543 | 0.082 | 0.461 | 0.868 | 0.035875486 | 0.067548638 |
| 0.75 | 1.231 | 0.430 | 0.801 | 1.669 | 0.062334630 | 0.129883268 |
| 1.00 | 3.161 | 1.810 | 1.351 | 3.020 | 0.105136187 | 0.235019455 |
| 1.25 | 6.434 | 4.461 | 1.973 | 4.993 | 0.153540856 | 0.388560311 |
| 1.50 | 7.536 | 5.933 | 1.603 | 6.596 | 0.124747082 | 0.513307393 |
| 1.75 | 13.115 | 10.633 | 2.482 | 9.078 | 0.193151751 | 0.706459144 |
| 2.00 | 10.337 | 8.513 | 1.824 | 10.902 | 0.141945525 | 0.848404669 |
| 2.25 | 6.704 | 5.579 | 1.125 | 12.027 | 0.087548638 | 0.935953307 |
| 2.50 | 2.453 | 1.863 | 0.590 | 12.617 | 0.045914397 | 0.981867704 |
| 2.75 | 0.496 | 0.326 | 0.170 | 12.787 | 0.013229572 | 0.995097276 |
| 3.00 | 0.191 | 0.150 | 0.041 | 12.828 | 0.003190661 | 0.998287938 |
| 3.25 | 0.106 | 0.095 | 0.011 | 12.839 | 0.000856031 | 0.999143969 |
| 3.50 | 0.045 | 0.037 | 0.008 | 12.847 | 0.000622568 | 0.999766537 |
| 3.75 | 0.027 | 0.026 | 0.001 | 12.848 | 0.000077821 | 1.0 |
| 4.00 | 0.017 | 0.015 | 0.002 | 12.850 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 52.834 |  |  |  |  |
| CO3 WT. |  | 12.85 |  |  |  |  |
| \% CARBONATE |  | 24.321 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 5.1-5.9 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-6: 5.9-6.8 ft.

| $\mathrm{PHI}$ SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | $\begin{gathered} \text { CUM CO3 } \\ w T \end{gathered}$ | $\begin{gathered} \hline \text { CO3 WT } . \\ \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0.017 | 0 | 0.017 | 0.017 | 0.001189893 | 0.001189893 |
| -1.00 | 0.017 | 0 | 0.017 | 0.034 | 0.001189893 | 0.002379786 |
| -0.75 | 0.033 | 0 | 0.033 | 0.067 | 0.002309792 | 0.004689578 |
| -0.50 | 0.052 | 0 | 0.052 | 0.119 | 0.003639672 | 0.008329250 |
| -0.25 | 0.082 | 0 | 0.082 | 0.201 | 0.005739483 | 0.014068734 |
| 0.00 | 0.139 | 0.006 | 0.133 | 0.334 | 0.009309162 | 0.023377896 |
| 0.25 | 0.291 | 0.014 | 0.277 | 0.611 | 0.019388255 | 0.042766151 |
| 0.50 | 0.449 | 0.079 | 0.370 | 0.981 | 0.025897669 | 0.068663820 |
| 0.75 | 0.726 | 0.217 | 0.509 | 1.490 | 0.035626794 | 0.104290614 |
| 1.00 | 1.593 | 0.839 | 0.754 | 2.244 | 0.052775250 | 0.157065864 |
| 1.25 | 3.501 | 2.190 | 1.311 | 3.555 | 0.091761741 | 0.248827606 |
| 1.50 | 4.927 | 3.519 | 1.408 | 4.963 | 0.098551130 | 0.347378736 |
| 1.75 | 12.415 | 9.843 | 2.572 | 7.535 | 0.180023798 | 0.527402534 |
| 2.00 | 14.686 | 11.788 | 2.898 | 10.433 | 0.202841744 | 0.730244278 |
| 2.25 | 11.915 | 9.640 | 2.275 | 12.708 | 0.159235669 | 0.889479947 |
| 2.50 | 4.855 | 3.674 | 1.181 | 13.889 | 0.082662560 | 0.972142507 |
| 2.75 | 1.047 | 0.715 | 0.332 | 14.221 | 0.023237909 | 0.995380416 |
| 3.00 | 0.357 | 0.313 | 0.044 | 14.265 | 0.003079723 | 0.998460139 |
| 3.25 | 0.188 | 0.171 | 0.017 | 14.282 | 0.001189893 | 0.999650031 |
| 3.50 | 0.071 | 0.068 | 0.003 | 14.285 | 0.000209981 | 0.999860013 |
| 3.75 | 0.043 | 0.039 | 0.004 | 14.289 | 0.000279975 | 1.0 |
| 4.00 | 0.022 | 0.024 | -0.002 | 14.287 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 57.426 |  |  |  |  |
| CO3 WT. |  | 14.287 |  |  |  |  |
| \% CARBONATE |  | 24.879 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-6: 5.9-6.8 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 0-0.4 ft

| PHI SIZE | - | TOTAL wT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | $\begin{gathered} \hline \mathrm{CO3WT} \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 |  | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 |  | 0.048 | 0 | 0.048 | 0.048 | 0.00305227 | 0.00305227 |
| -1.50 |  | 0 | 0 | 0 | 0.048 | 0 | 0.00305227 |
| -1.25 |  | 0.084 | 0 | 0.084 | 0.132 | 0.005341473 | 0.008393743 |
| -1.00 |  | 0.098 | 0 | 0.098 | 0.23 | 0.006231718 | 0.014625461 |
| -0.75 |  | 0.238 | 0 | 0.238 | 0.468 | 0.015134173 | 0.029759634 |
| -0.50 |  | 0.472 | 0.008 | 0.464 | 0.932 | 0.029505278 | 0.059264912 |
| -0.25 |  | 0.566 | 0.015 | 0.551 | 1.483 | 0.035037517 | 0.094302429 |
| 0.00 |  | 0.830 | 0.085 | 0.745 | 2.228 | 0.047373776 | 0.141676205 |
| 0.25 |  | 1.364 | 0.276 | 1.088 | 3.316 | 0.069184790 | 0.210860995 |
| 0.50 |  | 1.973 | 0.603 | 1.370 | 4.686 | 0.087116877 | 0.297977871 |
| 0.75 |  | 2.937 | 1.456 | 1.481 | 6.167 | 0.094175251 | 0.392153122 |
| 1.00 |  | 5.511 | 3.459 | 2.052 | 8.219 | 0.130484548 | 0.522637670 |
| 1.25 |  | 7.955 | 5.750 | 2.205 | 10.424 | 0.140213659 | 0.662851329 |
| 1.50 |  | 7.447 | 5.870 | 1.577 | 12.001 | 0.100279791 | 0.763131120 |
| 1.75 |  | 9.375 | 7.522 | 1.853 | 13.854 | 0.117830345 | 0.880961465 |
| 2.00 |  | 5.330 | 4.206 | 1.124 | 14.978 | 0.071473992 | 0.952435457 |
| 2.25 |  | 2.282 | 1.723 | 0.559 | 15.537 | 0.035546229 | 0.987981686 |
| 2.50 |  | 0.609 | 0.403 | 0.206 | 15.743 | 0.013099326 | 1.0 |
| 2.75 |  | 0.122 | 0.097 | 0.025 | 15.768 | 0.001589724 | 1.0 |
| 3.00 |  | 0.045 | 0.055 | -0.010 | 15.758 | - | 1.0 |
| 3.25 |  | 0.020 | 0.033 | -0.013 | 15.745 | 0 | 1.0 |
| 3.50 |  | 0.014 | 0.019 | -0.005 | 15.740 | 0 | 1.0 |
| 3.75 |  | 0.010 | 0.016 | -0.006 | 15.734 | 0 | 1.0 |
| 4.00 |  | 0.005 | 0.013 | -0.008 | 15.726 | 0 | 1.0 |
| PAN |  | 0 | 0 | 0 | 0 | 0 | 1.0 |
| total wt |  |  | 47.335 |  |  |  |  |
| CO3 WT. |  |  | 15.726 |  |  |  |  |
| \% CARBONATE |  |  | 33.223 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 0-0.4 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 0.4-0.7ft

| $\mathrm{PHI}$ SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO} 3 \\ & \mathrm{WT} . \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.25 | 0.003 | 0 | 0.003 | 0.003 | 0.000230521 | 0.000230521 |
| 0.00 | 0.027 | 0.004 | 0.023 | 0.026 | 0.001767327 | 0.001997848 |
| 0.25 | 0.037 | 0.006 | 0.031 | 0.057 | 0.002382050 | 0.004379899 |
| 0.50 | 0.121 | 0.041 | 0.080 | 0.137 | 0.006147226 | 0.010527125 |
| 0.75 | 0.341 | 0.113 | 0.228 | 0.365 | 0.017519594 | 0.028046719 |
| 1.00 | 1.313 | 0.714 | 0.599 | 0.964 | 0.046027355 | 0.074074074 |
| 1.25 | 4.014 | 2.934 | 1.080 | 2.044 | 0.082987552 | 0.157061626 |
| 1.50 | 6.885 | 5.038 | 1.847 | 3.891 | 0.141924082 | 0.298985708 |
| 1.75 | 15.065 | 11.636 | 3.429 | 7.320 | 0.263485477 | 0.562471185 |
| 2.00 | 12.969 | 9.974 | 2.995 | 10.315 | 0.230136776 | 0.792607961 |
| 2.25 | 8.095 | 6.202 | 1.893 | 12.208 | 0.145458737 | 0.938066697 |
| 2.50 | 3.727 | 3.069 | 0.658 | 12.866 | 0.050560934 | 0.988627632 |
| 2.75 | 1.966 | 1.840 | 0.126 | 12.992 | 0.009681881 | 0.998309513 |
| 3.00 | 0.985 | 0.955 | 0.030 | 13.022 | 0.002305210 | 1.0 |
| 3.25 | 0.317 | 0.317 | 0 | 13.022 | 0 | 1.0 |
| 3.50 | 0.073 | 0.069 | 0.004 | 13.026 | 0.000307361 | 1.0 |
| 3.75 | 0.027 | 0.034 | -0.007 | 13.019 | 0 | 1.0 |
| 4.00 | 0.016 | 0.021 | -0.005 | 13.014 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 55.981 |  |  |  |  |
| CO3 WT. |  | 13.014 |  |  |  |  |
| \% CARBONA |  | 23.247 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 0.4-0.7 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 0.7-0.9 ft


CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 0.7-0.9 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 0.9-1.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.33 | 0 | 0.33 | 0.33 | 0.037904893 | 0.037904893 |
| -1.75 | 0 | 0 | 0 | 0.33 | 0 | 0.037904893 |
| -1.50 | 0 | 0 | 0 | 0.33 | 0 | 0.037904893 |
| -1.25 | 0 | 0 | 0 | 0.33 | 0 | 0.037904893 |
| -1.00 | 0.031 | 0 | 0.031 | 0.361 | 0.003560763 | 0.041465656 |
| -0.75 | 0.04 | 0 | 0.04 | 0.401 | 0.004594533 | 0.046060188 |
| -0.50 | 0.063 | 0 | 0.063 | 0.464 | 0.007236389 | 0.053296577 |
| -0.25 | 0.123 | 0.007 | 0.116 | 0.58 | 0.013324144 | 0.066620721 |
| 0.00 | 0.143 | -0.027 | 0.170 | 0.750 | 0.019526763 | 0.086147484 |
| 0.25 | 0.227 | 0.025 | 0.202 | 0.952 | 0.023202389 | 0.109349874 |
| 0.50 | 0.427 | 0.095 | 0.332 | 1.284 | 0.038134620 | 0.147484493 |
| 0.75 | 0.825 | 0.286 | 0.539 | 1.823 | 0.061911326 | 0.209395819 |
| 1.00 | 1.902 | 1.035 | 0.867 | 2.690 | 0.099586492 | 0.308982311 |
| 1.25 | 3.393 | 2.336 | 1.057 | 3.747 | 0.121410521 | 0.430392833 |
| 1.50 | 4.116 | 2.755 | 1.361 | 5.108 | 0.156328969 | 0.586721801 |
| 1.75 | 7.158 | 5.490 | 1.668 | 6.776 | 0.191592006 | 0.778313807 |
| 2.00 | 6.731 | 5.744 | 0.987 | 7.763 | 0.113370090 | 0.891683896 |
| 2.25 | 7.837 | 7.257 | 0.580 | 8.343 | 0.066620721 | 0.958304618 |
| 2.50 | 10.418 | 10.136 | 0.282 | 8.625 | 0.032391454 | 0.990696072 |
| 2.75 | 7.572 | 7.441 | 0.131 | 8.756 | 0.015047094 | 1.0 |
| 3.00 | 2.821 | 2.830 | -0.009 | 8.747 | 0 | 1.0 |
| 3.25 | 0.572 | 0.596 | -0.024 | 8.723 | 0 | 1.0 |
| 3.50 | 0.059 | 0.070 | -0.011 | 8.712 | 0 | 1.0 |
| 3.75 | 0.022 | 0.025 | -0.003 | 8.709 | 0 | 1.0 |
| 4.00 | 0.010 | 0.013 | -0.003 | 8.706 | 0 | 0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  | 1.0 |
| TOTAL WT. |  | 54.82 |  |  |  |  |
| CO3 WT. |  | 8.706 |  |  |  |  |
| \% CARBONATE |  | 15.881 |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR7: 1.1-1.5 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  | 0 | 0 |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 |  |
| -1.50 | 0.141 | 0 | 0.141 | 0.141 | 0.006717485 | 0.006717485 |
| -1.25 | 0.230 | 0 | 0.230 | 0.371 | 0.010957599 | 0.017675083 |
| -1.00 | 0.269 | 0 | 0.269 | 0.640 | 0.012815626 | 0.030490710 |
| -0.75 | 0.555 | 0 | 0.555 | 1.195 | 0.026441162 | 0.056931872 |
| -0.50 | 1.096 | 0.012 | 1.084 | 2.279 | 0.051643640 | 0.108575512 |
| -0.25 | 1.567 | 0.093 | 1.474 | 3.753 | 0.070223916 | 0.178799428 |
| 0.00 | 1.795 | 0.193 | 1.602 | 5.355 | 0.076322058 | 0.255121486 |
| 0.25 | 2.437 | 0.489 | 1.948 | 7.303 | 0.092806098 | 0.347927585 |
| 0.50 | 2.832 | 0.970 | 1.862 | 9.165 | 0.088708909 | 0.436636494 |
| 0.75 | 3.458 | 1.741 | 1.717 | 10.882 | 0.081800858 | 0.518437351 |
| 1.00 | 5.283 | 3.390 | 1.893 | 12.775 | 0.090185803 | 0.608623154 |
| 1.25 | 6.821 | 4.756 | 2.065 | 14.840 | 0.098380181 | 0.707003335 |
| 1.50 | 6.662 | 4.965 | 1.697 | 16.537 | 0.080848023 | 0.787851358 |
| 1.75 | 9.296 | 7.329 | 1.967 | 18.504 | 0.093711291 | 0.881562649 |
| 2.00 | 6.215 | 4.899 | 1.316 | 19.820 | 0.062696522 | 0.944259171 |
| 2.25 | 3.375 | 2.521 | 0.854 | 20.674 | 0.040686041 | 0.984945212 |
| 2.50 | 1.146 | 0.889 | 0.257 | 20.931 | 0.012243926 | 0.997189138 |
| 2.75 | 0.426 | 0.372 | 0.054 | 20.985 | 0.002572654 | 0.999761791 |
| 3.00 | 0.274 | 0.266 | 0.008 | 20.993 | 0.000381134 | 1.0 |
| 3.25 | 0.165 | 0.161 | 0.004 | 20.997 | 0.000190567 | 1.0 |
| 3.50 | 0.074 | 0.075 | -0.001 | 20.996 | 0 | 1.0 |
| 3.75 | 0.038 | 0.040 | -0.002 | 20.994 | 0 | 1.0 |
| 4.00 | 0.013 | 0.017 | -0.004 | 20.990 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 54.168 |  |  |  |  |
| CO3 WT. |  | 20.99 |  |  |  |  |
| CARBONATE |  | 38.750 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 1.1-1.5 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 1.5-2.2 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE - | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.75 | 0.026 | 0 | 0.026 | 0.026 | 0.001563816 | 0.001563816 |
| -0.50 | 0.100 | 0 | 0.100 | 0.126 | 0.006014676 | 0.007578492 |
| -0.25 | 0.286 | 0.011 | 0.275 | 0.401 | 0.016540358 | 0.024118850 |
| 0.00 | 0.548 | 0.044 | 0.504 | 0.905 | 0.030313966 | 0.054432816 |
| 0.25 | 1.287 | 0.192 | 1.095 | 2.000 | 0.065860700 | 0.120293516 |
| 0.50 | 2.107 | 0.646 | 1.461 | 3.461 | 0.087874414 | 0.208167930 |
| 0.75 | 3.536 | 1.682 | 1.854 | 5.315 | 0.111512089 | 0.319680019 |
| 1.00 | 6.082 | 3.917 | 2.165 | 7.480 | 0.130217731 | 0.449897751 |
| 1.25 | 8.582 | 5.975 | 2.607 | 10.087 | 0.156802598 | 0.606700349 |
| 1.50 | 8.079 | 5.957 | 2.122 | 12.209 | 0.127631421 | 0.734331770 |
| 1.75 | 10.060 | 7.899 | 2.161 | 14.370 | 0.129977144 | 0.864308914 |
| 2.00 | 6.097 | 4.867 | 1.230 | 15.600 | 0.073980512 | 0.938289426 |
| 2.25 | 3.122 | 2.416 | 0.706 | 16.306 | 0.042463611 | 0.980753037 |
| 2.50 | 1.115 | 0.865 | 0.250 | 16.556 | 0.015036690 | 0.995789727 |
| 2.75 | 0.413 | 0.362 | 0.051 | 16.607 | 0.003067485 | 0.998857212 |
| 3.00 | 0.262 | 0.245 | 0.017 | 16.624 | 0.001022495 | 0.999879706 |
| 3.25 | 0.166 | 0.153 | 0.013 | 16.637 | 0.000781908 | 1.0 |
| 3.50 | 0.073 | 0.076 | -0.003 | 16.634 | 0 | 1.0 |
| 3.75 | 0.042 | 0.045 | -0.003 | 16.631 | 0 | 1.0 |
| 4.00 | 0.013 | 0.018 | -0.005 | 16.626 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 51.996 |  |  |  |  |
| CO3 WT. |  | 16.626 |  |  |  |  |
| \% CARBONATE |  | 31.976 |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR7: 2.2 - 2.8 ft

| $\mathrm{PHI}$ SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO} 3 \\ & \mathrm{WT} . \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT. } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0.032 | 0 | 0 | 0 | 0 | 0 |
| -0.75 | 0.050 | 0 | 0.050 | 0.082 | 0.004362240 | 0.007154074 |
| -0.50 | 0.018 | 0 | 0.018 | 0.100 | 0.001570407 | 0.008724481 |
| -0.25 | 0.066 | 0.006 | 0.060 | 0.160 | 0.005234689 | 0.013959169 |
| 0.00 | 0.053 | 0 | 0.053 | 0.213 | 0.004623975 | 0.018583144 |
| 0.25 | 0.119 | 0.018 | 0.101 | 0.314 | 0.008811726 | 0.027394870 |
| 0.50 | 0.252 | 0.046 | 0.206 | 0.520 | 0.017972431 | 0.045367301 |
| 0.75 | 0.615 | 0.212 | 0.403 | 0.923 | 0.035159658 | 0.080526959 |
| 1.00 | 1.665 | 0.776 | 0.889 | 1.812 | 0.077560635 | 0.158087594 |
| 1.25 | 3.596 | 2.215 | 1.381 | 3.193 | 0.120485081 | 0.278572675 |
| 1.50 | 5.363 | 3.515 | 1.848 | 5.041 | 0.161228407 | 0.439801082 |
| 1.75 | 10.189 | 7.247 | 2.942 | 7.983 | 0.256674228 | 0.696475310 |
| 2.00 | 8.608 | 6.528 | 2.080 | 10.063 | 0.181469203 | 0.877944512 |
| 2.25 | 7.003 | 5.976 | 1.027 | 11.090 | 0.089600419 | 0.967544931 |
| 2.50 | 6.444 | 6.153 | 0.291 | 11.381 | 0.025388239 | 0.992933170 |
| 2.75 | 5.650 | 5.484 | 0.166 | 11.547 | 0.014482638 | 1.0 |
| 3.00 | 3.011 | 3.025 | -0.014 | 11.533 | 0 | 1.0 |
| 3.25 | 0.916 | 0.970 | -0.054 | 11.479 | 0 | 1.0 |
| 3.50 | 0.113 | 0.119 | -0.006 | 11.473 | 0 | 1.0 |
| 3.75 | 0.018 | 0.025 | -0.007 | 11.466 | 0 | 1.0 |
| 4.00 | 0.008 | 0.012 | -0.004 | 11.462 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 53.789 |  |  |  |  |
| CO3 WT. |  | 11.462 |  |  |  |  |
| \% CARBONATE |  | 21.309 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 2.2-2.8 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 3.3-3.6 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & -\quad \mathrm{wT} . \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO3} \\ & \mathrm{WT} . \end{aligned}$ | CUM CO3 WT. | CO3 WT $\%$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.50 | 0.011 | 0 | 0.011 | 0 | 0 | 0 |
| -0.25 | 0.013 | 0 | 0.013 | 0 | 0 | 0 |
| 0.00 | 0.008 | 0 | 0.008 | 0.032 | 0.000397772 | 0.001591090 |
| 0.25 | 0.051 | 0.004 | 0.047 | 0.079 | 0.002336913 | 0.003928003 |
| 0.50 | 0.078 | 0.008 | 0.070 | 0.149 | 0.003480509 | 0.007408512 |
| 0.75 | 0.282 | 0.058 | 0.224 | 0.373 | 0.011137629 | 0.018546142 |
| 1.00 | 1.121 | 0.354 | 0.767 | 1.140 | 0.038136436 | 0.056682578 |
| 1.25 | 3.604 | 1.676 | 1.928 | 3.068 | 0.095863166 | 0.152545744 |
| 1.50 | 6.990 | 3.336 | 3.654 | 6.722 | 0.181682578 | 0.334228321 |
| 1.75 | 14.848 | 8.239 | 6.609 | 13.331 | 0.328609785 | 0.662838107 |
| 2.00 | 11.049 | 6.491 | 4.558 | 17.889 | 0.226630867 | 0.889468974 |
| 2.25 | 5.982 | 4.008 | 1.974 | 19.863 | 0.098150358 | 0.987619332 |
| 2.50 | 2.863 | 2.482 | 0.381 | 20.244 | 0.018943914 | 1.0 |
| 2.75 | 1.876 | 1.799 | 0.077 | 20.321 | 0.003828560 | 1.0 |
| 3.00 | 1.262 | 1.389 | -0.127 | 20.194 | 0 | 1.0 |
| 3.25 | 0.453 | 0.513 | -0.060 | 20.134 | 0 | 1.0 |
| 3.50 | 0.094 | 0.107 | -0.013 | 20.121 | 0 | 1.0 |
| 3.75 | 0.013 | 0.019 | -0.006 | 20.115 | 0 | 1.0 |
| 4.00 | 0.003 | 0.006 | -0.003 | 20.112 | 0 | 1.0 |
| PAN | 0 | 0 | - | 0 | 0 | 1.0 |
| TOTAL W |  | 50.601 |  |  |  |  |
| CO3 WT. |  | 20.112 |  |  |  |  |
| \% CARBONATE |  | 39.746 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 3.3-3.6 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR7: 3.6 - 3.9 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{gathered} \text { TOTAL } \\ -\quad \text { WT. } \end{gathered}$ | DIGESTED WT. | CO3 WT. | CUM CO3 .$\quad W T$. | CO3 WT $\%$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0.054 | 0 | 0.054 | 0.054 | 0 | 0 |
| -1.25 | 0.052 | 0 | 0.052 | 0.106 | 0 | 0 |
| -1.00 | 0.089 | 0 | 0.089 | 0.195 | 0 | 0 |
| -0.75 | 0.144 | 0 | 0.144 | 0.339 | 0 | 0 |
| -0.50 | 0.178 | 0 | 0.178 | 0.517 | 0 | 0 |
| -0.25 | 0.340 | 0 | 0.340 | 0.857 | 0 | 0 |
| 0.00 | 0.506 | 0.010 | 0.496 | 1.353 | 0.027787115 | 0.075798319 |
| 0.25 | 0.736 | 0.061 | 0.675 | 2.028 | 0.037815126 | 0.113613445 |
| 0.50 | 1.287 | 0.222 | 1.065 | 3.093 | 0.059663866 | 0.173277311 |
| 0.75 | 2.180 | 0.669 | 1.511 | 4.604 | 0.084649860 | 0.257927171 |
| 1.00 | 4.152 | 2.100 | 2.052 | 6.656 | 0.114957983 | 0.372885154 |
| 1.25 | 6.862 | 4.420 | 2.442 | 9.098 | 0.136806723 | 0.509691877 |
| 1.50 | 7.789 | 5.275 | 2.514 | 11.612 | 0.140840336 | 0.650532213 |
| 1.75 | 10.898 | 7.839 | 3.059 | 14.671 | 0.171372549 | 0.821904762 |
| 2.00 | 6.857 | 4.957 | 1.900 | 16.571 | 0.106442577 | 0.928347339 |
| 2.25 | 3.410 | 2.465 | 0.945 | 17.516 | 0.052941176 | 0.981288515 |
| 2.50 | 1.043 | 0.774 | 0.269 | 17.785 | 0.015070028 | 0.996358543 |
| 2.75 | 0.330 | 0.278 | 0.052 | 17.837 | 0.002913165 | 0.999271709 |
| 3.00 | 0.203 | 0.181 | 0.022 | 17.859 | 0.001232493 | 1.0 |
| 3.25 | 0.085 | 0.083 | 0.002 | 17.861 | 0.000112045 | 1.0 |
| 3.50 | 0.024 | 0.025 | -0.001 | 17.860 | -0.000056022 | 1.0 |
| 3.75 | 0.014 | 0.017 | -0.003 | 17.857 | -0.000168067 | 1.0 |
| 4.00 | 0.005 | 0.012 | -0.007 | 17.850 | $-0.000392157$ | 1.0 |
| PAN | 0 | 0 | - | . | - | 1.0 |
| TOTAL WT |  | 47.238 |  |  |  |  |
| CO3 WT. |  | 17.85 |  |  |  |  |
| \% CARBONATE |  | 37.787 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 3.6-3.9 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR7: 3.9 - 5.5 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT. } \\ \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0.277 | 0 | 0.277 | 0.277 | 0.012720426 | 0.012720426 |
| -1.50 | 0.388 | 0 | 0.388 | 0.665 | 0.017817781 | 0.030538207 |
| -1.25 | 0.219 | 0 | 0.219 | 0.884 | 0.010056943 | 0.040595151 |
| -1.00 | 0.216 | 0 | 0.216 | 1.100 | 0.009919177 | 0.050514328 |
| -0.75 | 0.448 | 0 | 0.448 | 1.548 | 0.020573108 | 0.071087436 |
| -0.50 | 0.551 | 0 | 0.551 | 2.099 | 0.025303086 | 0.096390522 |
| -0.25 | 0.747 | 0.014 | 0.733 | 2.832 | 0.033660911 | 0.130051433 |
| 0.00 | 1.061 | 0.072 | 0.989 | 3.821 | 0.045416973 | 0.175468406 |
| 0.25 | 1.740 | 0.296 | 1.444 | 5.265 | 0.066311536 | 0.241779941 |
| 0.50 | 2.351 | 0.704 | 1.647 | 6.912 | 0.075633725 | 0.317413666 |
| 0.75 | 3.240 | 1.466 | 1.774 | 8.686 | 0.081465834 | 0.398879500 |
| 1.00 | 5.260 | 3.177 | 2.083 | 10.769 | 0.095655768 | 0.494535268 |
| 1.25 | 7.415 | 4.945 | 2.470 | 13.239 | 0.113427627 | 0.607962895 |
| 1.50 | 7.414 | 5.206 | 2.208 | 15.447 | 0.101396032 | 0.709358927 |
| 1.75 | 10.149 | 7.454 | 2.695 | 18.142 | 0.123760103 | 0.833119030 |
| 2.00 | 6.730 | 4.993 | 1.737 | 19.879 | 0.079766716 | 0.912885746 |
| 2.25 | 3.964 | 2.872 | 1.092 | 20.971 | 0.050146951 | 0.963032697 |
| 2.50 | 1.724 | 1.188 | 0.536 | 21.507 | 0.024614254 | 0.987646951 |
| 2.75 | 0.745 | 0.542 | 0.203 | 21.710 | 0.009322190 | 0.996969140 |
| 3.00 | 0.441 | 0.390 | 0.051 | 21.761 | 0.002342028 | 0.999311168 |
| 3.25 | 0.198 | 0.177 | 0.021 | 21.782 | 0.000964364 | 1.0 |
| 3.50 | 0.051 | 0.050 | 0.001 | 21.783 | 0.000045922 | 1.0 |
| 3.75 | 0.028 | 0.029 | -0.001 | 21.782 | 0 | 1.0 |
| 4.00 | 0.013 | 0.019 | -0.006 | 21.776 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 55.370 |  |  |  |  |
| CO3 WT. |  | 21.776 |  |  |  |  |
| \% CARBONATE |  | 39.328 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-7: 3.9-5.5 ft.


CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR7: 5.5-6.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT. | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  | 0 | 0 |
| -2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0.017 | 0.017 | 0.001033246 |
| -1.25 | 0.017 | 0 | 0.049 | 0.066 | 0.002978180 | 0.001033246 |
| -1.00 | 0.049 | 0 | 0.035 | 0.101 | 0.002127272 | 0.006138698 |
| -0.75 | 0.035 | 0 | 0.063 | 0.164 | 0.003829089 | 0.009967787 |
| -0.50 | 0.063 | 0 | 0.137 | 0.301 | 0.008326749 | 0.018294536 |
| -0.25 | 0.137 | 0 | 0.230 | 0.531 | 0.013979214 | 0.032273749 |
| 0.00 | 0.237 | 0.007 | 0.365 | 0.896 | 0.022184404 | 0.054458154 |
| 0.25 | 0.410 | 0.045 | 0.596 | 1.492 | 0.036224397 | 0.090682550 |
| 0.50 | 0.760 | 0.164 | 0.972 | 2.464 | 0.059077372 | 0.149759922 |
| 0.75 | 1.539 | 0.567 | 1.548 | 4.012 | 0.094086185 | 0.243846107 |
| 1.00 | 3.915 | 2.367 | 2.650 | 6.662 | 0.161064851 | 0.404910958 |
| 1.25 | 8.212 | 5.562 | 2.182 | 8.844 | 0.132620191 | 0.537531149 |
| 1.50 | 8.894 | 6.712 | 11.661 | 0.171214976 | 0.708746125 |  |
| 1.75 | 13.315 | 10.498 | 2.817 | 1.925 | 13.586 | 0.116999939 |
| 2.00 | 10.165 | 8.240 | 1.925 | 0.825746065 |  |  |
| 2.25 | 6.800 | 5.498 | 1.302 | 14.888 | 0.079134504 | 0.904880569 |
| 2.50 | 3.280 | 2.499 | 0.781 | 15.669 | 0.047468547 | 0.952349116 |
| 2.75 | 1.696 | 1.311 | 0.385 | 16.054 | 0.023399988 | 0.975749104 |
| 3.00 | 1.271 | 1.072 | 0.199 | 16.253 | 0.012095059 | 0.987844162 |
| 3.25 | 0.714 | 0.574 | 0.140 | 16.393 | 0.008509086 | 0.996353249 |
| 3.50 | 0.164 | 0.134 | 0.030 | 16.423 | 0.001823376 | 0.998176624 |
| 3.75 | 0.071 | 0.050 | 0.021 | 16.444 | 0.001276363 | 0.999452987 |
| 4.00 | 0.035 | 0.026 | 0.009 | 16.453 | 0.000547013 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 61.779 |  |  |  |  |
| CO3 WT. |  | 16.453 |  |  |  |  |
| \% CARBONATE |  | 26.632 |  |  |  |  |



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR8: $0-0.3 \mathrm{ft}$

| $\begin{aligned} & \mathrm{PHI} \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \mathrm{CO} \mathrm{WT} \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0.043 | 0 | 0.043 | 0.043 | 0.002089712 | 0.002089712 |
| -1.00 | 0.022 | 0.002 | 0.02 | 0.063 | 0.000971959 | 0.003061671 |
| -0.75 | 0.134 | 0.016 | 0.118 | 0.181 | 0.005734558 | 0.008796229 |
| -0.50 | 0.212 | 0.013 | 0.199 | 0.38 | 0.009670992 | 0.018467221 |
| -0.25 | 0.307 | 0.017 | 0.29 | 0.67 | 0.014093405 | 0.032560626 |
| 0.00 | 0.437 | 0.056 | 0.381 | 1.051 | 0.018515819 | 0.051076445 |
| 0.25 | 1.079 | 0.174 | 0.905 | 1.956 | 0.043981144 | 0.095057589 |
| 0.50 | 1.949 | 0.585 | 1.364 | 3.320 | 0.066287603 | 0.161345191 |
| 0.75 | 3.492 | 1.696 | 1.796 | 5.116 | 0.087281917 | 0.248627108 |
| 1.00 | 6.913 | 4.547 | 2.366 | 7.482 | 0.114982748 | 0.363609856 |
| 1.25 | 10.800 | 7.622 | 3.178 | 10.660 | 0.154444282 | 0.518054138 |
| 1.50 | 11.059 | 8.694 | 2.365 | 13.025 | 0.114934150 | 0.632988288 |
| 1.75 | 16.642 | 13.258 | 3.384 | 16.409 | 0.164455460 | 0.797443748 |
| 2.00 | 11.573 | 9.434 | 2.139 | 18.548 | 0.103951013 | 0.901394761 |
| 2.25 | 6.378 | 5.076 | 1.302 | 19.850 | 0.063274530 | 0.964669291 |
| 2.50 | 2.004 | 1.402 | 0.602 | 20.452 | 0.029255965 | 0.993925256 |
| 2.75 | 0.431 | 0.319 | 0.112 | 20.564 | 0.005442970 | 0.999368227 |
| 3.00 | 0.220 | 0.205 | 0.015 | 20.579 | 0.000728969 | 1.0 |
| 3.25 | 0.165 | 0.159 | 0.006 | 20.585 | 0.000291588 | 1.0 |
| 3.50 | 0.100 | 0.102 | -0.002 | 20.583 | 0 | 1.0 |
| 3.75 | 0.054 | 0.053 | 0.001 | 20.584 | 0.000048598 | 1.0 |
| 4.00 | 0.011 | 0.018 | -0.007 | 20.577 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 74.025 |  |  |  |  |
| CO3 WT. |  | 20.577 |  |  |  |  |
| \% CARBONATE |  | 27.797 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 0-0.3 ft.


Phi Size

| CARBONATE GRAI <br> CORE IR8: 0.3-1.0 ft |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 2.539 | 0 | 2.539 | 2.539 | 0.052092844 | 0.052092844 |
| -1.75 | 1.015 | 0 | 1.015 | 3.554 | 0.020824827 | 0.072917671 |
| -1.50 | 1.926 | 0 | 1.926 | 5.48 | 0.039515879 | 0.11243355 |
| -1.25 | 2.309 | 0 | 2.309 | 7.789 | 0.047373917 | 0.159807468 |
| -1.00 | 2.474 | 0 | 2.474 | 10.263 | 0.050759234 | 0.210566702 |
| -0.75 | 3.373 | 0.003 | 3.37 | 13.633 | 0.06914253 | 0.279709232 |
| -0.50 | 4.363 | 0.086 | 4.277 | 17.91 | 0.087751514 | 0.367460746 |
| -0.25 | 5.013 | 0.346 | 4.667 | 22.577 | 0.095753171 | 0.463213917 |
| 0.00 | 4.944 | 0.675 | 4.269 | 26.846 | 0.087587377 | 0.550801294 |
| 0.25 | 5.717 | 1.337 | 4.380 | 31.226 | 0.089864772 | 0.640666066 |
| 0.50 | 5.431 | 2.048 | 3.383 | 34.609 | 0.069409252 | 0.710075318 |
| 0.75 | 5.885 | 2.885 | 3.000 | 37.609 | 0.061551214 | 0.771626532 |
| 1.00 | 6.974 | 4.243 | 2.731 | 40.340 | 0.056032122 | 0.827658653 |
| 1.25 | 8.310 | 4.990 | 3.320 | 43.660 | 0.068116676 | 0.895775330 |
| 1.50 | 6.027 | 4.587 | 1.440 | 45.100 | 0.029544583 | 0.925319912 |
| 1.75 | 7.568 | 6.041 | 1.527 | 46.627 | 0.031329568 | 0.956649480 |
| 2.00 | 5.173 | 4.181 | 0.992 | 47.619 | 0.020352935 | 0.977002415 |
| 2.25 | 3.248 | 2.538 | 0.710 | 48.329 | 0.014565069 | 0.991567484 |
| 2.50 | 1.393 | 1.018 | 0.375 | 48.704 | 0.007693902 | 0.999261385 |
| 2.75 | 0.518 | 0.400 | 0.118 | 48.822 | 0.002421014 | 1.0 |
| 3.00 | 0.268 | 0.272 | -0.004 | 48.818 | 0 | 1.0 |
| 3.25 | 0.188 | 0.201 | -0.013 | 48.805 | 0 | 1.0 |
| 3.50 | 0.090 | 0.115 | -0.025 | 48.780 | 0 | 1.0 |
| 3.75 | 0.053 | 0.075 | -0.022 | 48.758 | 0 | 1.0 |
| 4.00 | 0.011 | 0.029 | -0.018 | 48.740 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT. } \end{aligned}$ |  | 84.8099 |  |  |  |  |
|  |  | 48.7399 |  |  |  |  |
| \% CARBONATE |  | 57.470 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 0.3 -1.0 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR8: 1.0 - 1.5 ft

| $\begin{aligned} & \mathrm{PHI} \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \mathrm{CO3} \mathrm{WT} \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -0.75 | 0.052 | 0 | 0.052 | 0.052 | 0.002718528 | 0.002718528 |
| -0.50 | 0.047 | 0 | 0.047 | 0.099 | 0.002457131 | 0.005175659 |
| -0.25 | 0.08 | 0.012 | 0.068 | 0.167 | 0.003554998 | 0.008730657 |
| 0.00 | 0.178 | 0.003 | 0.175 | 0.342 | 0.009148892 | 0.017879548 |
| 0.25 | 0.360 | 0.056 | 0.304 | 0.646 | 0.015892932 | 0.033772480 |
| 0.50 | 0.875 | 0.181 | 0.694 | 1.340 | 0.036281890 | 0.070054371 |
| 0.75 | 1.685 | 0.702 | 0.983 | 2.323 | 0.051390632 | 0.121445002 |
| 1.00 | 4.212 | 2.524 | 1.688 | 4.011 | 0.088247595 | 0.209692597 |
| 1.25 | 7.926 | 5.442 | 2.484 | 6.495 | 0.129861982 | 0.339554580 |
| 1.50 | 10.052 | 7.861 | 2.191 | 8.686 | 0.114544124 | 0.454098703 |
| 1.75 | 18.175 | 14.254 | 3.921 | 12.607 | 0.204987453 | 0.659086156 |
| 2.00 | 14.696 | 11.728 | 2.968 | 15.575 | 0.155165203 | 0.814251359 |
| 2.25 | 9.406 | 7.305 | 2.101 | 17.676 | 0.109838980 | 0.924090339 |
| 2.50 | 3.628 | 2.588 | 1.040 | 18.716 | 0.054370556 | 0.978460895 |
| 2.75 | 1.056 | 0.749 | 0.307 | 19.023 | 0.016049770 | 0.994510665 |
| 3.00 | 0.530 | 0.465 | 0.065 | 19.088 | 0.003398160 | 0.997908825 |
| 3.25 | 0.384 | 0.334 | 0.050 | 19.138 | 0.002613969 | 1.0 |
| 3.50 | 0.200 | 0.210 | -0.010 | 19.128 | 0 | 1.0 |
| 3.75 | 0.109 | 0.104 | 0.005 | 19.133 | 0.000261397 | 1.0 |
| 4.00 | 0.018 | 0.023 | -0.005 | 19.128 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT |  | 73.669 |  |  |  |  |
| CO3 WT. |  | 19.128 |  |  |  |  |
| \% CARBONATE |  | 25.965 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 1.0-1.5 ft.


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR8: 1.5-1.9 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |


| $<-2.00$ | 0.125 | 0 | 0.125 | 0.125 | 0.004147588 | 0.004147588 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.056 | 0 | 0.056 | 0.181 | 0.001858119 | 0.006005707 |
| -1.50 | 0.128 | 0 | 0.128 | 0.309 | 0.00424713 | 0.010252837 |
| -1.25 | 0.283 | 0 | 0.283 | 0.592 | 0.009390139 | 0.019642976 |
| -1.00 | 0.416 | 0 | 0.416 | 1.008 | 0.013803172 | 0.033446148 |
| -0.75 | 0.884 | 0 | 0.884 | 1.892 | 0.029331741 | 0.062777888 |
| -0.50 | 1.257 | 0.019 | 1.238 | 3.13 | 0.041077709 | 0.103855598 |
| -0.25 | 1.837 | 0.1 | 1.737 | 4.867 | 0.05763488 | 0.161490477 |
| 0.00 | 2.133 | 0.176 | 1.957 | 6.824 | 0.064934634 | 0.226425111 |
| 0.25 | 2.750 | 0.483 | 2.267 | 9.091 | 0.075220652 | 0.301645763 |
| 0.50 | 3.302 | 1.087 | 2.215 | 11.306 | 0.073495255 | 0.375141018 |
| 0.75 | 4.105 | 1.953 | 2.152 | 13.458 | 0.071404871 | 0.446545889 |
| 1.00 | 6.192 | 3.754 | 2.438 | 15.896 | 0.080894552 | 0.527440441 |
| 1.25 | 8.492 | 5.678 | 2.814 | 18.710 | 0.093370496 | 0.620810936 |
| 1.50 | 9.227 | 7.138 | 2.089 | 20.799 | 0.069314487 | 0.690125423 |
| 1.75 | 15.314 | 12.147 | 3.167 | 23.966 | 0.105083284 | 0.795208707 |
| 2.00 | 12.176 | 9.055 | 3.121 | 27.087 | 0.103556971 | 0.898765678 |
| 2.25 | 7.799 | 6.085 | 1.714 | 28.801 | 0.056871723 | 0.955637401 |
| 2.50 | 3.071 | 2.151 | 0.920 | 29.721 | 0.030526246 | 0.986163647 |
| 2.75 | 0.868 | 0.611 | 0.257 | 29.978 | 0.008527440 | 0.994691088 |
| 3.00 | 0.464 | 0.363 | 0.101 | 30.079 | 0.003351251 | 0.998042339 |
| 3.25 | 0.317 | 0.285 | 0.032 | 30.111 | 0.001061782 | 0.999104121 |
| 3.50 | 0.198 | 0.174 | 0.024 | 30.135 | 0.000796337 | 0.999900458 |
| 3.75 | 0.100 | 0.096 | 0.004 | 30.139 | 0.000132723 | 1.0 |
| 4.00 | 0.024 | 0.025 | -0.001 | 30.138 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |


| TOTAL WT. | 81.518 |
| :--- | :--- |
| CO3 WT. | 30.138 |
|  |  |
| \% CARBONATE | 36.971 |

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 1.5-1.9 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR8: 1.9-2.4 ft

| PHI | TOTAL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. \% |
| -2.00 | 0.075 | 0 | 0.075 | 0.075 | 0.001659622 | 0.001659622 |
| -1.75 | 0.3 | 0 | 0.3 | 0.375 | 0.00663849 | 0.008298112 |
| -1.50 | 0.872 | 0 | 0.872 | 1.247 | 0.019295877 | 0.02759399 |
| -1.25 | 1.766 | 0 | 1.766 | 3.013 | 0.039078578 | 0.066672568 |
| -1.00 | 3.221 | 0 | 3.221 | 6.234 | 0.071275254 | 0.137947821 |
| -0.75 | 4.486 | 0.042 | 4.444 | 10.678 | 0.098338165 | 0.236285986 |
| -0.50 | 6.197 | 0.109 | 6.088 | 16.766 | 0.13471709 | 0.371003076 |
| -0.25 | 5.165 | 0.389 | 4.776 | 21.542 | 0.10568476 | 0.476687836 |
| 0.00 | 4.253 | 0.472 | 3.781 | 25.323 | 0.083667102 | 0.560354938 |
| 0.25 | 3.449 | 0.576 | 2.873 | 28.196 | 0.063574606 | 0.623929543 |
| 0.50 | 2.533 | 0.712 | 1.821 | 30.017 | 0.040295634 | 0.664225178 |
| 0.75 | 2.621 | 1.049 | 1.572 | 31.589 | 0.034785687 | 0.699010865 |
| 1.00 | 3.782 | 2.140 | 1.642 | 33.231 | 0.036334668 | 0.735345533 |
| 1.25 | 5.797 | 3.931 | 1.866 | 35.097 | 0.041291408 | 0.776636941 |
| 1.50 | 6.680 | 5.128 | 1.552 | 36.649 | 0.034343121 | 0.810980062 |
| 1.75 | 11.918 | 9.311 | 2.607 | 39.256 | 0.057688478 | 0.868668540 |
| 2.00 | 10.399 | 8.215 | 2.184 | 41.440 | 0.048328207 | 0.916996747 |
| 2.25 | 7.711 | 5.982 | 1.729 | 43.169 | 0.038259830 | 0.955256578 |
| 2.50 | 3.915 | 2.854 | 1.061 | 44.230 | 0.023478126 | 0.978734704 |
| 2.75 | 1.710 | 1.290 | 0.420 | 44.650 | 0.009293886 | 0.988028590 |
| 3.00 | 1.145 | 0.933 | 0.212 | 44.862 | 0.004691200 | 0.992719789 |
| 3.25 | 1.039 | 0.894 | 0.145 | 45.007 | 0.003208603 | 0.995928393 |
| 3.50 | 0.694 | 0.618 | 0.076 | 45.083 | 0.001681751 | 0.997610144 |
| 3.75 | 0.446 | 0.346 | 0.100 | 45.183 | 0.002212830 | 0.999822974 |
| 4.00 | 0.077 | 0.069 | 0.008 | 45.191 | 0 | 0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  |  |

90.251
45.191
50.073

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 1.9 - 2.4 ft .


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR8: 2.4-2.7 ft


CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 2.4-2.7 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR8: 2.7-3.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3WT } \\ \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.75 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.50 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.25 | 0 | 0 | 0 | 0 | 0 | 0 |
| -1.00 | 0.014 | 0 | 0.014 | 0.014 | 0.000528461 | 0.000528461 |
| -0.75 | 0.022 | 0 | 0.022 | 0.036 | 0.000830439 | 0.001358901 |
| -0.50 | 0.11 | 0 | 0.11 | 0.146 | 0.004152197 | 0.005511098 |
| -0.25 | 0.469 | 0.008 | 0.461 | 0.607 | 0.01740148 | 0.022912577 |
| 0.00 | 0.830 | 0.037 | 0.793 | 1.400 | 0.029933565 | 0.052846142 |
| 0.25 | 1.962 | 0.302 | 1.660 | 3.060 | 0.062660426 | 0.115506568 |
| 0.50 | 3.520 | 1.106 | 2.414 | 5.474 | 0.091121848 | 0.206628416 |
| 0.75 | 5.848 | 3.001 | 2.847 | 8.321 | 0.107466405 | 0.314094821 |
| 1.00 | 10.264 | 6.311 | 3.953 | 12.274 | 0.149214857 | 0.463309678 |
| 1.25 | 15.073 | 10.050 | 5.023 | 17.297 | 0.189604409 | 0.652914087 |
| 1.50 | 12.295 | 9.839 | 2.456 | 19.753 | 0.092707232 | 0.745621320 |
| 1.75 | 15.544 | 12.203 | 3.341 | 23.094 | 0.126113544 | 0.871734863 |
| 2.00 | 8.949 | 7.082 | 1.867 | 24.961 | 0.070474105 | 0.942208969 |
| 2.25 | 4.524 | 3.449 | 1.075 | 26.036 | 0.040578288 | 0.982787257 |
| 2.50 | 1.333 | 0.924 | 0.409 | 26.445 | 0.015438623 | 0.998225880 |
| 2.75 | 0.301 | 0.243 | 0.058 | 26.503 | 0.002189340 | 1.0 |
| 3.00 | 0.125 | 0.120 | 0.005 | 26.508 | 0.000188736 | 1.0 |
| 3.25 | 0.075 | 0.070 | 0.005 | 26.513 | 0.000188736 | 1.0 |
| 3.50 | 0.037 | 0.043 | -0.006 | 26.507 | 0 | 1.0 |
| 3.75 | 0.026 | 0.034 | -0.008 | 26.499 | 0 | 1.0 |
| 4.00 | 0.008 | 0.015 | -0.007 | 26.492 | 0 | 1.0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
| TOTAL WT. |  | 81.329 |  |  |  |  |
| CO3 WT. |  | 26.492 |  |  |  |  |
| \% CARBON |  | 32.574 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 2.7-3.0 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR8: 3.0-3.8 ft


CARBONATE GRAIN SIZE DISTRIBUTION IR-8: $3.0-3.8 \mathrm{ft}$.


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR8: 3.8 - 5.2 ft

| PHI <br> SIZE | TOTAL <br> WT. | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.128 |  |  |  |  |  |
| -1.75 | 0.057 | 0 | 0.128 | 0.128 | 0.004130765 | 0.004130765 |
| -1.50 | 0.017 | 0 | 0.057 | 0.185 | 0.001839481 | 0.005970246 |
| -1.25 | 0.277 | 0 | 0.017 | 0.202 | 0.000548617 | 0.006518863 |
| -1.00 | 0.458 | 0 | 0.277 | 0.479 | 0.008939233 | 0.015458095 |
| -0.75 | 0.836 | 0 | 0.458 | 0.937 | 0.014780392 | 0.030238487 |
| -0.50 | 1.593 | 0.021 | 0.836 | 1.773 | 0.026979056 | 0.057217543 |
| -0.25 | 2.234 | 0.058 | 2.176 | 3.345 | 0.050730952 | 0.107948495 |
| 0.00 | 2.627 | 0.3 | 2.327 | 7.848 | 0.070222997 | 0.178171491 |
| 0.25 | 3.698 | 0.850 | 2.848 | 10.696 | 0.091909510 | 0.3535177010 |
| 0.50 | 4.092 | 1.483 | 2.609 | 13.305 | 0.084196599 | 0.429373608 |
| 0.75 | 4.869 | 2.254 | 2.615 | 15.920 | 0.084390228 | 0.513763836 |
| 1.00 | 6.860 | 3.801 | 3.059 | 18.979 | 0.098718818 | 0.612482654 |
| 1.25 | 8.995 | 5.636 | 3.359 | 22.338 | 0.108400297 | 0.720882951 |
| 1.50 | 8.779 | 6.307 | 2.472 | 24.810 | 0.079775390 | 0.800658341 |
| 1.75 | 11.850 | 9.048 | 2.802 | 27.612 | 0.090425017 | 0.891083358 |
| 2.00 | 7.566 | 5.957 | 1.609 | 29.221 | 0.051925001 | 0.943008358 |
| 2.25 | 4.248 | 2.917 | 1.331 | 30.552 | 0.042953497 | 0.985961855 |
| 2.50 | 1.065 | 0.689 | 0.376 | 30.928 | 0.012134121 | 0.998095976 |
| 2.75 | 0.229 | 0.168 | 0.061 | 30.989 | 0.001968567 | 1.0 |
| 3.00 | 0.104 | 0.097 | 0.007 | 30.996 | 0.000225901 | 1.0 |
| 3.25 | 0.071 | 0.070 | 0.001 | 30.997 | 0.000032272 | 1.0 |
| 3.50 | 0.032 | 0.034 | -0.002 | 30.995 | 0 | 1.0 |
| 3.75 | 0.020 | 0.025 | -0.005 | 30.990 | 0 | 1.0 |
| 4.00 | 0.011 | 0.014 | -0.003 | 30.987 | 0 | 0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  | 1.0 |  |

TOTAL WT.
CO3 WT.
\% CARBONATE
70.716
30.987
43.819

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 3.8-5.2 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR8: 5.2-6.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.177 | 0 | 0.177 | 0.177 | 0.004654343 | 0.004654343 |
| -1.75 | 0.251 | 0 | 0.251 | 0.428 | 0.006600226 | 0.011254569 |
| -1.50 | 0.449 | 0 | 0.449 | 0.877 | 0.011806779 | 0.023061348 |
| -1.25 | 0.359 | 0 | 0.359 | 1.236 | 0.009440164 | 0.032501512 |
| -1.00 | 0.59 | 0 | 0.59 | 1.826 | 0.015514476 | 0.048015988 |
| -0.75 | 0.872 | 0.005 | 0.867 | 2.693 | 0.022798391 | 0.070814379 |
| -0.50 | 1.467 | 0.014 | 1.453 | 4.146 | 0.038207684 | 0.109022062 |
| -0.25 | 2.26 | 0.079 | 2.181 | 6.327 | 0.057350969 | 0.166373031 |
| 0.00 | 3.032 | 0.283 | 2.749 | 9.076 | 0.072286939 | 0.238659970 |
| 0.25 | 4.451 | 0.828 | 3.623 | 12.699 | 0.095269400 | 0.333929370 |
| 0.50 | 5.664 | 2.024 | 3.640 | 16.339 | 0.095716427 | 0.429645797 |
| 0.75 | 7.928 | 3.674 | 4.254 | 20.593 | 0.111862000 | 0.541507797 |
| 1.00 | 10.322 | 5.872 | 4.450 | 25.043 | 0.117015962 | 0.658523758 |
| 1.25 | 11.066 | 7.028 | 4.038 | 29.081 | 0.106182124 | 0.764705882 |
| 1.50 | 8.073 | 5.803 | 2.270 | 31.351 | 0.059691288 | 0.824397171 |
| 1.75 | 9.505 | 7.109 | 2.396 | 33.747 | 0.063004549 | 0.887401720 |
| 2.00 | 6.169 | 4.673 | 1.496 | 35.243 | 0.039338400 | 0.926740119 |
| 2.25 | 3.751 | 2.711 | 1.040 | 36.283 | 0.027347551 | 0.954087670 |
| 2.50 | 1.410 | 0.934 | 0.476 | 36.759 | 0.012516764 | 0.966604433 |
| 2.75 | 1.425 | 0.283 | 1.142 | 37.901 | 0.030029714 | 0.996634148 |
| 3.00 | 0.216 | 0.168 | 0.048 | 37.949 | 0.001262195 | 0.997896342 |
| 3.25 | 0.140 | 0.103 | 0.037 | 37.986 | 0.000972942 | 0.998869284 |
| 3.50 | 0.064 | 0.050 | 0.014 | 38.000 | 0.000368140 | 0.999237424 |
| 3.75 | 0.057 | 0.038 | 0.019 | 38.019 | 0.000499619 | 0.999737043 |
| 4.00 | 0.033 | 0.023 | 0.010 | 38.029 |  | 0 |
| PAN | 0 | 0 | 0 | 0 | 0 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  | 79.731 |  |  |  |  |
| CO3 WT. |  | 38.029 |  |  |  |  |
| \% CARBONATE |  | 47.697 |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-8: 5.2 - 6.1 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-9: 0-0.5 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-9: 0-0.5 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-9: 0.5-1.8 ft.

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | CO3 WT $\%$. | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.048 | 0.000 | 0.048 | 0.048 | 0.002296761 | 0.002296761 |
| -1.50 | 0.161 | 0.000 | 0.161 | 0.209 | 0.007703718 | 0.010000478 |
| -1.25 | 0.164 | 0.000 | 0.164 | 0.373 | 0.007847265 | 0.017847744 |
| -1.00 | 0.186 | 0.000 | 0.186 | 0.559 | 0.008899947 | 0.026747691 |
| -0.75 | 0.551 | 0.000 | 0.551 | 1.110 | 0.026364898 | 0.053112589 |
| -0.50 | 0.998 | 0.095 | 0.903 | 2.013 | 0.043207809 | 0.096320398 |
| -0.25 | 1.429 | 0.158 | 1.271 | 3.284 | 0.060816307 | 0.157136705 |
| 0.00 | 1.539 | 0.301 | 1.238 | 4.522 | 0.059237284 | 0.216373989 |
| 0.25 | 2.534 | 0.563 | 1.971 | 6.493 | 0.094310733 | 0.310684722 |
| 0.50 | 3.155 | 0.883 | 2.272 | 8.765 | 0.108713336 | 0.419398057 |
| 0.75 | 4.547 | 1.719 | 2.828 | 11.593 | 0.135317479 | 0.554715537 |
| 1.00 | 7.058 | 3.875 | 3.183 | 14.776 | 0.152303938 | 0.707019475 |
| 1.25 | 9.064 | 6.554 | 2.510 | 17.286 | 0.120101440 | 0.827120915 |
| 1.50 | 8.414 | 8.039 | 0.375 | 17.661 | 0.017943442 | 0.845064357 |
| 1.75 | 11.752 | 11.597 | 0.155 | 17.816 | 0.007416623 | 0.852480980 |
| 2.00 | 8.645 | 7.962 | 0.683 | 18.499 | 0.032680990 | 0.885161969 |
| 2.25 | 5.453 | 4.403 | 1.050 | 19.549 | 0.050241638 | 0.935403608 |
| 2.50 | 2.217 | 1.442 | 0.775 | 20.324 | 0.037083114 | 0.972486722 |
| 2.75 | 0.824 | 0.489 | 0.335 | 20.659 | 0.016029475 | 0.988516197 |
| 3.00 | 0.522 | 0.343 | 0.179 | 20.838 | 0.008565003 | 0.997081200 |
| 3.25 | 0.291 | 0.238 | 0.053 | 20.891 | 0.002536007 | 0.999617207 |
| 3.50 | 0.124 | 0.122 | 0.002 | 20.893 | 0.000095698 | 0.999712905 |
| 3.75 | 0.036 | 0.034 | 0.002 | 20.895 | 0.000095698 | 0.999808603 |
| 4.00 | 0.022 | 0.020 | 0.002 | 20.897 | 0.000095698 | 0.999904302 |
| PAN | 0.019 | 0.017 | 0.002 | 20.899 | 0.000095698 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | 69.753 20.899 29.96\% | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-9: 0.5-1.8 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-9: $1.8-3.1 \mathrm{ft}$.


CARBONATE GRAIN SIZE DISTRIBUTION IR-9: 1.8-3.1 ft.


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-9: 3.1-3.6 ft.

| PHI <br> SIZE | TOTAL <br> WT. | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. $\%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.061 | 0.000 | 0.061 | 0.061 | 0.002081698 | 0.002081698 |
| -1.50 | 0.054 | 0.000 | 0.054 | 0.115 | 0.001842815 | 0.003924513 |
| -1.25 | 0.105 | 0.000 | 0.105 | 0.220 | 0.003583251 | 0.007507764 |
| -1.00 | 0.174 | 0.000 | 0.174 | 0.394 | 0.005937959 | 0.013445722 |
| -0.75 | 0.245 | 0.000 | 0.245 | 0.639 | 0.008360919 | 0.021806641 |
| -0.50 | 0.417 | 0.000 | 0.417 | 1.056 | 0.014230625 | 0.036037266 |
| -0.25 | 0.653 | 0.018 | 0.635 | 1.691 | 0.021670136 | 0.057707402 |
| 0.00 | 0.832 | 0.055 | 0.777 | 2.468 | 0.026516056 | 0.084223458 |
| 0.25 | 1.466 | 0.202 | 1.264 | 3.732 | 0.043135515 | 0.127358973 |
| 0.50 | 2.278 | 0.577 | 1.701 | 5.433 | 0.058048664 | 0.185407637 |
| 0.75 | 3.661 | 1.537 | 2.124 | 7.557 | 0.072484046 | 0.257891683 |
| 1.00 | 7.437 | 4.348 | 3.089 | 10.646 | 0.105415828 | 0.363307511 |
| 1.25 | 13.180 | 8.482 | 4.698 | 15.344 | 0.160324881 | 0.523632393 |
| 1.50 | 13.780 | 9.889 | 3.891 | 19.235 | 0.132785039 | 0.656417432 |
| 1.75 | 18.620 | 12.862 | 5.758 | 24.993 | 0.196498652 | 0.852916084 |
| 2.00 | 10.745 | 7.924 | 2.821 | 27.814 | 0.096270006 | 0.949186090 |
| 2.25 | 6.176 | 5.152 | 1.024 | 28.838 | 0.034945227 | 0.984131318 |
| 2.50 | 3.797 | 3.546 | 0.251 | 29.089 | 0.008556676 | 0.99296993 |
| 2.75 | 2.775 | 2.691 | 0.084 | 29.173 | 0.002866601 | 0.995563594 |
| 3.00 | 1.437 | 1.344 | 0.093 | 29.266 | 0.003173736 | 0.998737331 |
| 3.25 | 0.428 | 0.399 | 0.029 | 29.295 | 0.000989660 | 0.999726990 |
| 3.50 | 0.059 | 0.057 | 0.002 | 29.297 | 0.000068252 | 0.999795243 |
| 3.75 | 0.018 | 0.016 | 0.002 | 29.299 | 0.000008252 | 0.99963495 |
| 4.00 | 0.012 | 0.010 | 0.002 | 29.301 | 0.000068252 | 0.999931748 |
| PAN | 0.012 | 0.010 | 0.002 | 29.303 | 0.000068252 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
88.422 grams
29.303 grams

CARBONATE GRAIN SIZE DISTRIBUTION IR-9: 3.1-3.6 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-9: 3.6-4.2 ft.

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.034 | 0.000 | 0.034 | 0.034 | 0.001233314 | 0.001233314 |
| -1.25 | 0.087 | 0.000 | 0.087 | 0.121 | 0.003155833 | 0.004389147 |
| -1.00 | 0.063 | 0.000 | 0.063 | 0.184 | 0.002285258 | 0.006674405 |
| -0.75 | 0.167 | 0.000 | 0.167 | 0.351 | 0.006057748 | 0.012732153 |
| -0.50 | 0.380 | 0.000 | 0.380 | 0.731 | 0.013784098 | 0.026516251 |
| -0.25 | 0.573 | 0.009 | 0.564 | 1.295 | 0.020458503 | 0.046974753 |
| 0.00 | 0.947 | 0.033 | 0.914 | 2.209 | 0.033154382 | 0.080129135 |
| 0.25 | 1.913 | 0.218 | 1.695 | 3.904 | 0.061484330 | 0.141613465 |
| 0.50 | 2.947 | 0.881 | 2.066 | 5.970 | 0.074941962 | 0.216555427 |
| 0.75 | 4.600 | 2.202 | 2.398 | 8.368 | 0.086984910 | 0.303540337 |
| 1.00 | 8.490 | 4.929 | 3.561 | 11.929 | 0.129171503 | 0.432711840 |
| 1.25 | 13.215 | 8.944 | 4.271 | 16.200 | 0.154926001 | 0.587637841 |
| 1.50 | 11.966 | 8.783 | 3.183 | 19.383 | 0.115459954 | 0.703097795 |
| 1.75 | 16.494 | 12.473 | 4.021 | 23.404 | 0.145857516 | 0.848955311 |
| 2.00 | 9.929 | 7.555 | 2.374 | 25.778 | 0.086114335 | 0.935069646 |
| 2.25 | 4.723 | 3.550 | 1.173 | 26.951 | 0.042549333 | 0.977618979 |
| 2.50 | 1.559 | 1.114 | 0.445 | 27.396 | 0.016141904 | 0.993760882 |
| 2.75 | 0.673 | 0.574 | 0.099 | 27.495 | 0.003591120 | 0.997352002 |
| 3.00 | 0.454 | 0.426 | 0.028 | 27.523 | 0.001015670 | 0.998367673 |
| 3.25 | 0.231 | 0.209 | 0.022 | 27.545 | 0.000798027 | 0.999165699 |
| 3.50 | 0.086 | 0.078 | 0.008 | 27.553 | 0.000290192 | 0.999455891 |
| 3.75 | 0.047 | 0.036 | 0.011 | 27.564 | 0.000399013 | 0.999854904 |
| 4.00 | 0.025 | 0.023 | 0.002 | 27.566 | 0.000072548 | 0.999927452 |
| PAN | 0.028 | 0.026 | 0.002 | 27.568 | 0.000072548 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 79.631 <br> 27.568 <br> 34.62\% | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-9: $3.6-4.2 \mathrm{ft}$.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-9: 4.2-5.0 ft.



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-9: $5 \cdot 0-5.4 \mathrm{ft}$.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. |  | WT. |  |  | WT. |

CARBONATE GRAIN SIZE DISTRIBUTION IR-9: 5.0-5.4 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: 0-1.1 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.130 | 0.034 | 0.096 | 0.096 | 0.002896627 | 0.002896627 |
| -1.00 | 0.271 | 0.000 | 0.271 | 0.367 | 0.008176936 | 0.011073562 |
| -0.75 | 0.678 | 0.000 | 0.678 | 1.045 | 0.020457426 | 0.031530988 |
| -0.50 | 1.785 | 0.086 | 1.699 | 2.744 | 0.051264257 | 0.082795245 |
| -0.25 | 3.242 | 0.215 | 3.027 | 5.771 | 0.091334259 | 0.174129503 |
| 0.00 | 4.395 | 0.582 | 3.813 | 9.584 | 0.115050389 | 0.289179893 |
| 0.25 | 6.546 | 1.592 | 4.954 | 14.538 | 0.149478004 | 0.438657896 |
| 0.50 | 6.229 | 2.348 | 3.881 | 18.419 | 0.117102166 | 0.555760063 |
| 0.75 | 6.499 | 2.934 | 3.565 | 21.984 | 0.107567437 | 0.663327500 |
| 1.00 | 7.114 | 4.087 | 3.027 | 25.011 | 0.091334259 | 0.754661758 |
| 1.25 | 6.755 | 4.215 | 2.540 | 27.551 | 0.076639913 | 0.831301672 |
| 1.50 | 5.046 | 3.615 | 1.431 | 28.982 | 0.043177841 | 0.874479512 |
| 1.75 | 6.855 | 5.229 | 1.626 | 30.608 | 0.049061614 | 0.923541126 |
| 2.00 | 5.421 | 4.336 | 1.085 | 31.693 | 0.032737916 | 0.956279042 |
| 2.25 | 3.989 | 3.266 | 0.723 | 32.416 | 0.021815219 | 0.978094261 |
| 2.50 | 2.133 | 1.694 | 0.439 | 32.855 | 0.013246032 | 0.991340293 |
| 2.75 | 0.964 | 0.768 | 0.196 | 33.051 | 0.005913946 | 0.997254239 |
| 3.00 | 0.616 | 0.550 | 0.066 | 33.117 | 0.001991431 | 0.999245670 |
| 3.25 | 0.465 | 0.446 | 0.019 | 33.136 | 0.000573291 | 0.999818961 |
| 3.50 | 0.226 | 0.226 | 0.000 | 33.136 | 0.000000000 | 0.999818961 |
| 3.75 | 0.108 | 0.106 | 0.002 | 33.138 | 0.000060346 | 0.999879307 |
| 4.00 | 0.050 | 0.048 | 0.002 | 33.140 | 0.000060346 | 0.999939654 |
| PAN | 0.035 | 0.033 | 0.002 | 33.142 | 0.000060346 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-10: 1.1-2.7 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 3.472 | 0.000 | 3.472 | 3.472 | 0.068938130 | 0.068938130 |
| -1.75 | 1.833 | 0.000 | 1.833 | 5.305 | 0.036395044 | 0.105333174 |
| -1.50 | 2.883 | 0.001 | 2.882 | 8.187 | 0.057223414 | 0.162556588 |
| -1.25 | 4.363 | 0.000 | 4.363 | 12.550 | 0.086629338 | 0.249185926 |
| -1.00 | 4.603 | 0.033 | 4.570 | 17.120 | 0.090739417 | 0.339925343 |
| -0.75 | 5.371 | 0.029 | 5.342 | 22.462 | 0.106067826 | 0.445993170 |
| -0.50 | 5.143 | 0.174 | 4.969 | 27.431 | 0.098661743 | 0.544654912 |
| -0.25 | 4.340 | 0.276 | 4.064 | 31.495 | 0.080692558 | 0.625347470 |
| 0.00 | 3.325 | 0.390 | 2.935 | 34.430 | 0.058275753 | 0.683623223 |
| 0.25 | 3.037 | 0.655 | 2.382 | 36.812 | 0.047295687 | 0.730918910 |
| 0.50 | 2.382 | 0.788 | 1.594 | 38.406 | 0.031649591 | 0.762568501 |
| 0.75 | 2.289 | 1.079 | 1.210 | 39.616 | 0.024025097 | 0.786593599 |
| 1.00 | 2.829 | 1.629 | 1.200 | 40.816 | 0.023826543 | 0.810420141 |
| 1.25 | 3.731 | 2.483 | 1.248 | 42.064 | 0.024779604 | 0.835199746 |
| 1.50 | 4.731 | 3.186 | 1.545 | 43.609 | 0.030676674 | 0.865876420 |
| 1.75 | 8.552 | 6.607 | 1.945 | 45.554 | 0.038618855 | 0.904495274 |
| 2.00 | 7.713 | 6.113 | 1.600 | 47.154 | 0.031768724 | 0.936263998 |
| 2.25 | 6.177 | 4.914 | 1.263 | 48.417 | 0.025077436 | 0.961341434 |
| 2.50 | 3.839 | 2.933 | 0.906 | 49.323 | 0.017989040 | 0.979330474 |
| 2.75 | 2.321 | 1.798 | 0.523 | 49.846 | 0.010384402 | 0.989714876 |
| 3.00 | 2.014 | 1.683 | 0.331 | 50.177 | 0.006572155 | 0.996287030 |
| 3.25 | 1.850 | 1.671 | 0.179 | 50.356 | 0.003554126 | 0.999841156 |
| 3.50 | 0.961 | 0.959 | 0.002 | 50.358 | 0.000039711 | 0.999880867 |
| 3.75 | 0.413 | 0.411 | 0.002 | 50.360 | 0.000039711 | 0.999920578 |
| 4.00 | 0.056 | 0.054 | 0.002 | 50.362 | 0.000039711 | 0.999960289 |
| PAN | 0.040 | 0.038 | 0.002 | 50.364 | 0.000039711 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  | 58.268 | grams |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-10: 1.1-2.7 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: 2.7-3.1 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-10: 2.7-3.1 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: $3.1-3.8 \mathrm{ft}$.


CARBONATE GRAIN SIZE DISTRIBUTION IR-10: 3.1-3.8 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: 3.8-4.0 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.105 | 0.000 | 0.105 | 0.105 | 0.004426458 | 0.004426458 |
| -1.25 | 0.036 | 0.000 | 0.036 | 0.141 | 0.001517643 | 0.005944100 |
| -1.00 | 0.005 | 0.000 | 0.005 | 0.146 | 0.000210784 | 0.006154884 |
| -0.75 | 0.066 | 0.000 | 0.066 | 0.212 | 0.002782345 | 0.008937229 |
| -0.50 | 0.188 | 0.000 | 0.188 | 0.400 | 0.007925467 | 0.016862696 |
| -0.25 | 0.255 | 0.008 | 0.247 | 0.647 | 0.010412714 | 0.027275410 |
| 0.00 | 0.477 | 0.037 | 0.440 | 1.087 | 0.018548965 | 0.045824375 |
| 0.25 | 1.127 | 0.114 | 1.013 | 2.100 | 0.042704776 | 0.088529151 |
| 0.50 | 2.175 | 0.570 | 1.605 | 3.705 | 0.067661566 | 0.156190717 |
| 0.75 | 4.407 | 2.025 | 2.382 | 6.087 | 0.100417352 | 0.256608069 |
| 1.00 | 9.384 | 5.895 | 3.489 | 9.576 | 0.147084862 | 0.403692930 |
| 1.25 | 15.356 | 9.870 | 5.486 | 15.062 | 0.231271869 | 0.634964799 |
| 1.50 | 11.934 | 9.007 | 2.927 | 17.989 | 0.123392774 | 0.758357573 |
| 1.75 | 13.482 | 10.455 | 3.027 | 21.016 | 0.127608448 | 0.885966022 |
| 2.00 | 7.054 | 5.423 | 1.631 | 22.647 | 0.068757641 | 0.954723663 |
| 2.25 | 3.150 | 2.492 | 0.658 | 23.305 | 0.027739134 | 0.982462797 |
| 2.50 | 1.000 | 0.762 | 0.238 | 23.543 | 0.010033304 | 0.992496101 |
| 2.75 | 0.354 | 0.271 | 0.083 | 23.626 | 0.003499009 | 0.995995110 |
| 3.00 | 0.250 | 0.203 | 0.047 | 23.673 | 0.001981367 | 0.997976477 |
| 3.25 | 0.172 | 0.160 | 0.012 | 23.685 | 0.000505881 | 0.998482357 |
| 3.50 | 0.109 | 0.079 | 0.030 | 23.715 | 0.001264702 | 0.999747060 |
| 3.75 | 0.043 | 0.041 | 0.002 | 23.717 | 0.000084313 | 0.999831373 |
| 4.00 | 0.030 | 0.028 | 0.002 | 23.719 | 0.000084313 | 0.999915687 |
| PAN | 0.005 | 0.003 | 0.002 | 23.721 | 0.000084313 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \text { \% CARBONATE } \end{aligned}$ |  |  |  | 71.164 23.721 33.33\% | grams grams |  |



CARBONATE GRAIN SIZE DISTRIBUTION



CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: $4.2-5.5 \mathrm{ft}$.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | 0 | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.295 | 0.000 | 0.295 | 0.295 | 0.010578026 | 0.010578026 |
| -1.75 | 0.672 | 0.000 | 0.672 | 0.967 | 0.024096386 | 0.034674412 |
| -1.50 | 0.404 | 0.000 | 0.404 | 1.371 | 0.014486517 | 0.049160929 |
| -1.25 | 0.724 | 0.009 | 0.715 | 2.086 | 0.025638267 | 0.074799197 |
| -1.00 | 0.679 | 0.000 | 0.679 | 2.765 | 0.024347390 | 0.099146586 |
| -0.75 | 1.042 | 0.016 | 1.026 | 3.791 | 0.036790017 | 0.135936604 |
| -0.50 | 1.366 | 0.092 | 1.274 | 5.065 | 0.045682731 | 0.181619334 |
| -0.25 | 1.824 | 0.101 | 1.723 | 6.788 | 0.061782846 | 0.243402180 |
| 0.00 | 1.957 | 0.247 | 1.710 | 8.498 | 0.061316695 | 0.304718876 |
| 0.25 | 2.582 | 0.609 | 1.973 | 10.471 | 0.070747275 | 0.375466150 |
| 0.50 | 2.975 | 1.135 | 1.840 | 12.311 | 0.065978199 | 0.441444349 |
| 0.75 | 3.697 | 2.041 | 1.656 | 13.967 | 0.059380379 | 0.500824727 |
| 1.00 | 5.509 | 3.598 | 1.911 | 15.878 | 0.068524096 | 0.569348824 |
| 1.25 | 6.945 | 4.720 | 2.225 | 18.103 | 0.079783419 | 0.649132243 |
| 1.50 | 6.941 | 5.149 | 1.792 | 19.895 | 0.064257028 | 0.713389271 |
| 1.75 | 11.535 | 9.043 | 2.492 | 22.387 | 0.089357430 | 0.802746701 |
| 2.00 | 10.756 | 8.603 | 2.153 | 24.540 | 0.077201664 | 0.879948365 |
| 2.25 | 8.626 | 6.969 | 1.657 | 26.197 | 0.059416236 | 0.939364601 |
| 2.50 | 4.285 | 3.294 | 0.991 | 27.188 | 0.035534997 | 0.974899598 |
| 2.75 | 1.558 | 1.181 | 0.377 | 27.565 | 0.013518359 | 0.988417958 |
| 3.00 | 0.900 | 0.735 | 0.165 | 27.730 | 0.005916523 | 0.994334481 |
| 3.25 | 0.701 | 0.654 | 0.047 | 27.777 | 0.001685313 | 0.996019793 |
| 3.50 | 0.396 | 0.349 | 0.047 | 27.824 | 0.001685313 | 0.997705106 |
| 3.75 | 0.252 | 0.215 | 0.037 | 27.861 | 0.001326736 | 0.999031842 |
| 4.00 | 0.079 | 0.054 | 0.025 | 27.886 | 0.000896443 | 0.999928285 |
| PAN | 0.040 | 0.038 | 0.002 | 27.888 | 0.000071715 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-10: 4.2 -5.5 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: 5.5-5.9 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-10: 5.5-5.9 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-10: 5.9-6.6 ft.

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO} \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 21.460 | 0.000 | 21.460 | 21.460 | 0.233446104 | 0.233446104 |
| -1.75 | 6.109 | 0.000 | 6.109 | 27.569 | 0.066454904 | 0.299901008 |
| -1.50 | 7.676 | 0.000 | 7.676 | 35.245 | 0.083501039 | 0.383402047 |
| -1.25 | 8.121 | 0.000 | 8.121 | 43.366 | 0.088341836 | 0.471743884 |
| -1.00 | 8.496 | 0.000 | 8.496 | 51.862 | 0.092421160 | 0.564165044 |
| -0.75 | 8.107 | 0.068 | 8.039 | 59.901 | 0.087449824 | 0.651614868 |
| -0.50 | 8.773 | 0.346 | 8.427 | 68.328 | 0.091670565 | 0.743285433 |
| -0.25 | 7.159 | 0.551 | 6.608 | 74.936 | 0.071883125 | 0.815168558 |
| 0.00 | 5.169 | 0.830 | 4.339 | 79.275 | 0.047200496 | 0.862369054 |
| 0.25 | 4.827 | 1.078 | 3.749 | 83.024 | 0.040782360 | 0.903151414 |
| 0.50 | 3.475 | 1.195 | 2.280 | 85.304 | 0.024802289 | 0.927953702 |
| 0.75 | 3.022 | 1.381 | 1.641 | 86.945 | 0.017851121 | 0.945804823 |
| 1.00 | 3.118 | 1.830 | 1.288 | 88.233 | 0.014011118 | 0.959815941 |
| 1.25 | 2.935 | 2.000 | 0.935 | 89.168 | 0.010171114 | 0.969987055 |
| 1.50 | 2.453 | 1.839 | 0.614 | 89.782 | 0.006679213 | 0.976666268 |
| 1.75 | 3.584 | 2.858 | 0.726 | 90.508 | 0.007897571 | 0.984563839 |
| 2.00 | 3.380 | 2.963 | 0.417 | 90.925 | 0.004536208 | 0.989100047 |
| 2.25 | 3.326 | 2.841 | 0.485 | 91.410 | 0.005275925 | 0.994375972 |
| 2.50 | 2.352 | 1.907 | 0.445 | 91.855 | 0.004840798 | 0.999216770 |
| 2.75 | 1.172 | 1.112 | 0.060 | 91.915 | 0.000652692 | 0.999869462 |
| 3.00 | 0.747 | 0.745 | 0.002 | 91.917 | 0.000021756 | 0.999891218 |
| 3.25 | 0.555 | 0.553 | 0.002 | 91.919 | 0.000021756 | 0.999912974 |
| 3.50 | 0.308 | 0.306 | 0.002 | 91.921 | 0.000021756 | 0.999934731 |
| 3.75 | 0.208 | 0.206 | 0.002 | 91.923 | 0.000021756 | 0.999956487 |
| 4.00 | 0.056 | 0.054 | 0.002 | 91.925 | 0.000021756 | 0.999978244 |
| PAN | 0.056 | 0.054 | 0.002 | 91.927 | 0.000021756 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \text { \% CARBONATE } \end{aligned}$ |  |  |  | $\begin{gathered} 116.644 \\ 91.927 \\ 78.81 \% \end{gathered}$ | grams grams |  |



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-11: 0-1.1 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.077 | 0.000 | 0.077 | 0.077 | 0.002987739 | 0.002987739 |
| -1.25 | 0.270 | 0.000 | 0.270 | 0.347 | 0.010476486 | 0.013464225 |
| -1.00 | 0.260 | 0.000 | 0.260 | 0.607 | 0.010088468 | 0.023552693 |
| -0.75 | 0.416 | 0.000 | 0.416 | 1.023 | 0.016141549 | 0.039694242 |
| -0.50 | 0.420 | 0.000 | 0.420 | 1.443 | 0.016296756 | 0.055990998 |
| -0.25 | 0.471 | 0.021 | 0.450 | 1.893 | 0.017460810 | 0.073451808 |
| 0.00 | 0.491 | 0.091 | 0.400 | 2.293 | 0.015520720 | 0.088972528 |
| 0.25 | 0.665 | 0.143 | 0.522 | 2.815 | 0.020254540 | 0.109227068 |
| 0.50 | 0.886 | 0.305 | 0.581 | 3.396 | 0.022543846 | 0.131770914 |
| 0.75 | 1.226 | 0.596 | 0.630 | 4.026 | 0.024445134 | 0.156216048 |
| 1.00 | 2.681 | 1.551 | 1.130 | 5.156 | 0.043846034 | 0.200062083 |
| 1.25 | 4.849 | 3.334 | 1.515 | 6.671 | 0.058784728 | 0.258846810 |
| 1.50 | 7.025 | 5.017 | 2.008 | 8.679 | 0.077914015 | 0.336760826 |
| 1.75 | 15.722 | 11.347 | 4.375 | 13.054 | 0.169757877 | 0.506518702 |
| 2.00 | 18.538 | 13.760 | 4.778 | 17.832 | 0.185395002 | 0.691913705 |
| 2.25 | 17.692 | 13.712 | 3.980 | 21.812 | 0.154431166 | 0.846344870 |
| 2.50 | 10.929 | 8.418 | 2.511 | 24.323 | 0.097431321 | 0.943776191 |
| 2.75 | 5.434 | 4.427 | 1.007 | 25.330 | 0.039073413 | 0.982849604 |
| 3.00 | 3.679 | 3.324 | 0.355 | 25.685 | 0.013774639 | 0.996624243 |
| 3.25 | 2.166 | 2.109 | 0.057 | 25.742 | 0.002211703 | 0.998835946 |
| 3.50 | 0.813 | 0.789 | 0.024 | 25.766 | 0.000931243 | 0.999767189 |
| 3.75 | 0.328 | 0.326 | 0.002 | 25.768 | 0.000077604 | 0.999844793 |
| 4.00 | 0.074 | 0.072 | 0.002 | 25.770 | 0.000077604 | 0.999922396 |
| PAN | 0.031 | 0.029 | 0.002 | 25.772 | 0.000077604 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  | 25.143 | grams |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-11: 0-1.1 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-11: 1.1-2.3 ft.

| $\mathrm{PHI}$ <br> SIZE | $\begin{aligned} & \hline \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.172 | 0.000 | 0.172 | 0.172 | 0.004490627 | 0.004490627 |
| -1.25 | 0.220 | 0.000 | 0.220 | 0.392 | 0.005743825 | 0.010234453 |
| -1.00 | 0.303 | 0.000 | 0.303 | 0.695 | 0.007910814 | 0.018145267 |
| -0.75 | 0.767 | 0.000 | 0.767 | 1.462 | 0.020025064 | 0.038170331 |
| -0.50 | 1.302 | 0.000 | 1.302 | 2.764 | 0.033993003 | 0.072163334 |
| -0.25 | 2.100 | 0.074 | 2.026 | 4.790 | 0.052895410 | 0.125058744 |
| 0.00 | 2.752 | 0.196 | 2.556 | 7.346 | 0.066732808 | 0.191791551 |
| 0.25 | 4.428 | 0.802 | 3.626 | 10.972 | 0.094668686 | 0.286460237 |
| 0.50 | 5.796 | 2.114 | 3.682 | 14.654 | 0.096130750 | 0.382590987 |
| 0.75 | 8.227 | 4.257 | 3.970 | 18.624 | 0.103649940 | 0.486240927 |
| 1.00 | 12.403 | 7.819 | 4.584 | 23.208 | 0.119680434 | 0.605921362 |
| 1.25 | 14.671 | 9.938 | 4.733 | 27.941 | 0.123570571 | 0.729491933 |
| 1.50 | 11.780 | 8.742 | 3.038 | 30.979 | 0.079317007 | 0.808808939 |
| 1.75 | 14.292 | 10.842 | 3.450 | 34.429 | 0.090073625 | 0.898882565 |
| 2.00 | 8.822 | 7.172 | 1.650 | 36.079 | 0.043078690 | 0.941961255 |
| 2.25 | 5.437 | 4.342 | 1.095 | 37.174 | 0.028588585 | 0.970549841 |
| 2.50 | 2.708 | 2.015 | 0.693 | 37.867 | 0.018093050 | 0.988642891 |
| 2.75 | 1.359 | 1.097 | 0.262 | 38.129 | 0.006840374 | 0.995483265 |
| 3.00 | 0.925 | 0.825 | 0.100 | 38.229 | 0.002610830 | 0.998094094 |
| 3.25 | 0.544 | 0.478 | 0.066 | 38.295 | 0.001723148 | 0.999817242 |
| 3.50 | 0.190 | 0.189 | 0.001 | 38.296 | 0.000026108 | 0.999843350 |
| 3.75 | 0.095 | 0.093 | 0.002 | 38.298 | 0.000052217 | 0.999895567 |
| 4.00 | 0.035 | 0.033 | 0.002 | 38.300 | 0.000052217 | 0.999947783 |
| PAN | 0.031 | 0.029 | 0.002 | 38.302 | 0.000052217 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 99.359 38.302 38.55\% | grams <br> grams |  |



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-11: 2.3-3.2 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.067 | 0.000 | 0.067 | 0.067 | 0.008414971 | 0.008414971 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.067 | 0.000000000 | 0.008414971 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.067 | 0.000000000 | 0.008414971 |
| -1.25 | 0.044 | 0.008 | 0.036 | 0.103 | 0.004521477 | 0.012936448 |
| -1.00 | 0.069 | 0.000 | 0.069 | 0.172 | 0.008666164 | 0.021602612 |
| -0.75 | 0.107 | 0.033 | 0.074 | 0.246 | 0.009294147 | 0.030896760 |
| -0.50 | 0.338 | 0.101 | 0.237 | 0.483 | 0.029766390 | 0.060663150 |
| -0.25 | 0.446 | 0.215 | 0.231 | 0.714 | 0.029012811 | 0.089675961 |
| 0.00 | 0.663 | 0.482 | 0.181 | 0.895 | 0.022732982 | 0.112408942 |
| 0.25 | 1.226 | 0.953 | 0.273 | 1.168 | 0.034287867 | 0.146696810 |
| 0.50 | 2.178 | 1.910 | 0.268 | 1.436 | 0.033659884 | 0.180356694 |
| 0.75 | 3.918 | 3.570 | 0.348 | 1.784 | 0.043707611 | 0.224064305 |
| 1.00 | 7.893 | 7.463 | 0.430 | 2.214 | 0.054006531 | 0.278070836 |
| 1.25 | 14.349 | 13.043 | 1.306 | 3.520 | 0.164029138 | 0.442099975 |
| 1.50 | 14.733 | 13.649 | 1.084 | 4.604 | 0.136146697 | 0.578246672 |
| 1.75 | 22.433 | 20.628 | 1.805 | 6.409 | 0.226701834 | 0.804948505 |
| 2.00 | 14.732 | 13.768 | 0.964 | 7.373 | 0.121075107 | 0.926023612 |
| 2.25 | 8.371 | 7.993 | 0.378 | 7.751 | 0.047475509 | 0.973499121 |
| 2.50 | 4.097 | 3.979 | 0.118 | 7.869 | 0.014820397 | 0.988319518 |
| 2.75 | 2.129 | 2.048 | 0.081 | 7.950 | 0.010173323 | 0.998492841 |
| 3.00 | 1.218 | 1.216 | 0.002 | 7.952 | 0.000251193 | 0.998744034 |
| 3.25 | 0.627 | 0.625 | 0.002 | 7.954 | 0.000251193 | 0.998995227 |
| 3.50 | 0.146 | 0.144 | 0.002 | 7.956 | 0.000251193 | 0.999246420 |
| 3.75 | 0.071 | 0.069 | 0.002 | 7.958 | 0.000251193 | 0.999497614 |
| 4.00 | 0.028 | 0.026 | 0.002 | 7.960 | 0.000251193 | 0.999748807 |
| PAN | 0.030 | 0.028 | 0.002 | 7.962 | 0.000251193 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-11: 3.2-4.6 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 3.463 | 0.000 | 3.463 | 3.463 | 0.063795295 | 0.063795295 |
| -1.75 | 1.912 | 0.000 | 1.912 | 5.375 | 0.035222814 | 0.099018109 |
| -1.50 | 2.256 | 0.000 | 2.256 | 7.631 | 0.041559973 | 0.140578082 |
| -1.25 | 2.520 | 0.000 | 2.520 | 10.151 | 0.046423374 | 0.187001455 |
| -1.00 | 2.636 | 0.000 | 2.636 | 12.787 | 0.048560323 | 0.235561778 |
| -0.75 | 2.978 | 0.000 | 2.978 | 15.765 | 0.054860638 | 0.290422416 |
| -0.50 | 3.240 | 0.088 | 3.152 | 18.917 | 0.058066061 | 0.348488477 |
| -0.25 | 3.064 | 0.141 | 2.923 | 21.840 | 0.053847429 | 0.402335906 |
| 0.00 | 2.913 | 0.346 | 2.567 | 24.407 | 0.047289207 | 0.449625113 |
| 0.25 | 3.583 | 0.698 | 2.885 | 27.292 | 0.053147394 | 0.502772507 |
| 0.50 | 4.091 | 1.281 | 2.810 | 30.102 | 0.051765746 | 0.554538253 |
| 0.75 | 5.459 | 2.642 | 2.817 | 32.919 | 0.051894700 | 0.606432953 |
| 1.00 | 9.781 | 6.127 | 3.654 | 36.573 | 0.067313892 | 0.673746845 |
| 1.25 | 14.789 | 10.101 | 4.688 | 41.261 | 0.086362213 | 0.760109058 |
| 1.50 | 13.414 | 10.115 | 3.299 | 44.560 | 0.060774091 | 0.820883149 |
| 1.75 | 17.836 | 13.820 | 4.016 | 48.576 | 0.073982647 | 0.894865796 |
| 2.00 | 12.298 | 9.937 | 2.361 | 50.937 | 0.043494280 | 0.938360076 |
| 2.25 | 8.368 | 6.777 | 1.591 | 52.528 | 0.029309360 | 0.967669436 |
| 2.50 | 4.326 | 3.306 | 1.020 | 53.548 | 0.018790413 | 0.986459849 |
| 2.75 | 2.026 | 1.581 | 0.445 | 53.993 | 0.008197778 | 0.994657628 |
| 3.00 | 1.330 | 1.151 | 0.179 | 54.172 | 0.003297533 | 0.997955161 |
| 3.25 | 0.928 | 0.839 | 0.089 | 54.261 | 0.001639556 | 0.999594717 |
| 3.50 | 0.366 | 0.350 | 0.016 | 54.277 | 0.000294752 | 0.999889468 |
| 3.75 | 0.208 | 0.206 | 0.002 | 54.279 | 0.000036844 | 0.999926312 |
| 4.00 | 0.062 | 0.060 | 0.002 | 54.281 | 0.000036844 | 0.999963156 |
| PAN | 0.046 | 0.044 | 0.002 | 54.283 | 0.000036844 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-11: 4.6-5.8 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.813 | 0.000 | 0.813 | 0.813 | 0.010989457 | 0.010989457 |
| -1.75 | 0.669 | 0.000 | 0.669 | 1.482 | 0.009042985 | 0.020032441 |
| -1.50 | 1.249 | 0.000 | 1.249 | 2.731 | 0.016882941 | 0.036915383 |
| -1.25 | 2.569 | 0.000 | 2.569 | 5.300 | 0.034725602 | 0.071640984 |
| -1.00 | 4.008 | 0.000 | 4.008 | 9.308 | 0.054176805 | 0.125817789 |
| -0.75 | 5.810 | 0.009 | 5.801 | 15.109 | 0.078413085 | 0.204230873 |
| -0.50 | 7.773 | 0.108 | 7.665 | 22.774 | 0.103609084 | 0.307839957 |
| -0.25 | 9.489 | 0.477 | 9.012 | 31.786 | 0.121816707 | 0.429656664 |
| 0.00 | 9.550 | 1.247 | 8.303 | 40.089 | 0.112233036 | 0.541889700 |
| 0.25 | 10.237 | 2.161 | 8.076 | 48.165 | 0.109164639 | 0.651054339 |
| 0.50 | 8.643 | 2.776 | 5.867 | 54.032 | 0.079305218 | 0.730359557 |
| 0.75 | 7.964 | 3.170 | 4.794 | 58.826 | 0.064801298 | 0.795160854 |
| 1.00 | 8.206 | 4.158 | 4.048 | 62.874 | 0.054717491 | 0.849878345 |
| 1.25 | 7.397 | 4.172 | 3.225 | 66.099 | 0.043592863 | 0.893471208 |
| 1.50 | 5.463 | 3.600 | 1.863 | 67.962 | 0.025182482 | 0.918653690 |
| 1.75 | 6.863 | 4.899 | 1.964 | 69.926 | 0.026547716 | 0.945201406 |
| 2.00 | 5.426 | 4.186 | 1.240 | 71.166 | 0.016761287 | 0.961962693 |
| 2.25 | 4.548 | 3.504 | 1.044 | 72.210 | 0.014111922 | 0.976074615 |
| 2.50 | 3.120 | 2.303 | 0.817 | 73.027 | 0.011043525 | 0.987118140 |
| 2.75 | 1.967 | 1.497 | 0.470 | 73.497 | 0.006353068 | 0.993471208 |
| 3.00 | 1.449 | 1.223 | 0.226 | 73.723 | 0.003054880 | 0.996526088 |
| 3.25 | 1.033 | 0.894 | 0.139 | 73.862 | 0.001878886 | 0.998404974 |
| 3.50 | 0.438 | 0.382 | 0.056 | 73.918 | 0.000756961 | 0.999161936 |
| 3.75 | 0.228 | 0.193 | 0.035 | 73.953 | 0.000473101 | 0.999635036 |
| 4.00 | 0.075 | 0.062 | 0.013 | 73.966 | 0.000175723 | 0.999810760 |
| PAN | 0.086 | 0.072 | 0.014 | 73.980 | 0.000189240 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-11: 4.6-5.8 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-11: 5.8-6.6 ft.

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | $\begin{gathered} \text { DIGESTED } \\ \text { WT. } \end{gathered}$ | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.193 | 0.000 | 0.193 | 0.193 | 0.006762913 | 0.006762913 |
| -1.50 | 0.052 | 0.000 | 0.052 | 0.245 | 0.001822132 | 0.008585045 |
| -1.25 | 0.172 | 0.000 | 0.172 | 0.417 | 0.006027052 | 0.014612096 |
| -1.00 | 0.244 | 0.000 | 0.244 | 0.661 | 0.008550004 | 0.023162100 |
| -0.75 | 0.273 | 0.000 | 0.273 | 0.934 | 0.009566192 | 0.032728292 |
| -0.50 | 0.455 | 0.000 | 0.455 | 1.389 | 0.015943654 | 0.048671946 |
| -0.25 | 0.577 | 0.023 | 0.554 | 1.943 | 0.019412713 | 0.068084659 |
| 0.00 | 0.816 | 0.087 | 0.729 | 2.672 | 0.025544888 | 0.093629547 |
| 0.25 | 1.152 | 0.186 | 0.966 | 3.638 | 0.033849604 | 0.127479151 |
| 0.50 | 1.565 | 0.423 | 1.142 | 4.780 | 0.040016820 | 0.167495970 |
| 0.75 | 2.233 | 1.034 | 1.199 | 5.979 | 0.042014157 | 0.209510127 |
| 1.00 | 4.042 | 2.352 | 1.690 | 7.669 | 0.059219287 | 0.268729413 |
| 1.25 | 5.686 | 3.651 | 2.035 | 9.704 | 0.071308431 | 0.340037844 |
| 1.50 | 5.961 | 4.186 | 1.775 | 11.479 | 0.062197771 | 0.402235616 |
| 1.75 | 9.873 | 7.300 | 2.573 | 14.052 | 0.090160488 | 0.492396103 |
| 2.00 | 10.533 | 8.157 | 2.376 | 16.428 | 0.083257411 | 0.575653515 |
| 2.25 | 12.594 | 9.935 | 2.659 | 19.087 | 0.093174014 | 0.668827528 |
| 2.50 | 12.099 | 9.401 | 2.698 | 21.785 | 0.094540613 | 0.763368141 |
| 2.75 | 10.229 | 8.103 | 2.126 | 23.911 | 0.074497162 | 0.837865302 |
| 3.00 | 10.177 | 8.642 | 1.535 | 25.446 | 0.053787932 | 0.891653234 |
| 3.25 | 8.396 | 6.965 | 1.431 | 26.877 | 0.050143668 | 0.941796902 |
| 3.50 | 4.461 | 3.746 | 0.715 | 27.592 | 0.025054314 | 0.966851216 |
| 3.75 | 2.034 | 1.541 | 0.493 | 28.085 | 0.017275212 | 0.984126428 |
| 4.00 | 0.499 | 0.298 | 0.201 | 28.286 | 0.007043241 | 0.991169669 |
| PAN | 0.501 | 0.249 | 0.252 | 28.538 | 0.008830331 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | $\begin{gathered} 104.817 \\ 28.538 \\ 27.23 \% \end{gathered}$ | grams <br> grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-11: 5.8-6.6 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-12: 0-1.0 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.027 | 0.000 | 0.027 | 0.027 | 0.001809045 | 0.001809045 |
| -0.50 | 0.040 | 0.017 | 0.023 | 0.050 | 0.001541039 | 0.003350084 |
| -0.25 | 0.156 | 0.008 | 0.148 | 0.198 | 0.009916248 | 0.013266332 |
| 0.00 | 0.237 | 0.023 | 0.214 | 0.412 | 0.014338358 | 0.027604690 |
| 0.25 | 0.474 | 0.069 | 0.405 | 0.817 | 0.027135678 | 0.054740369 |
| 0.50 | 0.838 | 0.200 | 0.638 | 1.455 | 0.042747069 | 0.097487437 |
| 0.75 | 1.308 | 0.612 | 0.696 | 2.151 | 0.046633166 | 0.144120603 |
| 1.00 | 2.912 | 1.798 | 1.114 | 3.265 | 0.074639866 | 0.218760469 |
| 1.25 | 5.039 | 3.640 | 1.399 | 4.664 | 0.093735343 | 0.312495812 |
| 1.50 | 6.558 | 5.159 | 1.399 | 6.063 | 0.093735343 | 0.406231156 |
| 1.75 | 13.942 | 11.025 | 2.917 | 8.980 | 0.195443886 | 0.601675042 |
| 2.00 | 14.763 | 11.840 | 2.923 | 11.903 | 0.195845896 | 0.797520938 |
| 2.25 | 10.508 | 8.662 | 1.846 | 13.749 | 0.123685092 | 0.921206030 |
| 2.50 | 3.652 | 2.708 | 0.944 | 14.693 | 0.063249581 | 0.984455611 |
| 2.75 | 0.612 | 0.404 | 0.208 | 14.901 | 0.013936348 | 0.998391960 |
| 3.00 | 0.192 | 0.179 | 0.013 | 14.914 | 0.000871022 | 0.999262982 |
| 3.25 | 0.068 | 0.066 | 0.002 | 14.916 | 0.000134003 | 0.999396985 |
| 3.50 | 0.027 | 0.025 | 0.002 | 14.918 | 0.000134003 | 0.999530988 |
| 3.75 | 0.007 | 0.005 | 0.002 | 14.920 | 0.000134003 | 0.999664992 |
| 4.00 | 0.005 | 0.003 | 0.002 | 14.922 | 0.000134003 | 0.999798995 |
| PAN | 0.008 | 0.005 | 0.003 | 14.925 | 0.000201005 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-12: 1.0-1.2 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.042 | 0.000 | 0.042 | 0.042 | 0.002228826 | 0.002228826 |
| -0.75 | 0.099 | 0.000 | 0.099 | 0.141 | 0.005253662 | 0.007482488 |
| -0.50 | 0.228 | 0.000 | 0.228 | 0.369 | 0.012099342 | 0.019581830 |
| -0.25 | 0.298 | 0.009 | 0.289 | 0.658 | 0.015336447 | 0.034918276 |
| 0.00 | 0.564 | 0.016 | 0.548 | 1.206 | 0.029080875 | 0.063999151 |
| 0.25 | 1.039 | 0.131 | 0.908 | 2.114 | 0.048185099 | 0.112184250 |
| 0.50 | 1.675 | 0.385 | 1.290 | 3.404 | 0.068456803 | 0.180641053 |
| 0.75 | 2.490 | 1.009 | 1.481 | 4.885 | 0.078592655 | 0.259233708 |
| 1.00 | 4.617 | 2.709 | 1.908 | 6.793 | 0.101252388 | 0.360486096 |
| 1.25 | 7.459 | 4.982 | 2.477 | 9.270 | 0.131447676 | 0.491933772 |
| 1.50 | 8.305 | 6.419 | 1.886 | 11.156 | 0.100084908 | 0.592018680 |
| 1.75 | 13.787 | 10.622 | 3.165 | 14.321 | 0.167957971 | 0.759976650 |
| 2.00 | 10.537 | 8.224 | 2.313 | 16.634 | 0.122744640 | 0.882721291 |
| 2.25 | 5.915 | 4.400 | 1.515 | 18.149 | 0.080396943 | 0.963118234 |
| 2.50 | 1.702 | 1.085 | 0.617 | 18.766 | 0.032742518 | 0.995860751 |
| 2.75 | 0.406 | 0.340 | 0.066 | 18.832 | 0.003502441 | 0.999363193 |
| 3.00 | 0.244 | 0.242 | 0.002 | 18.834 | 0.000106135 | 0.999469327 |
| 3.25 | 0.127 | 0.125 | 0.002 | 18.836 | 0.000106135 | 0.999575462 |
| 3.50 | 0.042 | 0.040 | 0.002 | 18.838 | 0.000106135 | 0.999681596 |
| 3.75 | 0.012 | 0.010 | 0.002 | 18.840 | 0.000106135 | 0.999787731 |
| 4.00 | 0.004 | 0.002 | 0.002 | 18.842 | 0.000106135 | 0.999893865 |
| PAN | 0.009 | 0.007 | 0.002 | 18.844 | 0.000106135 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-12: 1.0-1.2 ft.


CARBONATE GRAIN SIZE DISTRIBUTION



CARBONATE GRAIN SIZE DISTRIBUTION

## CORE IR-12: 2.0-3.3 ft.

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3WT } \\ \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.247 | 0.000 | 0.247 | 0.247 | 0.008763838 | 0.008763838 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.247 | 0.000000000 | 0.008763838 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.247 | 0.000000000 | 0.008763838 |
| -1.25 | 0.164 | 0.000 | 0.164 | 0.411 | 0.005818904 | 0.014582742 |
| -1.00 | 0.500 | 0.000 | 0.500 | 0.911 | 0.017740562 | 0.032323304 |
| -0.75 | 0.795 | 0.000 | 0.795 | 1.706 | 0.028207494 | 0.060530798 |
| -0.50 | 1.667 | 0.023 | 1.644 | 3.350 | 0.058330968 | 0.118861766 |
| -0.25 | 2.403 | 0.150 | 2.253 | 5.603 | 0.079938972 | 0.198800738 |
| 0.00 | 2.971 | 0.414 | 2.557 | 8.160 | 0.090725234 | 0.289525972 |
| 0.25 | 4.078 | 1.104 | 2.974 | 11.134 | 0.105520863 | 0.395046835 |
| , 0.50 | 4.389 | 1.741 | 2.648 | 13.782 | 0.093954016 | 0.489000852 |
| 0.75 | 5.159 | 2.715 | 2.444 | 16.226 | 0.086715867 | 0.575716719 |
| 1.00 | 7.358 | 4.745 | 2.613 | 18.839 | 0.092712177 | 0.668428896 |
| 1.25 | 9.030 | 6.080 | 2.950 | 21.789 | 0.104669316 | 0.773098212 |
| 1.50 | 7.927 | 6.009 | 1.918 | 23.707 | 0.068052796 | 0.841151008 |
| 1.75 | 9.752 | 7.669 | 2.083 | 25.790 | 0.073907181 | 0.915058189 |
| 2.00 | 5.894 | 4.677 | 1.217 | 27.007 | 0.043180528 | 0.958238717 |
| 2.25 | 2.901 | 2.149 | 0.752 | 27.759 | 0.026681805 | 0.984920522 |
| 2.50 | 0.831 | 0.587 | 0.244 | 28.003 | 0.008657394 | 0.993577917 |
| 2.75 | 0.264 | 0.196 | 0.068 | 28.071 | 0.002412716 | 0.995990633 |
| 3.00 | 0.176 | 0.147 | 0.029 | 28.100 | 0.001028953 | 0.997019586 |
| 3.25 | 0.129 | 0.111 | 0.018 | 28.118 | 0.000638660 | 0.997658246 |
| 3.50 | 0.085 | 0.070 | 0.015 | 28.133 | 0.000532217 | 0.998190463 |
| 3.75 | 0.073 | 0.057 | 0.016 | 28.149 | 0.000567698 | 0.998758161 |
| 4.00 | 0.041 | 0.029 | 0.012 | 28.161 | 0.000425773 | 0.999183934 |
| PAN | 0.062 | 0.039 | 0.023 | 28.184 | 0.000816066 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | 66.896 28.184 42.13\% | grams <br> grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-12: 2.0-3.3 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-12: $3.3-4.6 \mathrm{ft}$.

| $\begin{aligned} & \mathrm{PHI} \\ & \text { SIZE } \end{aligned}$ | $\begin{gathered} \hline \text { TOTAL } \\ \text { WT. } \end{gathered}$ | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.120 | 0.000 | 0.120 | 0.120 | 0.003836440 | 0.003836440 |
| -1.75 | 0.068 | 0.000 | 0.068 | 0.188 | 0.002173983 | 0.006010422 |
| -1.50 | 0.518 | 0.000 | 0.518 | 0.706 | 0.016560632 | 0.022571054 |
| -1.25 | 0.587 | 0.000 | 0.587 | 1.293 | 0.018766585 | 0.041337639 |
| -1.00 | 0.932 | 0.000 | 0.932 | 2.225 | 0.029796349 | 0.071133988 |
| -0.75 | 1.445 | 0.000 | 1.445 | 3.670 | 0.046197129 | 0.117331117 |
| -0.50 | 2.442 | 0.057 | 2.385 | 6.055 | 0.076249241 | 0.193580357 |
| -0.25 | 2.884 | 0.188 | 2.696 | 8.751 | 0.086192014 | 0.279772371 |
| 0.00 | 3.235 | 0.415 | 2.820 | 11.571 | 0.090156335 | 0.369928706 |
| 0.25 | 4.156 | 1.026 | 3.130 | 14.701 | 0.100067138 | 0.469995844 |
| 0.50 | 4.422 | 1.611 | 2.811 | 17.512 | 0.089868602 | 0.559864446 |
| 0.75 | 5.066 | 2.563 | 2.503 | 20.015 | 0.080021740 | 0.639886186 |
| 1.00 | 7.100 | 4.450 | 2.650 | 22.665 | 0.084721379 | 0.724607564 |
| 1.25 | 7.997 | 5.638 | 2.359 | 25.024 | 0.075418012 | 0.800025576 |
| 1.50 | 7.301 | 5.503 | 1.798 | 26.822 | 0.057482656 | 0.857508232 |
| 1.75 | 8.971 | 7.039 | 1.932 | 28.754 | 0.061766681 | 0.919274913 |
| 2.00 | 5.787 | 4.609 | 1.178 | 29.932 | 0.037661051 | 0.956935963 |
| 2.25 | 3.131 | 2.283 | 0.848 | 30.780 | 0.027110841 | 0.984046805 |
| 2.50 | 1.027 | 0.675 | 0.352 | 31.132 | 0.011253557 | 0.995300361 |
| 2.75 | 0.320 | 0.237 | 0.083 | 31.215 | 0.002653538 | 0.997953899 |
| 3.00 | 0.188 | 0.157 | 0.031 | 31.246 | 0.000991080 | 0.998944979 |
| 3.25 | 0.123 | 0.109 | 0.014 | 31.260 | 0.000447585 | 0.999392564 |
| 3.50 | 0.067 | 0.060 | 0.007 | 31.267 | 0.000223792 | 0.999616356 |
| 3.75 | 0.055 | 0.052 | 0.003 | 31.270 | 0.000095911 | 0.999712267 |
| 4.00 | 0.027 | 0.024 | 0.003 | 31.273 | 0.000095911 | 0.999808178 |
| PAN | 0.040 | 0.034 | 0.006 | 31.279 | 0.000191822 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | $\begin{aligned} & 68.009 \\ & 31.279 \\ & 45.99 \% \end{aligned}$ | grams grams |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-13: 0-0.6 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT. | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.204 | 0.000 | 0.204 | 0.204 | 0.006504272 | 0.006504272 |
| -1.00 | 0.135 | 0.000 | 0.135 | 0.339 | 0.004304298 | 0.010808570 |
| -0.75 | 0.220 | 0.000 | 0.220 | 0.559 | 0.007014411 | 0.017822982 |
| -0.50 | 0.620 | 0.010 | 0.610 | 1.169 | 0.019449050 | 0.037272032 |
| -0.25 | 1.191 | 0.033 | 1.158 | 2.327 | 0.036921311 | 0.074193343 |
| 0.00 | 1.949 | 0.194 | 1.755 | 4.082 | 0.055955873 | 0.130149216 |
| 0.25 | 3.609 | 0.678 | 2.931 | 7.013 | 0.093451090 | 0.223600306 |
| 0.50 | 4.959 | 1.678 | 3.281 | 10.294 | 0.104610381 | 0.328210687 |
| 0.75 | 7.127 | 3.278 | 3.849 | 14.143 | 0.122720316 | 0.450931004 |
| 1.00 | 10.647 | 6.367 | 4.280 | 18.423 | 0.136462186 | 0.587393190 |
| 1.25 | 12.722 | 8.271 | 4.451 | 22.874 | 0.141914297 | 0.729307486 |
| 1.50 | 9.407 | 7.307 | 2.100 | 24.974 | 0.066955745 | 0.796263232 |
| 1.75 | 11.977 | 9.332 | 2.645 | 27.619 | 0.084332356 | 0.880595587 |
| 2.00 | 9.292 | 7.427 | 1.865 | 29.484 | 0.059463079 | 0.940058666 |
| 2.25 | 6.324 | 5.120 | 1.204 | 30.688 | 0.038387961 | 0.978446627 |
| 2.50 | 2.401 | 1.804 | 0.597 | 31.285 | 0.019034562 | 0.997481189 |
| 2.75 | 0.517 | 0.450 | 0.067 | 31.352 | 0.002136207 | 0.999617396 |
| 3.00 | 0.187 | 0.185 | 0.002 | 31.354 | 0.000063767 | 0.999681163 |
| 3.25 | 0.088 | 0.086 | 0.002 | 31.356 | 0.000063767 | 0.999744930 |
| 3.50 | 0.053 | 0.051 | 0.002 | 31.358 | 0.000063767 | 0.999808698 |
| 3.75 | 0.042 | 0.040 | 0.002 | 31.360 | 0.000063767 | 0.999872465 |
| 4.00 | 0.012 | 0.010 | 0.002 | 31.362 | 0.000063767 | 0.999936233 |
| PAN | 0.005 | 0.003 | 0.002 | 31.364 | 0.000063767 | 1.0 |
|  |  |  |  |  |  |  |


| TOTAL WT. | 83.688 | grams |
| :--- | :--- | :--- |
| CO3 WT | 31.364 | grams |
| \% CARBONATE | $37.48 \%$ |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 0-0.6 ft.


| CARBONATE GRAIN SIZE DISTRIBUTION |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORE IR-13: 0.6-0.9 ft. |  |  |  |  |  |  |
| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| SIZE - | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 2.252 | 0.000 | 2.252 | 2.252 | 0.034711839 | 0.034711839 |
| -1.75 | 1.817 | 0.000 | 1.817 | 4.069 | 0.028006844 | 0.062718683 |
| -1.50 | 2.060 | 0.000 | 2.060 | 6.129 | 0.031752393 | 0.094471076 |
| -1.25 | 3.389 | 0.000 | 3.389 | 9.518 | 0.052237311 | 0.146708387 |
| -1.00 | 4.970 | 0.007 | 4.963 | 14.481 | 0.076498605 | 0.223206992 |
| -0.75 | 6.899 | 0.033 | 6.866 | 21.347 | 0.105831034 | 0.329038026 |
| -0.50 | 8.819 | 0.147 | 8.672 | 30.019 | 0.133668326 | 0.462706352 |
| -0.25 | 9.004 | 0.528 | 8.476 | 38.495 | 0.130647225 | 0.593353577 |
| 0.00 | 7.894 | 1.005 | 6.889 | 45.384 | 0.106185551 | 0.699539128 |
| 0.25 | 7.443 | 1.493 | 5.950 | 51.334 | 0.091712009 | 0.791251137 |
| 0.50 | 5.482 | 1.794 | 3.688 | 55.022 | 0.056846032 | 0.848097168 |
| 0.75 | 4.522 | 1.898 | 2.624 | 57.646 | 0.040445767 | 0.888542935 |
| 1.00 | 4.210 | 2.278 | 1.932 | 59.578 | 0.029779429 | 0.918322364 |
| 1.25 | 3.652 | 2.310 | 1.342 | 60.920 | 0.020685297 | 0.939007661 |
| 1.50 | 2.961 | 2.149 | 0.812 | 61.732 | 0.012515992 | 0.951523652 |
| 1.75 | 4.054 | 2.951 | 1.103 | 62.835 | 0.017001403 | 0.968525055 |
| 2.00 | 3.687 | 2.985 | 0.702 | 63.537 | 0.010820476 | 0.979345531 |
| 2.25 | 3.079 | 2.398 | 0.681 | 64.218 | 0.010496786 | 0.989842317 |
| 2.50 | 1.734 | 1.288 | 0.446 | 64.664 | 0.006874547 | 0.996716864 |
| 2.75 | 0.756 | 0.555 | 0.201 | 64.865 | 0.003098170 | 0.999815035 |
| 3.00 | 0.370 | 0.368 | 0.002 | 64.867 | 0.000030828 | 0.999845862 |
| 3.25 | 0.192 | 0.190 | 0.002 | 64.869 | 0.000030828 | 0.999876690 |
| 3.50 | 0.093 | 0.091 | 0.002 | 64.871 | 0.000030828 | 0.999907517 |
| 3.75 | 0.068 | 0.066 | 0.002 | 64.873 | 0.000030828 | 0.999938345 |
| 4.00 | 0.025 | 0.023 | 0.002 | 64.875 | 0.000030828 | 0.999969172 |
| PAN | 0.021 | 0.019 | 0.002 | 64.877 | 0.000030828 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | 89.453 64.877 72.53\% | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 0.6-0.9 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-13: 0.9-1.1 ft.

| PHI SIZE | TOTAL WT. | DIGESTED <br> WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3WT. } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.055 | 0.000 | 0.055 | 0.055 | 0.002554931 | 0.002554931 |
| -1.25 | 0.038 | 0.000 | 0.038 | 0.093 | 0.001765225 | 0.004320156 |
| -1.00 | 0.127 | 0.000 | 0.127 | 0.220 | 0.005899568 | 0.010219724 |
| -0.75 | 0.117 | 0.000 | 0.117 | 0.337 | 0.005435035 | 0.015654759 |
| -0.50 | 0.168 | 0.000 | 0.168 | 0.505 | 0.007804153 | 0.023458912 |
| -0.25 | 0.288 | 0.012 | 0.276 | 0.781 | 0.012821108 | 0.036280020 |
| 0.00 | 0.263 | 0.011 | 0.252 | 1.033 | 0.011706229 | 0.047986250 |
| 0.25 | 0.489 | 0.051 | 0.438 | 1.471 | 0.020346542 | 0.068332791 |
| 0.50 | 0.727 | 0.145 | 0.582 | 2.053 | 0.027035815 | 0.095368607 |
| 0.75 | 1.403 | 0.509 | 0.894 | 2.947 | 0.041529242 | 0.136897849 |
| 1.00 | 3.432 | 2.005 | 1.427 | 4.374 | 0.066288847 | 0.203186696 |
| 1.25 | 7.792 | 5.273 | 2.519 | 6.893 | 0.117015841 | 0.320202536 |
| 1.50 | 10.398 | 7.846 | 2.552 | 9.445 | 0.118548799 | 0.438751336 |
| 1.75 | 18.807 | 14.450 | 4.357 | 13.802 | 0.202396990 | 0.641148325 |
| 2.00 | 16.656 | 13.267 | 3.389 | 17.191 | 0.157430204 | 0.798578529 |
| 2.25 | 12.345 | 9.925 | 2.420 | 19.611 | 0.112416965 | 0.910995494 |
| 2.50 | 5.724 | 4.442 | 1.282 | 20.893 | 0.059553119 | 0.970548613 |
| 2.75 | 1.802 | 1.357 | 0.445 | 21.338 | 0.020671715 | 0.991220328 |
| 3.00 | 0.694 | 0.559 | 0.135 | 21.473 | 0.006271194 | 0.997491522 |
| 3.25 | 0.314 | 0.270 | 0.044 | 21.517 | 0.002043945 | 0.999535467 |
| 3.50 | 0.111 | 0.107 | 0.004 | 21.521 | 0.000185813 | 0.999721280 |
| 3.75 | 0.064 | 0.062 | 0.002 | 21.523 | 0.000092907 | 0.999814187 |
| 4.00 | 0.018 | 0.016 | 0.002 | 21.525 | 0.000092907 | 0.999907093 |
| PAN | 0.014 | 0.012 | 0.002 | 21.527 | 0.000092907 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | $\begin{aligned} & 81.846 \\ & 21.527 \\ & 26.30 \% \end{aligned}$ | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 0.9-1.1 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-13: 1.1-1.2 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 1.1-1.2 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-13: 1.2-3.3 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.00000000 |
| -0.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.00000000 |
| -0.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.008 | 0.000 | 0.008 | 0.008 | 0.000381116 | 0.000381116 |
| 0.00 | 0.030 | 0.000 | 0.030 | 0.038 | 0.001429184 | 0.001810300 |
| 0.25 | 0.098 | 0.003 | 0.095 | 0.133 | 0.004525749 | 0.006336049 |
| 0.50 | 0.358 | 0.035 | 0.323 | 0.456 | 0.015387547 | 0.021723596 |
| 0.75 | 0.952 | 0.298 | 0.654 | 1.110 | 0.031156210 | 0.052879806 |
| 1.00 | 3.170 | 1.741 | 1.429 | 2.539 | 0.068076795 | 0.120956600 |
| 1.25 | 7.742 | 5.189 | 2.553 | 5.092 | 0.121623553 | 0.242580153 |
| 1.50 | 10.940 | 7.946 | 2.994 | 8.086 | 0.142632557 | 0.385212710 |
| 1.75 | 19.935 | 15.044 | 4.891 | 12.977 | 0.233004621 | 0.618217331 |
| 2.00 | 17.097 | 13.373 | 3.724 | 16.701 | 0.177409366 | 0.795626697 |
| 2.25 | 11.478 | 9.036 | 2.442 | 19.143 | 0.11633572 | 0.911962270 |
| 2.50 | 4.936 | 3.718 | 1.218 | 20.361 | 0.058024868 | 0.969987137 |
| 2.75 | 1.696 | 1.269 | 0.427 | 20.788 | 0.020342051 | 0.990329189 |
| 3.00 | 0.836 | 0.711 | 0.125 | 20.913 | 0.005954933 | 0.996284122 |
| 3.25 | 0.473 | 0.410 | 0.063 | 20.976 | 0.003001286 | 0.999285408 |
| 3.50 | 0.165 | 0.154 | 0.011 | 20.987 | 0.000524034 | 0.999809442 |
| 3.75 | 0.087 | 0.085 | 0.002 | 20.989 | 0.000095279 | 0.999904721 |
| 4.00 | 0.030 | 0.030 | 0.000 | 20.989 | 0.000000000 | 0.999904721 |
| PAN | 0.021 | 0.019 | 0.002 | 20.991 | 0.000095279 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  | 20.052 |
| CO3 WT |  |  |  | 26.991 | grams |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 1.2-3.3 ft.


Phi Size

# CARBONATE GRAIN SIZE DISTRIBUTION 

CORE IR-13: 3.3-4.1 ft


CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 3.3-4.1 ft


CORE IR-13: 4.1-6.4 ft.

| PHI SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3WT. } \\ \% \end{gathered}$ | $\begin{gathered} \hline \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.390 | 0.000 | 0.390 | 0.390 | 0.009757562 | 0.009757562 |
| -1.75 | 0.425 | 0.000 | 0.425 | 0.815 | 0.010633241 | 0.020390803 |
| -1.50 | 0.766 | 0.000 | 0.766 | 1.581 | 0.019164853 | 0.039555656 |
| -1.25 | 1.523 | 0.000 | 1.523 | 3.104 | 0.038104531 | 0.077660187 |
| -1.00 | 1.486 | 0.000 | 1.486 | 4.590 | 0.037178814 | 0.114839000 |
| -0.75 | 1.837 | 0.000 | 1.837 | 6.427 | 0.045960619 | 0.160799620 |
| -0.50 | 2.550 | 0.041 | 2.509 | 8.936 | 0.062773650 | 0.223573269 |
| -0.25 | 2.866 | 0.076 | 2.790 | 11.726 | 0.069804098 | 0.293377367 |
| 0.00 | 2.957 | 0.256 | 2.701 | 14.427 | 0.067577372 | 0.360954740 |
| 0.25 | 3.651 | 0.632 | 3.019 | 17.446 | 0.075533538 | 0.436488278 |
| 0.50 | 4.112 | 1.282 | 2.830 | 20.276 | 0.070804874 | 0.507293152 |
| 0.75 | 5.190 | 2.316 | 2.874 | 23.150 | 0.071905727 | 0.579198879 |
| 1.00 | 7.646 | 4.525 | 3.121 | 26.271 | 0.078085516 | 0.657284395 |
| 1.25 | 9.748 | 6.248 | 3.500 | 29.771 | 0.087567865 | 0.744852261 |
| 1.50 | 8.906 | 6.399 | 2.507 | 32.278 | 0.062723611 | 0.807575871 |
| 1.75 | 11.386 | 8.794 | 2.592 | 34.870 | 0.064850259 | 0.872426130 |
| 2.00 | 9.249 | 7.384 | 1.865 | 36.735 | 0.046661162 | 0.919087293 |
| 2.25 | 7.533 | 6.000 | 1.533 | 38.268 | 0.038354725 | 0.957442018 |
| 2.50 | 3.976 | 2.960 | 1.016 | 39.284 | 0.025419700 | 0.982861718 |
| 2.75 | 1.453 | 0.974 | 0.479 | 39.763 | 0.011984288 | 0.994846006 |
| 3.00 | 0.635 | 0.513 | 0.122 | 39.885 | 0.003052366 | 0.997898371 |
| 3.25 | 0.352 | 0.288 | 0.064 | 39.949 | 0.001601241 | 0.999499612 |
| 3.50 | 0.136 | 0.131 | 0.005 | 39.954 | 0.000125097 | 0.999624709 |
| 3.75 | 0.087 | 0.082 | 0.005 | 39.959 | 0.000125097 | 0.999749806 |
| 4.00 | 0.036 | 0.034 | 0.002 | 39.961 | 0.000050039 | 0.999799845 |
| PAN | 0.042 | 0.034 | 0.008 | 39.969 | 0.000200155 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | 88.938 <br> 39.969 <br> 44.94\% | grams grams |  |



## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-13: 6.4-7.3 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-13: 6.4-7.3 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-14: 0-0.9 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 0-0.9 ft.


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-14: 0.9-2.4 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE - | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.094 | 0.000 | 0.094 | 0.094 | 0.002289054 | 0.002289054 |
| -1.00 | 0.279 | 0.000 | 0.279 | 0.373 | 0.006794107 | 0.009083161 |
| -0.75 | 0.461 | 0.000 | 0.461 | 0.834 | 0.011226105 | 0.020309266 |
| -0.50 | 1.172 | 0.013 | 1.159 | 1.993 | 0.028223548 | 0.048532814 |
| -0.25 | 1.857 | 0.079 | 1.778 | 3.771 | 0.043297212 | 0.091830026 |
| 0.00 | 2.366 | 0.219 | 2.147 | 5.918 | 0.052282966 | 0.144112992 |
| 0.25 | 3.481 | 0.696 | 2.785 | 8.703 | 0.067819311 | 0.211932302 |
| 0.50 | 4.380 | 1.611 | 2.769 | 11.472 | 0.067429685 | 0.279361987 |
| 0.75 | 6.250 | 3.018 | 3.232 | 14.704 | 0.078704493 | 0.358066480 |
| 1.00 | 9.498 | 5.886 | 3.612 | 18.316 | 0.087958115 | 0.446024595 |
| 1.25 | 13.665 | 8.637 | 5.028 | 23.344 | 0.122440034 | 0.568464629 |
| 1.50 | 11.678 | 8.312 | 3.366 | 26.710 | 0.081967612 | 0.650432242 |
| 1.75 | 15.639 | 10.208 | 5.431 | 32.141 | 0.132253744 | 0.782685986 |
| 2.00 | 9.355 | 5.307 | 4.048 | 36.189 | 0.098575429 | 0.881261415 |
| 2.25 | 4.616 | 1.716 | 2.900 | 39.089 | 0.070619749 | 0.951881164 |
| 2.50 | 1.506 | 0.399 | 1.107 | 40.196 | 0.026957263 | 0.978838427 |
| 2.75 | 0.495 | 0.124 | 0.371 | 40.567 | 0.009034458 | 0.987872884 |
| 3.00 | 0.300 | 0.075 | 0.225 | 40.792 | 0.005479118 | 0.993352003 |
| 3.25 | 0.162 | 0.028 | 0.134 | 40.926 | 0.003263119 | 0.996615122 |
| 3.50 | 0.085 | 0.015 | 0.070 | 40.996 | 0.001704615 | 0.998319737 |
| 3.75 | 0.041 | 0.008 | 0.033 | 41.029 | 0.000803604 | 0.999123341 |
| 4.00 | 0.015 | 0.000 | 0.015 | 41.044 | 0.000365275 | 0.999488616 |
| PAN | 0.021 | 0.000 | 0.021 | 41.065 | 0.000511384 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | 87.416 <br> 41.065 <br> 46.98\% | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 0.9-2.4 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE IR-14: 2.4-3.0 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 2.4-3.0 ft.


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-14: 3.0-3.4 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 3.0-3.4 ft.


CORE IR-14: 3.4-3.7 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE - | WT. | WT. | WT. | WT. | \% | WT. \% |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.064 | 0.000 | 0.064 | 0.064 | 0.002163624 | 0.002163624 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.064 | 0.000000000 | 0.002163624 |
| -1.25 | 0.023 | 0.000 | 0.023 | 0.087 | 0.000777552 | 0.002941176 |
| -1.00 | 0.126 | 0.000 | 0.126 | 0.213 | 0.004259635 | 0.007200811 |
| -0.75 | 0.239 | 0.000 | 0.239 | 0.452 | 0.008079784 | 0.015280595 |
| -0.50 | 0.450 | 0.000 | 0.450 | 0.902 | 0.015212982 | 0.030493577 |
| -0.25 | 0.741 | 0.000 | 0.741 | 1.643 | 0.025050710 | 0.055544287 |
| 0.00 | 1.150 | 0.075 | 1.075 | 2.718 | 0.036342123 | 0.091886410 |
| 0.25 | 1.939 | 0.265 | 1.674 | 4.392 | 0.056592292 | 0.148478702 |
| 0.50 | 2.950 | 0.826 | 2.124 | 6.516 | 0.071805274 | 0.220283976 |
| 0.75 | 4.693 | 2.263 | 2.430 | 8.946 | 0.082150101 | 0.302434077 |
| 1.00 | 8.647 | 5.462 | 3.185 | 12.131 | 0.107674104 | 0.410108181 |
| 1.25 | 15.170 | 9.251 | 5.919 | 18.050 | 0.200101420 | 0.610209601 |
| 1.50 | 12.063 | 9.514 | 2.549 | 20.599 | 0.086173090 | 0.696382691 |
| 1.75 | 16.730 | 11.970 | 4.760 | 25.359 | 0.160919540 | 0.857302231 |
| 2.00 | 9.462 | 7.068 | 2.394 | 27.753 | 0.080933063 | 0.938235294 |
| 2.25 | 5.370 | 4.359 | 1.011 | 28.764 | 0.034178499 | 0.972413793 |
| 2.50 | 3.834 | 3.413 | 0.421 | 29.185 | 0.014232590 | 0.986646383 |
| 2.75 | 2.294 | 2.123 | 0.171 | 29.356 | 0.005780933 | 0.992427316 |
| 3.00 | 0.966 | 0.887 | 0.079 | 29.435 | 0.002670723 | 0.995098039 |
| 3.25 | 0.271 | 0.216 | 0.055 | 29.490 | 0.001859364 | 0.996957404 |
| 3.50 | 0.055 | 0.034 | 0.021 | 29.511 | 0.000709939 | 0.997667343 |
| 3.75 | 0.030 | 0.000 | 0.030 | 29.541 | 0.001014199 | 0.998681542 |
| 4.00 | 0.015 | 0.000 | 0.015 | 29.556 | 0.000507099 | 0.999188641 |
| PAN | 0.024 | 0.000 | 0.024 | 29.580 | 0.000811359 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | $\begin{aligned} & 87.306 \\ & 29.580 \\ & 33.88 \% \end{aligned}$ | grams grams |  |

## CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 3.4-3.7 ft.



Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-14: 3.7-5.3 ft.


CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 3.7-5.3 ft.


CARBONATE GRAIN SIZE DISTRIBUTION

## CORE IR-14: 5.3-7.1 ft.




## CARBONATE GRAIN SIZE DISTRIBUTION

CORE IR-14: 7.1-8.0 ft.

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE - | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.054 | 0.000 | 0.054 | 0.054 | 0.002306312 | 0.002306312 |
| -1.50 | 0.031 | 0.000 | 0.031 | 0.085 | 0.001323994 | 0.003630307 |
| -1.25 | 0.033 | 0.000 | 0.033 | 0.118 | 0.001409413 | 0.005039720 |
| -1.00 | 0.063 | 0.000 | 0.063 | 0.181 | 0.002690698 | 0.007730418 |
| -0.75 | 0.154 | 0.000 | 0.154 | 0.335 | 0.006577261 | 0.014307679 |
| -0.50 | 0.206 | 0.004 | 0.202 | 0.537 | 0.008627317 | 0.022934996 |
| -0.25 | 0.389 | 0.018 | 0.371 | 0.908 | 0.015845221 | 0.038780217 |
| 0.00 | 0.811 | 0.030 | 0.781 | 1.689 | 0.033356112 | 0.072136329 |
| 0.25 | 1.942 | 0.247 | 1.695 | 3.384 | 0.072392586 | 0.144528914 |
| 0.50 | 3.450 | 1.010 | 2.440 | 5.824 | 0.104211156 | 0.248740070 |
| 0.75 | 6.201 | 3.168 | 3.033 | 8.857 | 0.129537883 | 0.378277953 |
| 1.00 | 10.901 | 6.744 | 4.157 | 13.014 | 0.177543350 | 0.555821303 |
| 1.25 | 12.885 | 8.805 | 4.080 | 17.094 | 0.174254719 | 0.730076023 |
| 1.50 | 8.611 | 6.694 | 1.917 | 19.011 | 0.081874092 | 0.811950115 |
| 1.75 | 8.442 | 6.379 | 2.063 | 21.074 | 0.088109678 | 0.900059793 |
| 2.00 | 4.862 | 3.784 | 1.078 | 22.152 | 0.046040830 | 0.946100624 |
| 2.25 | 2.801 | 2.109 | 0.692 | 22.844 | 0.029554967 | 0.975655591 |
| 2.50 | 1.122 | 0.714 | 0.408 | 23.252 | 0.017425472 | 0.993081063 |
| 2.75 | 0.340 | 0.236 | 0.104 | 23.356 | 0.004441787 | 0.997522850 |
| 3.00 | 0.169 | 0.122 | 0.047 | 23.403 | 0.002007346 | 0.999530196 |
| 3.25 | 0.075 | 0.070 | 0.005 | 23.408 | 0.000213547 | 0.999743743 |
| 3.50 | 0.038 | 0.037 | 0.001 | 23.409 | 0.000042709 | 0.999786453 |
| 3.75 | 0.028 | 0.027 | 0.001 | 23.410 | 0.000042709 | 0.999829162 |
| 4.00 | 0.014 | 0.012 | 0.002 | 23.412 | 0.000085419 | 0.999914581 |
| PAN | 0.042 | 0.040 | 0.002 | 23.414 | 0.000085419 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | 63.664 23.414 36.78\% | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION IR-14: 7.1-8.0 ft.


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-5 : 0-1 ft

| PHI | TOTAL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. $\%$ |
| <-2.00 | 0.086 | 0.000 | 0.086 | 0.086 | 0.002501673 | 0.002501673 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.086 | 0.000000000 | 0.002501673 |
| -1.50 | 0.118 | 0.000 | 0.118 | 0.204 | 0.003432528 | 0.005934200 |
| -1.25 | 0.134 | 0.000 | 0.134 | 0.338 | 0.003897955 | 0.009832155 |
| -1.00 | 0.196 | 0.000 | 0.196 | 0.534 | 0.005701486 | 0.015533642 |
| -0.75 | 0.601 | 0.000 | 0.601 | 1.135 | 0.017482619 | 0.033016261 |
| -0.50 | 1.347 | 0.010 | 1.337 | 2.472 | 0.038892283 | 0.071908544 |
| -0.25 | 2.390 | 0.076 | 2.314 | 4.786 | 0.067312447 | 0.139220991 |
| 0.00 | 3.255 | 0.320 | 2.935 | 7.721 | 0.085376851 | 0.224597842 |
| 0.25 | 4.787 | 0.872 | 3.915 | 11.636 | 0.113884283 | 0.338482125 |
| 0.50 | 5.343 | 1.831 | 3.512 | 15.148 | 0.102161329 | 0.440643453 |
| 0.75 | 6.479 | 3.108 | 3.371 | 18.519 | 0.098059749 | 0.538703203 |
| 1.00 | 8.374 | 5.176 | 3.198 | 21.717 | 0.093027315 | 0.631730517 |
| 1.25 | 9.023 | 5.813 | 3.210 | 24.927 | 0.093376385 | 0.725106903 |
| 1.50 | 7.198 | 5.204 | 1.994 | 26.921 | 0.058003898 | 0.783110801 |
| 1.75 | 9.876 | 7.815 | 2.061 | 28.982 | 0.059952875 | 0.843063676 |
| 2.00 | 8.918 | 7.103 | 1.815 | 30.797 | 0.052796928 | 0.895860604 |
| 2.25 | 7.634 | 5.996 | 1.638 | 32.435 | 0.047648137 | 0.943508741 |
| 2.50 | 4.450 | 3.200 | 1.250 | 33.685 | 0.036361521 | 0.979870262 |
| 2.75 | 1.827 | 1.330 | 0.497 | 34.182 | 0.014457341 | 0.994327603 |
| 3.00 | 0.855 | 0.687 | 0.168 | 34.350 | 0.004886988 | 0.999214591 |
| 3.25 | 0.335 | 0.308 | 0.027 | 34.377 | 0.000785409 | 1.000000000 |
| 3.50 | 0.096 | 0.096 | 0.000 | 34.377 | 0.000000000 | 1.000000000 |
| 3.75 | 0.033 | 0.033 | 0.000 | 34.377 | 0.000000000 | 1.000000000 |
| 4.00 | 0.014 | 0.014 | 0.000 | 34.377 | 0.000000000 | 1.000000000 |
| PAN | 0.027 | 0.027 | 0.000 | 34.377 | 0.000000000 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  | 33.396 |
| CO3 WT |  |  |  | $41.22 \%$ |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-5 : 1-1.4 ft



CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-5 : 1.4-2.3 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | CO3 WT $\%$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.016 | 0.000 | 0.016 | 0.016 | 0.000754966 | 0.000754966 |
| -1.00 | 0.011 | 0.000 | 0.011 | 0.027 | 0.000519039 | 0.001274006 |
| -0.75 | 0.020 | 0.000 | 0.020 | 0.047 | 0.000943708 | 0.002217713 |
| -0.50 | 0.030 | 0.000 | 0.030 | 0.077 | 0.001415562 | 0.003633275 |
| -0.25 | 0.195 | 0.009 | 0.186 | 0.263 | 0.008776483 | 0.012409758 |
| 0.00 | 0.324 | 0.015 | 0.309 | 0.572 | 0.014580286 | 0.026990044 |
| 0.25 | 0.711 | 0.076 | 0.635 | 1.207 | 0.029962724 | 0.056952767 |
| 0.50 | 1.191 | 0.265 | 0.926 | 2.133 | 0.043693672 | 0.100646440 |
| 0.75 | 2.103 | 0.885 | 1.218 | 3.351 | 0.057471807 | 0.158118247 |
| 1.00 | 4.613 | 2.965 | 1.648 | 4.999 | 0.077761525 | 0.235879772 |
| 1.25 | 8.449 | 5.715 | 2.734 | 7.733 | 0.129004860 | 0.364884632 |
| 1.50 | 10.624 | 7.877 | 2.747 | 10.480 | 0.129618270 | 0.494502902 |
| 1.75 | 18.188 | 14.563 | 3.625 | 14.105 | 0.171047044 | 0.665549946 |
| 2.00 | 15.367 | 12.231 | 3.136 | 17.241 | 0.147973387 | 0.813523333 |
| 2.25 | 9.753 | 7.283 | 2.470 | 19.711 | 0.116547917 | 0.930071250 |
| 2.50 | 3.213 | 2.010 | 1.203 | 20.914 | 0.056764026 | 0.986835276 |
| 2.75 | 0.556 | 0.329 | 0.227 | 21.141 | 0.010711084 | 0.997546360 |
| 3.00 | 0.185 | 0.144 | 0.041 | 21.182 | 0.001934601 | 0.999480961 |
| 3.25 | 0.074 | 0.069 | 0.005 | 21.187 | 0.000235927 | 0.999716888 |
| 3.50 | 0.032 | 0.032 | 0.000 | 21.187 | 0.000000000 | 0.999716888 |
| 3.75 | 0.017 | 0.015 | 0.002 | 21.189 | 0.000094371 | 0.999811258 |
| 4.00 | 0.009 | 0.007 | 0.002 | 21.191 | 0.000094371 | 0.999905629 |
| PAN | 0.013 | 0.011 | 0.002 | 21.193 | 0.000094371 | 1.0 |
| total wt. CO3 WT \% CARBONATE |  |  |  | 75.694 | grams grams |  |
|  |  |  |  | 21.193 |  |  |
|  |  |  |  | 27.998 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-5: 1.4-2.3 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-5 : 2.3-3.2 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.014 | 0.000 | 0.014 | 0.014 | 0.000551094 | 0.000551094 |
| -0.75 | 0.068 | 0.000 | 0.068 | 0.082 | 0.002676744 | 0.003227838 |
| -0.50 | 0.107 | 0.000 | 0.107 | 0.189 | 0.004211935 | 0.007439773 |
| -0.25 | 0.182 | 0.000 | 0.182 | 0.371 | 0.007164226 | 0.014603999 |
| 0.00 | 0.372 | 0.015 | 0.357 | 0.728 | 0.014052905 | 0.028656904 |
| 0.25 | 0.722 | 0.072 | 0.650 | 1.378 | 0.025586522 | 0.054243426 |
| 0.50 | 1.498 | 0.329 | 1.169 | 2.547 | 0.046016375 | 0.100259802 |
| 0.75 | 2.949 | 1.104 | 1.845 | 4.392 | 0.072626358 | 0.172886160 |
| 1.00 | 6.722 | 4.082 | 2.640 | 7.032 | 0.103920642 | 0.276806802 |
| 1.25 | 13.052 | 8.985 | 4.067 | 11.099 | 0.160092899 | 0.436899701 |
| 1.50 | 14.762 | 10.308 | 4.454 | 15.553 | 0.175326720 | 0.612226421 |
| 1.75 | 19.852 | 15.044 | 4.808 | 20.361 | 0.189261534 | 0.801487955 |
| 2.00 | 11.916 | 9.082 | 2.834 | 23.195 | 0.111557235 | 0.913045190 |
| 2.25 | 5.647 | 4.102 | 1.545 | 24.740 | 0.060817194 | 0.973862384 |
| 2.50 | 1.569 | 0.988 | 0.581 | 25.321 | 0.022870414 | 0.996732798 |
| 2.75 | 0.325 | 0.260 | 0.065 | 25.386 | 0.002558652 | 0.999291450 |
| 3.00 | 0.153 | 0.142 | 0.011 | 25.397 | 0.000433003 | 0.999724453 |
| 3.25 | 0.075 | 0.074 | 0.001 | 25.398 | 0.000039364 | 0.999763817 |
| 3.50 | 0.038 | 0.037 | 0.001 | 25.399 | 0.000039364 | 0.999803181 |
| 3.75 | 0.029 | 0.028 | 0.001 | 25.400 | 0.000039364 | 0.999842544 |
| 4.00 | 0.017 | 0.015 | 0.002 | 25.402 | 0.000078728 | 0.999921272 |
| PAN | 0.020 | 0.018 | 0.002 | 25.404 | 0.000078728 | 1.0 |


| TOTAL WT. | 80.089 | grams |
| :--- | :--- | :--- |
| CO3 WT | 25.404 | grams |
| \% CARBONATE | 31.720 |  |
|  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-5: 2.3-3.2 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-5 : 3.2-4.3 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  | $\ldots$ |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.006 | 0.000 | 0.006 | 0.006 | 0.000257965 | 0.000257965 |
| -0.50 | 0.027 | 0.000 | 0.027 | 0.033 | 0.001160841 | 0.001418806 |
| -0.25 | 0.128 | 0.000 | 0.128 | 0.161 | 0.005503246 | 0.006922052 |
| 0.00 | 0.342 | 0.023 | 0.319 | 0.480 | 0.013715121 | 0.020637173 |
| 0.25 | 0.818 | 0.087 | 0.731 | 1.211 | 0.031428694 | 0.052065867 |
| 0.50 | 1.715 | 0.386 | 1.329 | 2.540 | 0.057139172 | 0.109205039 |
| 0.75 | 2.940 | 1.222 | 1.718 | 4.258 | 0.073863881 | 0.183068920 |
| 1.00 | 6.169 | 3.726 | 2.443 | 6.701 | 0.105034610 | 0.288103530 |
| 1.25 | 11.608 | 8.029 | 3.579 | 10.280 | 0.153875919 | 0.441979449 |
| 1.50 | 12.312 | 9.189 | 3.123 | 13.403 | 0.134270605 | 0.576250054 |
| 1.75 | 17.654 | 13.800 | 3.854 | 17.257 | 0.165699299 | 0.741949353 |
| 2.00 | 13.099 | 10.446 | 2.653 | 19.910 | 0.114063373 | 0.856012726 |
| 2.25 | 8.513 | 6.737 | 1.776 | 21.686 | 0.076357539 | 0.932370265 |
| 2.50 | 3.841 | 2.848 | 0.993 | 22.679 | 0.042693151 | 0.975063416 |
| 2.75 | 1.508 | 1.120 | 0.388 | 23.067 | 0.016681715 | 0.991745131 |
| 3.00 | 0.764 | 0.635 | 0.129 | 23.196 | 0.005546240 | 0.997291371 |
| 3.25 | 0.340 | 0.289 | 0.051 | 23.247 | 0.002192700 | 0.999484071 |
| 3.50 | 0.100 | 0.094 | 0.006 | 23.253 | 0.000257965 | 0.999742035 |
| 3.75 | 0.048 | 0.046 | 0.002 | 23.255 | 0.000085988 | 0.999828024 |
| 4.00 | 0.018 | 0.016 | 0.002 | 23.257 | 0.000085988 | 0.999914012 |
| PAN | 0.032 | 0.030 | 0.002 | 23.259 | 0.000085988 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  | 23.982 | grams |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-5: 3.2-4.3 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE SL-5 : 4.3-5.2 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.024 | 0.000 | 0.024 | 0.024 | 0.001291156 | 0.001291156 |
| 0.00 | 0.060 | 0.004 | 0.056 | 0.080 | 0.003012696 | 0.004303852 |
| 0.25 | 0.204 | 0.012 | 0.192 | 0.272 | 0.010329245 | 0.014633097 |
| 0.50 | 0.545 | 0.070 | 0.475 | 0.747 | 0.025554121 | 0.040187218 |
| 0.75 | 1.479 | 0.431 | 1.048 | 1.795 | 0.056380461 | 0.096567678 |
| 1.00 | 4.105 | 2.442 | 1.663 | 3.458 | 0.089466322 | 0.186034000 |
| 1.25 | 8.063 | 5.400 | 2.663 | 6.121 | 0.143264472 | 0.329298472 |
| 1.50 | 10.541 | 7.770 | 2.771 | 8.892 | 0.149074672 | 0.478373144 |
| 1.75 | 15.665 | 12.186 | 3.479 | 12.371 | 0.187163762 | 0.665536906 |
| 2.00 | 11.810 | 9.339 | 2.471 | 14.842 | 0.132935227 | 0.798472133 |
| 2.25 | 7.936 | 5.972 | 1.964 | 16.806 | 0.105659565 | 0.904131698 |
| 2.50 | 3.693 | 2.479 | 1.214 | 18.020 | 0.065310953 | 0.969442651 |
| 2.75 | 1.349 | 0.940 | 0.409 | 18.429 | 0.022003443 | 0.991446094 |
| 3.00 | 0.634 | 0.531 | 0.103 | 18.532 | 0.005541209 | 0.996987304 |
| 3.25 | 0.270 | 0.236 | 0.034 | 18.566 | 0.001829137 | 0.998816441 |
| 3.50 | 0.090 | 0.079 | 0.011 | 18.577 | 0.000591780 | 0.999408220 |
| 3.75 | 0.042 | 0.039 | 0.003 | 18.580 | 0.000161394 | 0.999569615 |
| 4.00 | 0.027 | 0.021 | 0.006 | 18.586 | 0.000322789 | 0.999892404 |
| PAN | 0.024 | 0.022 | 0.002 | 18.588 | 0.000107596 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| \%ARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-5: 4.3-5.2 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-6 : 0-2.6 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.037 | 0.000 | 0.037 | 0.037 | 0.001230053 | 0.001230053 |
| -0.75 | 0.128 | 0.003 | 0.125 | 0.162 | 0.004155585 | 0.005385638 |
| -0.50 | 0.257 | 0.000 | 0.257 | 0.419 | 0.008543883 | 0.013929521 |
| -0.25 | 0.658 | 0.023 | 0.635 | 1.054 | 0.021110372 | 0.035039894 |
| 0.00 | 1.039 | 0.067 | 0.972 | 2.026 | 0.032313830 | 0.067353723 |
| 0.25 | 1.767 | 0.330 | 1.437 | 3.463 | 0.047772606 | 0.115126330 |
| 0.50 | 2.217 | 0.711 | 1.506 | 4.969 | 0.050066489 | 0.165192819 |
| 0.75 | 2.742 | 1.287 | 1.455 | 6.424 | 0.048371011 | 0.213563830 |
| 1.00 | 3.908 | 2.183 | 1.725 | 8.149 | 0.057347074 | 0.270910904 |
| 1.25 | 4.851 | 2.601 | 2.250 | 10.399 | 0.074800532 | 0.345711436 |
| 1.50 | 5.155 | 3.227 | 1.928 | 12.327 | 0.064095745 | 0.409807181 |
| 1.75 | 9.700 | 7.109 | 2.591 | 14.918 | 0.086136968 | 0.495944149 |
| 2.00 | 13.833 | 10.114 | 3.719 | 18.637 | 0.123636968 | 0.619581117 |
| 2.25 | 19.396 | 13.852 | 5.544 | 24.181 | 0.184308511 | 0.803889628 |
| 2.50 | 15.405 | 11.912 | 3.493 | 27.674 | 0.116123670 | 0.920013298 |
| 2.75 | 7.716 | 6.136 | 1.580 | 29.254 | 0.052526596 | 0.972539894 |
| 3.00 | 3.925 | 3.278 | 0.647 | 29.901 | 0.021509309 | 0.994049202 |
| 3.25 | 1.533 | 1.395 | 0.138 | 30.039 | 0.004587766 | 0.998636968 |
| 3.50 | 0.417 | 0.379 | 0.038 | 30.077 | 0.001263298 | 0.999900266 |
| 3.75 | 0.121 | 0.120 | 0.001 | 30.078 | 0.000033245 | 0.999933511 |
| 4.00 | 0.029 | 0.028 | 0.001 | 30.079 | 0.000033245 | 0.999966755 |
| PAN | 0.022 | 0.021 | 0.001 | 30.080 | 0.000033245 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  | 30.0856 | 9.71 |  |
| \% CARBONATE |  |  |  |  |  |  |



| $\begin{aligned} & \text { CARBONATE GRAII } \\ & \text { CORE SL-6 : } 2.6-3.1 \mathrm{ft} \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.044 | 0.000 | 0.044 | 0.044 | 0.001345237 | 0.001345237 |
| -1.00 | 0.036 | 0.000 | 0.036 | 0.080 | 0.001100648 | 0.002445885 |
| -0.75 | 0.067 | 0.000 | 0.067 | 0.147 | 0.002048429 | 0.004494313 |
| -0.50 | 0.121 | 0.000 | 0.121 | 0.268 | 0.003699401 | 0.008193714 |
| -0.25 | 0.293 | 0.008 | 0.285 | 0.553 | 0.008713465 | 0.016907179 |
| 0.00 | 0.584 | 0.019 | 0.565 | 1.118 | 0.017274061 | 0.034181240 |
| 0.25 | 1.174 | 0.090 | 1.084 | 2.202 | 0.033141739 | 0.067322979 |
| 0.50 | 2.049 | 0.439 | 1.610 | 3.812 | 0.049223432 | 0.116546411 |
| 0.75 | 3.351 | 1.401 | 1.950 | 5.762 | 0.059618442 | 0.176164853 |
| 1.00 | 5.961 | 3.457 | 2.504 | 8.266 | 0.076556194 | 0.252721047 |
| 1.25 | 9.154 | 3.485 | 5.669 | 13.935 | 0.173321512 | 0.426042558 |
| 1.50 | 10.131 | 7.273 | 2.858 | 16.793 | 0.087379234 | 0.513421793 |
| 1.75 | 16.212 | 12.201 | 4.011 | 20.804 | 0.122630549 | 0.636052342 |
| 2.00 | 16.744 | 12.835 | 3.909 | 24.713 | 0.119512046 | 0.755564388 |
| 2.25 | 15.891 | 12.423 | 3.468 | 28.181 | 0.106029106 | 0.861593494 |
| 2.50 | 9.780 | 7.096 | 2.684 | 30.865 | 0.082059435 | 0.943652929 |
| 2.75 | 3.832 | 2.668 | 1.164 | 32.029 | 0.035587624 | 0.979240553 |
| 3.00 | 1.519 | 1.068 | 0.451 | 32.480 | 0.013788676 | 0.993029228 |
| 3.25 | 0.492 | 0.359 | 0.133 | 32.613 | 0.004066283 | 0.997095512 |
| 3.50 | 0.147 | 0.119 | 0.028 | 32.641 | 0.000856060 | 0.997951571 |
| 3.75 | 0.065 | 0.062 | 0.003 | 32.644 | 0.000091721 | 0.998043292 |
| 4.00 | 0.026 | 0.026 | 0.000 | 32.644 | 0.000000000 | 0.998043292 |
| PAN | 0.027 | 0.065 | 0.064 | 32.708 | 0.001956708 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | 97.700 | grams |  |
|  |  |  |  | 32.708 | grams |  |
|  |  |  |  | 33.478 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-6: 2.6-3.1 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE SL-6 : 3.1-3.8 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| -2.00 | 2.452 | 0.000 | 2.452 | 2.452 | 0.033690111 | 0.033690111 |
| -1.75 | 1.125 | 0.000 | 1.125 | 3.577 | 0.015457331 | 0.049147442 |
| -1.50 | 1.829 | 0.000 | 1.829 | 5.406 | 0.025130185 | 0.074277627 |
| -1.25 | 3.916 | 0.000 | 3.916 | 9.322 | 0.053805251 | 0.128082879 |
| -1.00 | 5.189 | 0.000 | 5.189 | 14.511 | 0.071296080 | 0.199378959 |
| -0.75 | 7.564 | 0.026 | 7.538 | 22.049 | 0.103570987 | 0.302949946 |
| -0.50 | 9.632 | 0.161 | 9.471 | 31.520 | 0.130130116 | 0.433080062 |
| -0.25 | 9.854 | 0.673 | 9.181 | 40.701 | 0.126145560 | 0.559225622 |
| 0.00 | 8.769 | 1.221 | 7.548 | 48.249 | 0.103708385 | 0.662934008 |
| 0.25 | 8.418 | 1.950 | 6.468 | 54.717 | 0.088869348 | 0.751803355 |
| 0.50 | 6.240 | 2.101 | 4.139 | 58.856 | 0.056869238 | 0.808672593 |
| 0.75 | 5.057 | 2.120 | 2.937 | 61.793 | 0.040353939 | 0.849026532 |
| 1.00 | 4.604 | 2.176 | 2.428 | 64.221 | 0.033360355 | 0.882386887 |
| 1.25 | 3.663 | 1.771 | 1.892 | 66.113 | 0.025995796 | 0.908382682 |
| 1.50 | 2.910 | 1.371 | 1.539 | 67.652 | 0.021145629 | 0.929528311 |
| 1.75 | 3.825 | 2.542 | 1.283 | 68.935 | 0.017628227 | 0.947156538 |
| 2.00 | 3.903 | 3.064 | 0.839 | 69.774 | 0.011527734 | 0.958684272 |
| 2.25 | 3.998 | 3.026 | 0.972 | 70.746 | 0.013355134 | 0.972039406 |
| 2.50 | 2.848 | 1.732 | 1.116 | 71.862 | 0.015333672 | 0.987373078 |
| 2.75 | 1.384 | 0.785 | 0.599 | 72.461 | 0.008230170 | 0.995603248 |
| 3.00 | 0.614 | 0.484 | 0.130 | 72.591 | 0.001786180 | 0.997389429 |
| 3.25 | 0.255 | 0.167 | 0.088 | 72.679 | 0.001209107 | 0.998598535 |
| 3.50 | 0.107 | 0.063 | 0.044 | 72.723 | 0.000604553 | 0.999203089 |
| 3.75 | 0.066 | 0.037 | 0.029 | 72.752 | 0.000398456 | 0.999601544 |
| 4.00 | 0.028 | 0.018 | 0.010 | 72.762 | 0.000137398 | 0.999738943 |
| PAN | 0.049 | 0.030 | 0.019 | 72.781 | 0.000261057 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| \% CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-6: 3.1-3.8 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-6 : 3.8-4.4 ft


CARBONATE GRAIN SIZE DISTRIBUTION SL-6: 3.8-4.4 ft



CARBONATE GRAIN SIZE DISTRIBUTION SL-6: 4.4-5.3 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-6 : 5.3-7.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. |  |  |  |  |  |
| WT. |  |  | WT. $\%$ |  |  |  |
| -2.00 | 0.534 | 0.000 | 0.534 | 0.534 | 0.006812354 | 0.006812354 |
| -1.75 | 1.100 | 0.000 | 1.100 | 1.634 | 0.014032939 | 0.020845293 |
| -1.50 | 2.014 | 0.000 | 2.014 | 3.648 | 0.025693036 | 0.046538329 |
| -1.25 | 4.275 | 0.000 | 4.275 | 7.923 | 0.054537104 | 0.101075433 |
| -1.00 | 6.105 | 0.000 | 6.105 | 14.028 | 0.077882812 | 0.178958246 |
| -0.75 | 9.055 | 0.016 | 9.039 | 23.067 | 0.115312488 | 0.294270734 |
| -0.50 | 11.444 | 0.184 | 11.260 | 34.327 | 0.143646268 | 0.437917002 |
| -0.25 | 12.185 | 0.724 | 11.461 | 45.788 | 0.146210469 | 0.584127470 |
| 0.00 | 10.686 | 1.518 | 9.168 | 54.956 | 0.116958169 | 0.701085639 |
| 0.25 | 10.290 | 2.439 | 7.851 | 62.807 | 0.100156914 | 0.801242553 |
| 0.50 | 7.141 | 2.456 | 4.685 | 67.492 | 0.059767563 | 0.861010116 |
| 0.75 | 5.429 | 2.185 | 3.244 | 70.736 | 0.041384413 | 0.902394530 |
| 1.00 | 4.544 | 2.304 | 2.240 | 72.976 | 0.028576167 | 0.930970697 |
| 1.25 | 3.521 | 1.948 | 1.573 | 74.549 | 0.020067103 | 0.951037800 |
| 1.50 | 2.954 | 1.792 | 1.162 | 75.711 | 0.014823887 | 0.965861686 |
| 1.75 | 3.310 | 2.439 | 0.871 | 76.582 | 0.011111536 | 0.976973223 |
| 2.00 | 3.130 | 2.549 | 0.581 | 77.163 | 0.007411943 | 0.984385166 |
| 2.25 | 2.711 | 2.149 | 0.562 | 77.725 | 0.007169556 | 0.991554722 |
| 2.50 | 1.510 | 1.042 | 0.468 | 78.193 | 0.005970378 | 0.997525100 |
| 2.75 | 0.546 | 0.397 | 0.149 | 78.342 | 0.001900825 | 0.999425925 |
| 3.00 | 0.267 | 0.232 | 0.035 | 78.377 | 0.000446503 | 0.999872428 |
| 3.25 | 0.130 | 0.128 | 0.002 | 78.379 | 0.000025514 | 0.999897942 |
| 3.50 | 0.075 | 0.073 | 0.002 | 78.381 | 0.000025514 | 0.999923457 |
| 3.75 | 0.041 | 0.039 | 0.002 | 78.383 | 0.000025514 | 0.999948971 |
| 4.00 | 0.024 | 0.022 | 0.002 | 78.385 | 0.000025514 | 0.999974486 |
| PAN | 0.028 | 0.026 | 0.002 | 78.387 | 0.000025514 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE

| 103.049 | grams |
| :---: | :---: |
| 78.387 | grams |

78.387 grams

CARBONATE GRAIN SIZE DISTRIBUTION SL-6: 5.3-7.0 ft


## CARBONATE GRAIN SIZE DISTRIBUTION



TOTAL WT.
CO3 WT
\% CARBONATE
102.352 grams
41.366 grams
40.415

CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 0-1.5 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-7 : 1.5-2.6 ft

| PHI | TOTAL | DIGESTED | CO3 | CUMCO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 38.345 | 0.000 | 38.345 | 38.345 | 0.336327196 | 0.336327196 |
| -1.75 | 2.744 | 0.000 | 2.744 | 41.089 | 0.024067853 | 0.360395050 |
| -1.50 | 2.793 | 0.000 | 2.793 | 43.882 | 0.024497636 | 0.384892686 |
| -1.25 | 4.021 | 0.000 | 4.021 | 47.903 | 0.035268527 | 0.420161213 |
| -1.00 | 5.072 | 0.000 | 5.072 | 52.975 | 0.044486935 | 0.464648148 |
| -0.75 | 6.635 | 0.000 | 6.635 | 59.610 | 0.058196139 | 0.522844287 |
| -0.50 | 8.280 | 0.000 | 8.280 | 67.890 | 0.072624571 | 0.595468858 |
| -0.25 | 9.483 | 0.008 | 9.475 | 77.365 | 0.083106016 | 0.678574874 |
| 0.00 | 7.771 | 0.051 | 7.720 | 85.085 | 0.067712765 | 0.746287639 |
| 0.25 | 7.495 | 0.912 | 6.583 | 91.668 | 0.057740043 | 0.804027682 |
| 0.50 | 6.072 | 1.249 | 4.823 | 96.491 | 0.042302936 | 0.846330617 |
| 0.75 | 5.511 | 1.820 | 3.691 | 100.182 | 0.032374069 | 0.878704686 |
| 1.00 | 5.829 | 2.348 | 3.481 | 103.663 | 0.030532142 | 0.909236828 |
| 1.25 | 4.409 | 2.077 | 2.332 | 105.995 | 0.020454167 | 0.929690995 |
| 1.50 | 4.056 | 1.658 | 2.398 | 108.393 | 0.021033058 | 0.950724053 |
| 1.75 | 3.856 | 2.140 | 1.716 | 110.109 | 0.015051179 | 0.965775232 |
| 2.00 | 2.550 | 1.593 | 0.957 | 111.066 | 0.008393927 | 0.974169159 |
| 2.25 | 1.796 | 0.912 | 0.884 | 111.950 | 0.007753638 | 0.981922797 |
| 2.50 | 1.122 | 0.538 | 0.584 | 112.534 | 0.005122313 | 0.987045110 |
| 2.75 | 0.647 | 0.306 | 0.341 | 112.875 | 0.002990939 | 0.990036049 |
| 3.00 | 0.516 | 0.251 | 0.265 | 113.140 | 0.002324337 | 0.992360386 |
| 3.25 | 0.436 | 0.186 | 0.250 | 113.390 | 0.002192771 | 0.994553157 |
| 3.50 | 0.211 | 0.065 | 0.146 | 113.536 | 0.001280578 | 0.995833735 |
| 3.75 | 0.146 | 0.030 | 0.116 | 113.652 | 0.001017446 | 0.996851181 |
| 4.00 | 0.081 | 0.005 | 0.076 | 113.728 | 0.000666602 | 0.997517783 |
| PAN | 0.293 | 0.010 | 0.283 | 114.011 | 0.002482217 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| WO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 1.5-2.6 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-7 : 2.6-3.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 1.837 | 0.000 | 1.837 | 1.837 | 0.039881030 | 0.039881030 |
| -1.75 | 1.558 | 0.000 | 1.558 | 3.395 | 0.033823976 | 0.073705006 |
| -1.50 | 1.423 | 0.000 | 1.423 | 4.818 | 0.030893144 | 0.104598150 |
| -1.25 | 2.469 | 0.000 | 2.469 | 7.287 | 0.053601667 | 0.158199818 |
| -1.00 | 3.260 | 0.000 | 3.260 | 10.547 | 0.070774174 | 0.228973992 |
| -0.75 | 4.929 | 0.000 | 4.929 | 15.476 | 0.107007946 | 0.335981937 |
| -0.50 | 4.908 | 0.004 | 4.904 | 20.380 | 0.106465199 | 0.442447136 |
| -0.25 | 4.974 | 0.017 | 4.957 | 25.337 | 0.107615822 | 0.550062959 |
| 0.00 | 5.112 | 0.057 | 5.055 | 30.392 | 0.109743389 | 0.659806348 |
| 0.25 | 4.844 | 0.512 | 4.332 | 34.724 | 0.094047154 | 0.753853502 |
| 0.50 | 4.139 | 1.111 | 3.028 | 37.752 | 0.065737484 | 0.819590986 |
| 0.75 | 3.722 | 1.352 | 2.370 | 40.122 | 0.051452390 | 0.871043376 |
| 1.00 | 3.436 | 1.777 | 1.659 | 41.781 | 0.036016673 | 0.907060049 |
| 1.25 | 2.400 | 1.586 | 0.814 | 42.595 | 0.017671834 | 0.924731883 |
| 1.50 | 2.187 | 1.266 | 0.921 | 43.516 | 0.019994790 | 0.944726673 |
| 1.75 | 2.408 | 1.530 | 0.878 | 44.394 | 0.019061265 | 0.963787938 |
| 2.00 | 1.361 | 0.462 | 0.899 | 45.293 | 0.019517173 | 0.983305111 |
| 2.25 | 0.776 | 0.460 | 0.316 | 45.609 | 0.006860319 | 0.990165429 |
| 2.50 | 0.389 | 0.185 | 0.204 | 45.813 | 0.004428813 | 0.994594243 |
| 2.75 | 0.183 | 0.095 | 0.088 | 45.901 | 0.001910468 | 0.996504711 |
| 3.00 | 0.137 | 0.089 | 0.048 | 45.949 | 0.001042074 | 0.997546785 |
| 3.25 | 0.111 | 0.071 | 0.040 | 45.989 | 0.000868395 | 0.998415180 |
| 3.50 | 0.060 | 0.028 | 0.032 | 46.021 | 0.000694716 | 0.999109895 |
| 3.75 | 0.036 | 0.018 | 0.018 | 46.039 | 0.000390778 | 0.999500673 |
| 4.00 | 0.015 | 0.007 | 0.008 | 46.047 | 0.000173679 | 0.999674352 |
| PAN | 0.019 | 0.004 | 0.015 | 46.062 | 0.000325648 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE

| 56.693 | grams |
| :--- | :--- |
| 46.062 | grams |
| 81.248 |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 2.6-3.1 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-7 : 3.1-4.8 ft


CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 3.1-4.8 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-7 : 4.8-5.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | CUM CO3 |
|  |  |  |  |  | WT. \% |

TOTAL WT.
CO3 WT
\% CARBONATE
80.943 grams
36.944 grams

CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 4.8-5.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-7 : 5.0-5.3 ft

| PHI | TOTAL | DIGESTED |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. \% |
| -2.00 | 5.092 | 0.000 | 5.092 | 5.092 | 0.084702908 | 0.084702908 |
| -1.75 | 1.525 | 0.000 | 1.525 | 6.617 | 0.025367623 | 0.110070530 |
| -1.50 | 1.687 | 0.000 | 1.687 | 8.304 | 0.028062413 | 0.138132943 |
| -1.25 | 1.885 | 0.000 | 1.885 | 10.189 | 0.031356045 | 0.169488988 |
| -1.00 | 2.382 | 0.000 | 2.382 | 12.571 | 0.039623395 | 0.209112383 |
| -0.75 | 3.497 | 0.000 | 3.497 | 16.068 | 0.058170870 | 0.267283252 |
| -0.50 | 3.925 | 0.000 | 3.925 | 19.993 | 0.065290438 | 0.332573691 |
| -0.25 | 6.371 | 0.002 | 6.369 | 26.362 | 0.105945173 | 0.438518864 |
| 0.00 | 5.435 | 0.031 | 5.404 | 31.766 | 0.089892874 | 0.528411737 |
| 0.25 | 5.461 | 0.271 | 5.190 | 36.956 | 0.086333089 | 0.614744827 |
| 0.50 | 5.513 | 0.413 | 5.100 | 42.056 | 0.084835984 | 0.699580810 |
| 0.75 | 4.687 | 0.742 | 3.945 | 46.001 | 0.065623129 | 0.765203939 |
| 1.00 | 4.398 | 1.555 | 2.843 | 48.844 | 0.047291902 | 0.812495841 |
| 1.25 | 2.268 | 1.628 | 0.640 | 49.484 | 0.010646084 | 0.823141926 |
| 1.50 | 3.789 | 1.136 | 2.653 | 52.137 | 0.044131346 | 0.867273272 |
| 1.75 | 3.340 | 1.278 | 2.062 | 54.199 | 0.034300353 | 0.901573624 |
| 2.00 | 2.097 | 0.870 | 1.227 | 55.426 | 0.020410540 | 0.921984164 |
| 2.25 | 1.954 | 0.746 | 1.208 | 56.634 | 0.020094484 | 0.942078648 |
| 2.50 | 1.972 | 1.026 | 0.946 | 57.580 | 0.015736243 | 0.957814891 |
| 2.75 | 2.032 | 1.354 | 0.678 | 58.258 | 0.011278195 | 0.969093087 |
| 3.00 | 2.172 | 1.620 | 0.552 | 58.810 | 0.009182248 | 0.978275334 |
| 3.25 | 2.292 | 1.788 | 0.504 | 59.314 | 0.008383791 | 0.986659126 |
| 3.50 | 1.052 | 0.822 | 0.230 | 59.544 | 0.003825937 | 0.990485062 |
| 3.75 | 0.463 | 0.290 | 0.173 | 59.717 | 0.002877770 | 0.993362832 |
| 4.00 | 0.115 | 0.056 | 0.059 | 59.776 | 0.000981436 | 0.994344268 |
| PAN | 0.386 | 0.046 | 0.340 | 60.116 | 0.005655732 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE

| 75.790 | grams |
| :--- | :--- |
| 60.116 | grams |
| 79.319 |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 5.0-5.3 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-7 : 5.3-5.8 ft


CARBONATE GRAIN SIZE DISTRIBUTION SL-7: 5.3-5.8 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-8 : 0-0.5 ft

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | CO3 WT $\%$ | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.210 | 0.000 | 0.210 | 0.210 | 0.003358066 | 0.003358066 |
| -1.75 | 0.095 | 0.000 | 0.095 | 0.305 | 0.001519125 | 0.004877191 |
| -1.50 | 0.260 | 0.000 | 0.260 | 0.565 | 0.004157605 | 0.009034796 |
| -1.25 | 1.325 | 0.000 | 1.325 | 1.890 | 0.021187796 | 0.030222592 |
| -1.00 | 2.799 | 0.000 | 2.799 | 4.689 | 0.044758219 | 0.074980811 |
| -0.75 | 5.844 | 0.022 | 5.822 | 10.511 | 0.093098375 | 0.168079186 |
| -0.50 | 7.960 | 0.075 | 7.885 | 18.396 | 0.126087374 | 0.294166560 |
| -0.25 | 9.624 | 0.211 | 9.413 | 27.809 | 0.150521300 | 0.444687860 |
| 0.00 | 8.100 | 0.421 | 7.679 | 35.488 | 0.122793271 | 0.567481131 |
| 0.25 | 7.984 | 0.636 | 7.348 | 42.836 | 0.117500320 | 0.684981451 |
| 0.50 | 5.427 | 0.704 | 4.723 | 47.559 | 0.075524498 | 0.760505949 |
| 0.75 | 4.203 | 0.853 | 3.350 | 50.909 | 0.053569144 | 0.814075093 |
| 1.00 | 4.129 | 1.306 | 2.823 | 53.732 | 0.045141998 | 0.859217091 |
| 1.25 | 3.827 | 1.730 | 2.097 | 55.829 | 0.033532685 | 0.892749776 |
| 1.50 | 3.647 | 1.752 | 1.895 | 57.724 | 0.030302546 | 0.923052322 |
| 1.75 | 4.266 | 2.558 | 1.708 | 59.432 | 0.027312268 | 0.950364590 |
| 2.00 | 3.197 | 2.194 | 1.003 | 60.435 | 0.016038762 | 0.966403352 |
| 2.25 | 2.474 | 1.499 | 0.975 | 61.410 | 0.015591020 | 0.981994371 |
| 2.50 | 1.811 | 1.099 | 0.712 | 62.122 | 0.011385442 | 0.993379813 |
| 2.75 | 1.188 | 0.842 | 0.346 | 62.468 | 0.005532813 | 0.998912626 |
| 3.00 | 0.793 | 0.735 | 0.058 | 62.526 | 0.000927466 | 0.999840092 |
| 3.25 | 0.389 | 0.387 | 0.002 | 62.528 | 0.000031982 | 0.999872074 |
| 3.50 | 0.116 | 0.114 | 0.002 | 62.530 | 0.000031982 | 0.999904055 |
| 3.75 | 0.039 | 0.037 | 0.002 | 62.532 | 0.000031982 | 0.999936037 |
| 4.00 | 0.021 | 0.019 | 0.002 | 62.534 | 0.000031982 | 0.999968018 |
| PAN | 0.022 | 0.020 | 0.002 | 62.536 | 0.000031982 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | 79.750 | grams grams |  |
|  |  |  |  | 62.536 |  |  |
|  |  |  |  | 78.415 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-8: 0-0.5 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-8 :0.5-0.8 ft



## CARBONATE GRAIN SIZE DISTRIBUTION

| $\begin{aligned} & \hline \mathrm{PHI} \\ & \mathrm{SIZE} \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3WT } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.063 | 0.000 | 0.063 | 0.063 | 0.001821862 | 0.001821862 |
| -1.25 | 0.165 | 0.000 | 0.165 | 0.228 | 0.004771544 | 0.006593407 |
| -1.00 | 0.104 | 0.000 | 0.104 | 0.332 | 0.003007519 | 0.009600925 |
| -0.75 | 0.379 | 0.000 | 0.379 | 0.711 | 0.010960093 | 0.020561018 |
| -0.50 | 0.658 | 0.000 | 0.658 | 1.369 | 0.019028340 | 0.039589358 |
| -0.25 | 1.074 | 0.030 | 1.044 | 2.413 | 0.030190862 | 0.069780220 |
| -0.00 | 1.490 | 0.079 | 1.411 | 3.824 | 0.040803933 | 0.110584153 |
| 0.25 | 2.408 | 0.297 | 2.111 | 5.935 | 0.061046848 | 0.171631001 |
| 0.25 0.50 | 3.148 | 0.612 | 2.536 | 8.471 | 0.073337189 | 0.244968190 |
| 0.75 | 4.752 | 1.412 | 3.340 | 11.811 | 0.096587623 | 0.341555813 |
| 1.00 | 8.070 | 3.407 | 4.663 | 16.474 | 0.134846732 | 0.476402545 |
| 1.25 | 10.807 | 5.569 | 5.238 | 21.712 | 0.151474841 | 0.627877386 |
| 1.50 | 10.299 | 6.372 | 3.927 | 25.639 | 0.113562753 | 0.741440139 |
| 1.75 | 12.594 | 8.899 | 3.695 | 29.334 | 0.106853673 | 0.848293811 |
| 2.00 | 8.097 | 5.712 | 2.385 | 31.719 | 0.068970503 | 0.917264315 |
| 2.25 | 4.596 | 2.936 | 1.660 | 33.379 | 0.048004627 | 0.965268942 |
| 2.50 | 2.035 | 1.169 | 0.866 | 34.245 | 0.025043378 | 0.990312319 |
| 2.75 | 0.923 | 0.643 | 0.280 | 34.525 | 0.008097166 | 0.998409485 |
| 3.00 | 0.513 | 0.509 | 0.004 | 34.529 | 0.000115674 | 0.998525159 |
| 3.25 | 0.330 | 0.287 | 0.043 | 34.572 | 0.001243493 | 0.999768652 |
| 3.50 | 0.109 | 0.107 | 0.002 | 34.574 | 0.000057837 | 0.999826489 |
| 3.75 | 0.033 | 0.031 | 0.002 | 34.576 | 0.000057837 | 0.999884326 |
| 4.00 | 0.013 | 0.011 | 0.002 | 34.578 | 0.000057837 | 0.999942163 |
| PAN | 0.014 | 0.012 | 0.002 | 34.580 | 0.000057837 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
72.674 grams
34.580 grams
47.582

CARBONATE GRAIN SIZE DISTRIBUTION SL-8: 0.8-1.9 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-8 : 1.9-2.2 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | CO3 WT $\%$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.056 | 0.000 | 0.056 | 0.056 | 0.000983509 | 0.000983509 |
| -1.75 | 0.044 | 0.000 | 0.044 | 0.100 | 0.000772757 | 0.001756265 |
| -1.50 | 0.031 | 0.000 | 0.031 | 0.131 | 0.000544442 | 0.002300708 |
| -1.25 | 0.073 | 0.000 | 0.073 | 0.204 | 0.001282074 | 0.003582782 |
| -1.00 | 0.049 | 0.000 | 0.049 | 0.253 | 0.000860570 | 0.004443352 |
| -0.75 | 0.310 | 0.000 | 0.310 | 0.563 | 0.005444423 | 0.009887775 |
| -0.50 | 0.743 | 0.022 | 0.721 | 1.284 | 0.012662674 | 0.022550449 |
| -0.25 | 1.573 | 0.016 | 1.557 | 2.841 | 0.027345053 | 0.049895502 |
| 0.00 | 3.538 | 0.172 | 3.366 | 6.207 | 0.059115896 | 0.109011398 |
| 0.25 | 8.018 | 0.998 | 7.020 | 13.227 | 0.123289836 | 0.232301235 |
| 0.50 | 11.094 | 2.253 | 8.841 | 22.068 | 0.155271431 | 0.387572665 |
| 0.75 | 13.616 | 3.791 | 9.825 | 31.893 | 0.172553083 | 0.560125749 |
| 1.00 | 14.863 | 5.836 | 9.027 | 40.920 | 0.158538085 | 0.718663833 |
| 1.25 | 13.226 | 6.496 | 6.730 | 47.650 | 0.118196667 | 0.836860500 |
| 1.50 | 6.426 | 5.795 | 0.631 | 48.281 | 0.011082035 | 0.847942535 |
| 1.75 | 10.281 | 6.485 | 3.796 | 52.077 | 0.066667838 | 0.914610373 |
| 2.00 | 5.635 | 3.866 | 1.769 | 53.846 | 0.031068336 | 0.945678709 |
| 2.25 | 3.345 | 2.040 | 1.305 | 55.151 | 0.022919264 | 0.968597973 |
| 2.50 | 1.956 | 1.180 | 0.776 | 55.927 | 0.013628620 | 0.982226593 |
| 2.75 | 1.550 | 1.046 | 0.504 | 56.431 | 0.008851578 | 0.991078171 |
| 3.00 | 1.542 | 1.275 | 0.267 | 56.698 | 0.004689229 | 0.995767400 |
| 3.25 | 1.120 | 0.933 | 0.187 | 56.885 | 0.003284216 | 0.999051617 |
| 3.50 | 0.339 | 0.291 | 0.048 | 56.933 | 0.000843007 | 0.999894624 |
| 3.75 | 0.085 | 0.083 | 0.002 | 56.935 | 0.000035125 | 0.999929749 |
| 4.00 | 0.031 | 0.029 | 0.002 | 56.937 | 0.000035125 | 0.999964875 |
| PAN | 0.022 | 0.020 | 0.002 | 56.939 | 0.000035125 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
99.566 grams
56.939 grams
57.187

CARBONATE GRAIN SIZE DISTRIBUTION SL-8: 1.9-2.2 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE SL-8 : 2.2-2.4 ft


CARBONATE GRAIN SIZE DISTRIBUTION SL-8: 2.2-2.4 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-8 : 2.4-4.5 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3WT | CUM CO3 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. $\%$ |


| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| :--- | ---: | :--- | :--- | :--- | :--- | ---: |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.036 | 0.000 | 0.036 | 0.036 | 0.000864678 | 0.000864678 |
| -1.00 | 0.014 | 0.000 | 0.014 | 0.050 | 0.000336264 | 0.001200942 |
| -0.75 | 0.095 | 0.000 | 0.095 | 0.145 | 0.002281789 | 0.003482730 |
| -0.50 | 0.172 | 0.000 | 0.172 | 0.317 | 0.004131239 | 0.007613969 |
| -0.25 | 0.367 | 0.000 | 0.367 | 0.684 | 0.008814911 | 0.016428880 |
| 0.00 | 0.656 | 0.009 | 0.647 | 1.331 | 0.015540184 | 0.031969064 |
| 0.25 | 1.571 | 0.073 | 1.498 | 2.829 | 0.035980208 | 0.067949272 |
| 0.50 | 2.904 | 0.392 | 2.512 | 5.341 | 0.060335303 | 0.128284575 |
| 0.75 | 5.782 | 1.656 | 4.126 | 9.467 | 0.099101696 | 0.227386271 |
| 1.00 | 11.886 | 5.158 | 6.728 | 16.195 | 0.161598693 | 0.388984964 |
| 1.25 | 18.309 | 9.762 | 8.547 | 24.742 | 0.205288947 | 0.594273911 |
| 1.50 | 16.485 | 11.222 | 5.263 | 30.005 | 0.126411106 | 0.720685017 |
| 1.75 | 18.417 | 13.160 | 5.257 | 35.262 | 0.126266993 | 0.846952010 |
| 2.00 | 10.707 | 7.427 | 3.280 | 38.542 | 0.078781765 | 0.925733775 |
| 2.25 | 5.002 | 3.210 | 1.792 | 40.334 | 0.043041745 | 0.968775520 |
| 2.50 | 1.867 | 1.061 | 0.806 | 41.140 | 0.019359178 | 0.988134698 |
| 2.75 | 0.719 | 0.404 | 0.315 | 41.455 | 0.007565932 | 0.995700629 |
| 3.00 | 0.517 | 0.433 | 0.084 | 41.539 | 0.002017582 | 0.997718211 |
| 3.25 | 0.253 | 0.240 | 0.013 | 41.552 | 0.000312245 | 0.998030456 |
| 3.50 | 0.098 | 0.041 | 0.057 | 41.609 | 0.001369073 | 0.999399529 |
| 3.75 | 0.038 | 0.036 | 0.002 | 41.611 | 0.000048038 | 0.999447567 |
| 4.00 | 0.021 | 0.000 | 0.021 | 41.632 | 0.000504395 | 0.999951962 |
| PAN | 0.020 | 0.018 | 0.002 | 41.634 | 0.000048038 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
95.936 grams
41.634 grams

CARBONATE GRAIN SIZE DISTRIBUTION SL-8: 2.4-4.5 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE SL-8 : 4.5-6.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION SL-8: 4.5-6.0 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE SL-9 : 0-0.5 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.067 | 0.000 | 0.067 | 0.067 | 0.000961359 | 0.000961359 |
| -1.75 | 0.201 | 0.000 | 0.201 | 0.268 | 0.002884077 | 0.003845436 |
| -1.50 | 0.631 | 0.000 | 0.631 | 0.899 | 0.009053994 | 0.012899430 |
| -1.25 | 1.031 | 0.000 | 1.031 | 1.930 | 0.014793451 | 0.027692882 |
| -1.00 | 2.574 | 0.000 | 2.574 | 4.504 | 0.036933408 | 0.064626290 |
| -0.75 | 4.254 | 0.000 | 4.254 | 8.758 | 0.061039129 | 0.125665418 |
| -0.50 | 6.041 | 0.000 | 6.041 | 14.799 | 0.086680154 | 0.212345573 |
| -0.25 | 7.578 | 0.000 | 7.578 | 22.377 | 0.108734019 | 0.321079592 |
| 0.00 | 7.840 | 0.081 | 7.759 | 30.136 | 0.111331124 | 0.432410716 |
| 0.25 | 9.376 | 1.060 | 8.316 | 38.452 | 0.119323318 | 0.551734034 |
| 0.50 | 8.799 | 1.170 | 7.629 | 46.081 | 0.109465800 | 0.661199834 |
| 0.75 | 7.705 | 1.998 | 5.707 | 51.788 | 0.081887708 | 0.743087541 |
| 1.00 | 7.367 | 3.075 | 4.292 | 56.080 | 0.061584377 | 0.804671918 |
| 1.25 | 4.127 | 2.312 | 1.815 | 57.895 | 0.026042788 | 0.830714706 |
| 1.50 | 4.799 | 1.852 | 2.947 | 60.842 | 0.042285452 | 0.873000158 |
| 1.75 | 5.229 | 3.024 | 2.205 | 63.047 | 0.031638759 | 0.904638916 |
| 2.00 | 5.052 | 3.414 | 1.638 | 64.685 | 0.023503078 | 0.928141994 |
| 2.25 | 5.345 | 3.645 | 1.700 | 66.385 | 0.024392694 | 0.952534688 |
| 2.50 | 3.856 | 2.738 | 1.118 | 67.503 | 0.016041783 | 0.968576471 |
| 2.75 | 3.264 | 1.650 | 1.614 | 69.117 | 0.023158710 | 0.991735181 |
| 3.00 | 1.230 | 0.870 | 0.360 | 69.477 | 0.005165512 | 0.996900693 |
| 3.25 | 0.398 | 0.256 | 0.142 | 69.619 | 0.002037507 | 0.998938200 |
| 3.50 | 0.089 | 0.056 | 0.033 | 69.652 | 0.000473505 | 0.999411706 |
| 3.75 | 0.041 | 0.023 | 0.018 | 69.670 | 0.000258276 | 0.999669981 |
| 4.00 | 0.014 | 0.007 | 0.007 | 69.677 | 0.000100441 | 0.999770422 |
| PAN | 0.030 | 0.014 | 0.016 | 69.693 | 0.000229578 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 96.938 | grams grams |  |
|  |  |  |  | 69.693 |  |  |
|  |  |  |  | 71.894 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-9: 0-0.5 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE SL-9 : 0.5-2.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.009 | 0.000 | 0.009 | 0.009 | 0.000168363 | 0.000168363 |
| -1.50 | 0.027 | 0.000 | 0.027 | 0.036 | 0.000505088 | 0.000673451 |
| -1.25 | 0.081 | 0.000 | 0.081 | 0.117 | 0.001515265 | 0.002188716 |
| -1.00 | 0.106 | 0.000 | 0.106 | 0.223 | 0.001982939 | 0.004171655 |
| -0.75 | 0.187 | 0.000 | 0.187 | 0.410 | 0.003498204 | 0.007669859 |
| -0.50 | 0.396 | 0.004 | 0.392 | 0.802 | 0.007333134 | 0.015002993 |
| -0.25 | 0.870 | 0.040 | 0.830 | 1.632 | 0.015526788 | 0.030529782 |
| 0.00 | 1.432 | 0.072 | 1.360 | 2.992 | 0.025441485 | 0.055971266 |
| 0.25 | 3.527 | 0.109 | 3.418 | 6.410 | 0.063940437 | 0.119911703 |
| 0.50 | 3.896 | 0.481 | 3.415 | 9.825 | 0.063884316 | 0.183796019 |
| 0.75 | 5.736 | 0.960 | 4.776 | 14.601 | 0.089344508 | 0.273140527 |
| 1.00 | 7.248 | 2.368 | 4.880 | 19.481 | 0.091290033 | 0.364430560 |
| 1.25 | 5.142 | 4.152 | 0.990 | 20.471 | 0.018519904 | 0.382950464 |
| 1.50 | 10.541 | 5.603 | 4.938 | 25.409 | 0.092375037 | 0.475325501 |
| 1.75 | 17.868 | 11.706 | 6.162 | 31.571 | 0.115272374 | 0.590597875 |
| 2.00 | 19.149 | 12.516 | 6.633 | 38.204 | 0.124083358 | 0.714681233 |
| 2.25 | 18.673 | 12.071 | 6.602 | 44.806 | 0.123503442 | 0.838184675 |
| 2.50 | 13.065 | 7.890 | 5.175 | 49.981 | 0.096808590 | 0.934993265 |
| 2.75 | 5.924 | 3.768 | 2.156 | 52.137 | 0.040332236 | 0.975325501 |
| 3.00 | 2.429 | 1.609 | 0.820 | 52.957 | 0.015339719 | 0.990665220 |
| 3.25 | 0.705 | 0.368 | 0.337 | 53.294 | 0.006304250 | 0.996969470 |
| 3.50 | 0.094 | 0.064 | 0.030 | 53.324 | 0.000561209 | 0.997530679 |
| 3.75 | 0.049 | 0.027 | 0.022 | 53.346 | 0.000411553 | 0.997942233 |
| 4.00 | 0.030 | 0.007 | 0.023 | 53.369 | 0.000430260 | 0.998372493 |
| PAN | 0.092 | 0.005 | 0.087 | 53.456 | 0.001627507 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-9: 0.5-2.1 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-9 : 2.1-2.6 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. |
|  |  |  |  |  |  |  |
| $<-2.00$ | 2.035 | 0.000 | 2.035 | 2.035 | 0.019953328 | 0.019953328 |
| -1.75 | 3.395 | 0.000 | 3.395 | 5.430 | 0.033288230 | 0.053241558 |
| -1.50 | 5.838 | 0.000 | 5.838 | 11.268 | 0.057242028 | 0.110483586 |
| -1.25 | 6.919 | 0.000 | 6.919 | 18.187 | 0.067841315 | 0.178324901 |
| -1.00 | 8.616 | 0.000 | 8.616 | 26.803 | 0.084480527 | 0.262805428 |
| -0.75 | 12.604 | 0.012 | 12.592 | 39.395 | 0.123465506 | 0.386270934 |
| -0.50 | 12.302 | 0.094 | 12.208 | 51.603 | 0.119700357 | 0.505971291 |
| -0.25 | 13.741 | 0.176 | 13.565 | 65.168 | 0.133005844 | 0.638977135 |
| 0.00 | 9.101 | 0.423 | 8.678 | 73.846 | 0.085088442 | 0.724065576 |
| 0.25 | 8.663 | 0.641 | 8.022 | 81.868 | 0.078656313 | 0.802721889 |
| 0.50 | 5.497 | 0.798 | 4.699 | 86.567 | 0.046074048 | 0.848795937 |
| 0.75 | 3.555 | 0.884 | 2.671 | 89.238 | 0.026189356 | 0.874985292 |
| 1.00 | 3.712 | 1.392 | 2.320 | 91.558 | 0.022747774 | 0.897733067 |
| 1.25 | 2.134 | 1.667 | 0.467 | 92.025 | 0.004578970 | 0.902312037 |
| 1.50 | 4.190 | 1.557 | 2.633 | 94.658 | 0.025816763 | 0.928128799 |
| 1.75 | 5.009 | 2.857 | 2.152 | 96.810 | 0.021100522 | 0.949229321 |
| 2.00 | 4.289 | 2.813 | 1.476 | 98.286 | 0.014472291 | 0.963701612 |
| 2.25 | 3.577 | 2.234 | 1.343 | 99.629 | 0.013168216 | 0.976869828 |
| 2.50 | 2.145 | 1.195 | 0.950 | 100.579 | 0.009314821 | 0.986184649 |
| 2.75 | 0.927 | 0.504 | 0.423 | 101.002 | 0.004147547 | 0.990332196 |
| 3.00 | 0.409 | 0.271 | 0.138 | 101.140 | 0.001353100 | 0.991685296 |
| 3.25 | 0.253 | 0.120 | 0.133 | 101.273 | 0.001304075 | 0.992989371 |
| 3.50 | 0.148 | 0.041 | 0.107 | 101.380 | 0.001049143 | 0.994038514 |
| 3.75 | 0.122 | 0.014 | 0.108 | 101.488 | 0.001058948 | 0.995097462 |
| 4.00 | 0.082 | 0.006 | 0.076 | 101.564 | 0.000745186 | 0.995842648 |
| PAN | 0.426 | 0.002 | 0.424 | 101.988 | 0.004157352 | 1.0 |
|  |  |  |  |  |  |  |


| TOTAL WT. | 119.689 | grams |
| :--- | :---: | :---: |
| CO3 WT | 101.988 | grams |
| \% CARBONATE | 85.211 |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-9: 2.1-2.6 ft


| CARBONATE GRAI CORE SL-9 : 2.6-3.4 ft |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| SIZE WT. WT. WT. WT. WT. \% |  |  |  |  |  |  |
| $<-2.00$ | 0.889 | 0.000 | 0.889 | 0.889 | 0.011285020 | 0.011285020 |
| -1.75 | 1.076 | 0.000 | 1.076 | 1.965 | 0.013658809 | 0.024943829 |
| -1.50 | 1.291 | 0.000 | 1.291 | 3.256 | 0.016388032 | 0.041331861 |
| -1.25 | 1.985 | 0.000 | 1.985 | 5.241 | 0.025197710 | 0.066529571 |
| -1.00 | 1.987 | 0.000 | 1.987 | 7.228 | 0.025223098 | 0.091752669 |
| -0.75 | 2.938 | 0.000 | 2.938 | 10.166 | 0.037295150 | 0.129047819 |
| -0.50 | 5.521 | 0.007 | 5.514 | 15.680 | 0.069995049 | 0.199042868 |
| -0.25 | 8.674 | 0.101 | 8.573 | 24.253 | 0.108826180 | 0.307869048 |
| 0.00 | 7.370 | 0.306 | 7.064 | 31.317 | 0.089670843 | 0.397539891 |
| 0.25 | 10.750 | 0.796 | 9.954 | 41.271 | 0.126356678 | 0.523896569 |
| 0.50 | 9.320 | 1.540 | 7.780 | 49.051 | 0.098759790 | 0.622656359 |
| 0.75 | 9.560 | 2.842 | 6.718 | 55.769 | 0.085278698 | 0.707935057 |
| 1.00 | 10.515 | 5.630 | 4.885 | 60.654 | 0.062010485 | 0.769945542 |
| 1.25 | 5.591 | 5.465 | 0.126 | 60.780 | 0.001599452 | 0.771544994 |
| 1.50 | 11.808 | 6.412 | 5.396 | 66.176 | 0.068497150 | 0.840042144 |
| 1.75 | 12.983 | 8.522 | 4.461 | 70.637 | 0.056628204 | 0.896670348 |
| 2.00 | 8.802 | 6.047 | 2.755 | 73.392 | 0.034972137 | 0.931642484 |
| 2.25 | 5.995 | 3.603 | 2.392 | 75.784 | 0.030364193 | 0.962006677 |
| 2.50 | 3.094 | 1.486 | 1.608 | 77.392 | 0.020412049 | 0.982418726 |
| 2.75 | 1.257 | 0.586 | 0.671 | 78.063 | 0.008517715 | 0.990936441 |
| 3.00 | 0.550 | 0.283 | 0.267 | 78.330 | 0.003389314 | 0.994325755 |
| 3.25 | 0.224 | 0.086 | 0.138 | 78.468 | 0.001751780 | 0.996077535 |
| 3.50 | 0.074 | 0.022 | 0.052 | 78.520 | 0.000660091 | 0.996737626 |
| 3.75 | 0.054 | 0.016 | 0.038 | 78.558 | 0.000482374 | 0.997220001 |
| 4.00 | 0.039 | 0.007 | 0.032 | 78.590 | 0.000406210 | 0.997626211 |
| PAN | 0.191 | 0.004 | 0.187 | 78.777 | 0.002373789 | 1.0 |
| TOTAL WT. CO3 WT <br> \% CARBONATE |  |  |  | 122.538 | grams |  |
|  |  |  |  | 78.777 | grams |  |
|  |  |  |  | 64.288 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION SL-9: 2.6-3.4 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE SL-9 : 3.4-4.3 ft


CARBONATE GRAIN SIZE DISTRIBUTION SL-9: 3.4-4.3 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-4 : 0.-0.5 ft


CARBONATE GRAIN SIZE DISTRIBUTION M-4: 0-0.5 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-4 : 0.5-2.3 ft


CARBONATE GRAIN SIZE DISTRIBUTION M-4: 0.5-2.3 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-4 : 2.3-3.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.710 | 0.000 | 0.710 | 0.710 | 0.008027406 | 0.008027406 |
| -1.75 | 0.528 | 0.000 | 0.528 | 1.238 | 0.005969677 | 0.013997083 |
| -1.50 | 0.957 | 0.000 | 0.957 | 2.195 | 0.010820039 | 0.024817122 |
| -1.25 | 1.423 | 0.000 | 1.423 | 3.618 | 0.016088731 | 0.040905853 |
| -1.00 | 2.349 | 0.000 | 2.349 | 5.967 | 0.026558278 | 0.067464131 |
| -0.75 | 3.694 | 0.000 | 3.694 | 9.661 | 0.041765125 | 0.109229256 |
| -0.50 | 5.369 | 0.056 | 5.313 | 14.974 | 0.060069872 | 0.169299128 |
| -0.25 | 6.686 | 0.129 | 6.557 | 21.531 | 0.074134793 | 0.243433921 |
| 0.00 | 7.671 | 0.367 | 7.304 | 28.835 | 0.082580528 | 0.326014449 |
| 0.25 | 10.545 | 0.847 | 9.698 | 38.533 | 0.109647586 | 0.435662035 |
| 0.50 | 11.022 | 1.092 | 9.930 | 48.463 | 0.112270625 | 0.547932660 |
| 0.75 | 12.316 | 1.555 | 10.761 | 59.224 | 0.121666083 | 0.669598743 |
| 1.00 | 14.009 | 2.741 | 11.268 | 70.492 | 0.127398329 | 0.796997072 |
| 1.25 | 12.905 | 3.735 | 9.170 | 79.662 | 0.103677909 | 0.900674980 |
| 1.50 | 7.629 | 2.798 | 4.831 | 84.493 | 0.054620281 | 0.955295262 |
| 1.75 | 4.171 | 1.783 | 2.388 | 86.881 | 0.026999220 | 0.982294481 |
| 2.00 | 1.475 | 0.779 | 0.696 | 87.577 | 0.007869119 | 0.990163601 |
| 2.25 | 0.741 | 0.339 | 0.402 | 87.979 | 0.004545095 | 0.994708696 |
| 2.50 | 0.414 | 0.153 | 0.261 | 88.240 | 0.002950920 | 0.997659615 |
| 2.75 | 0.224 | 0.097 | 0.127 | 88.367 | 0.001435888 | 0.999095504 |
| 3.00 | 0.181 | 0.114 | 0.067 | 88.434 | 0.000757516 | 0.999853019 |
| 3.25 | 0.135 | 0.130 | 0.005 | 88.439 | 0.000056531 | 0.999909550 |
| 3.50 | 0.099 | 0.097 | 0.002 | 88.441 | 0.000022612 | 0.999932163 |
| 3.75 | 0.092 | 0.090 | 0.002 | 88.443 | 0.000022612 | 0.999954775 |
| 4.00 | 0.072 | 0.070 | 0.002 | 88.445 | 0.000022612 | 0.999977388 |
| PAN | 0.068 | 0.066 | 0.002 | 88.447 | 0.000022612 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  | 85.485 | grams |

CARBONATE GRAIN SIZE DISTRIBUTION M-4: 2.3-3.1 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-4 : 3.1-3.7 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.251 | 0.000 | 0.251 | 0.251 | 0.003563974 | 0.003563974 |
| -1.75 | 0.179 | 0.000 | 0.179 | 0.430 | 0.002541639 | 0.006105613 |
| -1.50 | 0.103 | 0.000 | 0.103 | 0.533 | 0.001462507 | 0.007568120 |
| -1.25 | 0.061 | 0.000 | 0.061 | 0.594 | 0.000866145 | 0.008434265 |
| -1.00 | 0.298 | 0.000 | 0.298 | 0.892 | 0.004231332 | 0.012665597 |
| -0.75 | 0.550 | 0.000 | 0.550 | 1.442 | 0.007809505 | 0.020475102 |
| -0.50 | 1.045 | 0.000 | 1.045 | 2.487 | 0.014838059 | 0.035313161 |
| -0.25 | 1.599 | 0.023 | 1.576 | 4.063 | 0.022377781 | 0.057690942 |
| 0.00 | 2.182 | 0.094 | 2.088 | 6.151 | 0.029647720 | 0.087338663 |
| 0.25 | 3.813 | 0.273 | 3.540 | 9.691 | 0.050264813 | 0.137603476 |
| 0.50 | 6.115 | 0.748 | 5.367 | 15.058 | 0.076206569 | 0.213810044 |
| 0.75 | 9.771 | 1.762 | 8.009 | 23.067 | 0.113720590 | 0.327530635 |
| 1.00 | 18.587 | 4.419 | 14.168 | 37.235 | 0.201172846 | 0.528703480 |
| 1.25 | 25.408 | 9.288 | 16.120 | 53.355 | 0.228889488 | 0.757592969 |
| 1.50 | 17.678 | 8.773 | 8.905 | 62.260 | 0.126442984 | 0.884035952 |
| 1.75 | 11.604 | 5.702 | 5.902 | 68.162 | 0.083803087 | 0.967839039 |
| 2.00 | 3.407 | 1.730 | 1.677 | 69.839 | 0.023811890 | 0.991650929 |
| 2.25 | 0.924 | 0.495 | 0.429 | 70.268 | 0.006091414 | 0.997742343 |
| 2.50 | 0.302 | 0.170 | 0.132 | 70.400 | 0.001874281 | 0.999616624 |
| 2.75 | 0.111 | 0.096 | 0.015 | 70.415 | 0.000212986 | 0.999829611 |
| 3.00 | 0.073 | 0.071 | 0.002 | 70.417 | 0.000028398 | 0.999858009 |
| 3.25 | 0.060 | 0.058 | 0.002 | 70.419 | 0.000028398 | 0.999886407 |
| 3.50 | 0.039 | 0.037 | 0.002 | 70.421 | 0.000028398 | 0.999914805 |
| 3.75 | 0.035 | 0.033 | 0.002 | 70.423 | 0.000028398 | 0.999943204 |
| 4.00 | 0.025 | 0.023 | 0.002 | 70.425 | 0.000028398 | 0.999971602 |
| PAN | 0.029 | 0.027 | 0.002 | 70.427 | 0.000028398 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-4: 3.1-3.7 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION


CARBONATE GRAIN SIZE DISTRIBUTION M-4: 3.7-4.5 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-4 : 4.5-5.5 ft

| PHI | TOTAL | DIGESTED | CO3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WM CO3 <br> WT. | CO3WT <br> $\%$ | CUM CO3 <br> WT. $\%$ |
|  |  |  |  |  |  |  |
| $<-2.00$ | 1.544 | 0.000 | 1.544 | 1.544 | 0.018023907 | 0.018023907 |
| -1.75 | 2.288 | 0.000 | 2.288 | 3.832 | 0.026709003 | 0.044732910 |
| -1.50 | 0.541 | 0.000 | 0.541 | 4.373 | 0.006315372 | 0.051048282 |
| -1.25 | 1.196 | 0.000 | 1.196 | 5.569 | 0.013961524 | 0.065009806 |
| -1.00 | 1.638 | 0.000 | 1.638 | 7.207 | 0.019121218 | 0.084131024 |
| -0.75 | 2.250 | 0.000 | 2.250 | 9.457 | 0.026265409 | 0.110396433 |
| -0.50 | 3.920 | 0.000 | 3.920 | 13.377 | 0.045760179 | 0.156156612 |
| -0.25 | 5.504 | 0.065 | 5.439 | 18.816 | 0.063492249 | 0.219648861 |
| 0.00 | 6.628 | 0.289 | 6.339 | 25.155 | 0.073998412 | 0.293647273 |
| 0.25 | 10.283 | 0.897 | 9.386 | 34.541 | 0.109567613 | 0.403214886 |
| 0.50 | 11.584 | 1.556 | 10.028 | 44.569 | 0.117062010 | 0.520276896 |
| 0.75 | 13.434 | 2.321 | 11.113 | 55.682 | 0.129727774 | 0.650004669 |
| 1.00 | 15.246 | 3.757 | 11.489 | 67.171 | 0.134117015 | 0.784121685 |
| 1.25 | 13.826 | 4.528 | 9.298 | 76.469 | 0.108540344 | 0.892662028 |
| 1.50 | 7.408 | 2.996 | 4.412 | 80.881 | 0.051503549 | 0.944165577 |
| 1.75 | 5.360 | 1.561 | 3.799 | 84.680 | 0.044347684 | 0.988513261 |
| 2.00 | 1.080 | 0.598 | 0.482 | 85.162 | 0.005626634 | 0.994139895 |
| 2.25 | 0.481 | 0.245 | 0.236 | 85.398 | 0.002754950 | 0.996894845 |
| 2.50 | 0.278 | 0.120 | 0.158 | 85.556 | 0.001844415 | 0.998739260 |
| 2.75 | 0.159 | 0.087 | 0.072 | 85.628 | 0.000840493 | 0.999579753 |
| 3.00 | 0.126 | 0.100 | 0.026 | 85.654 | 0.000303511 | 0.999883265 |
| 3.25 | 0.100 | 0.098 | 0.002 | 85.656 | 0.000023347 | 0.999906612 |
| 3.50 | 0.075 | 0.073 | 0.002 | 85.658 | 0.000023347 | 0.999929959 |
| 3.75 | 0.071 | 0.069 | 0.002 | 85.660 | 0.000023347 | 0.999953306 |
| 4.00 | 0.058 | 0.056 | 0.002 | 85.662 | 0.000023347 | 0.999976653 |
| PAN | 0.066 | 0.064 | 0.002 | 85.664 | 0.000023347 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE

| 105.144 | grams |
| :---: | :---: |
| 85.664 | grams |
| 81.473 |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-4: 4.5-5.5 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-4 : 5.5-6.8 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 3.197 | 0.000 | 3.197 | 3.197 | 0.042121212 | 0.042121212 |
| -1.75 | 0.590 | 0.000 | 0.590 | 3.787 | 0.007773386 | 0.049894598 |
| -1.50 | 0.493 | 0.000 | 0.493 | 4.280 | 0.006495389 | 0.056389987 |
| -1.25 | 0.857 | 0.000 | 0.857 | 5.137 | 0.011291173 | 0.067681159 |
| -1.00 | 1.032 | 0.000 | 1.032 | 6.169 | 0.013596838 | 0.081277997 |
| -0.75 | 1.823 | 0.000 | 1.823 | 7.992 | 0.024018445 | 0.105296443 |
| -0.50 | 2.776 | 0.022 | 2.754 | 10.746 | 0.036284585 | 0.141581028 |
| -0.25 | 4.063 | 0.014 | 4.049 | 14.795 | 0.053346509 | 0.194927536 |
| 0.00 | 4.949 | 0.079 | 4.870 | 19.665 | 0.064163373 | 0.259090909 |
| 0.25 | 7.757 | 0.150 | 7.607 | 27.272 | 0.100223979 | 0.359314888 |
| 0.50 | 8.482 | 0.191 | 8.291 | 35.563 | 0.109235837 | 0.468550725 |
| 0.75 | 8.838 | 0.288 | 8.550 | 44.113 | 0.112648221 | 0.581198946 |
| 1.00 | 9.465 | 0.828 | 8.637 | 52.750 | 0.113794466 | 0.694993412 |
| 1.25 | 9.579 | 2.341 | 7.238 | 59.988 | 0.095362319 | 0.790355731 |
| 1.50 | 8.015 | 2.635 | 5.380 | 65.368 | 0.070882740 | 0.861238472 |
| 1.75 | 7.460 | 3.117 | 4.343 | 69.711 | 0.057220026 | 0.918458498 |
| 2.00 | 4.318 | 2.009 | 2.309 | 72.020 | 0.030421607 | 0.948880105 |
| 2.25 | 2.654 | 1.125 | 1.529 | 73.549 | 0.020144928 | 0.969025033 |
| 2.50 | 1.519 | 0.554 | 0.965 | 74.514 | 0.012714097 | 0.981739130 |
| 2.75 | 0.953 | 0.351 | 0.602 | 75.116 | 0.007931489 | 0.989670619 |
| 3.00 | 0.696 | 0.400 | 0.296 | 75.412 | 0.003899868 | 0.993570487 |
| 3.25 | 0.596 | 0.362 | 0.234 | 75.646 | 0.003083004 | 0.996653491 |
| 3.50 | 0.392 | 0.299 | 0.093 | 75.739 | 0.001225296 | 0.997878788 |
| 3.75 | 0.323 | 0.216 | 0.107 | 75.846 | 0.001409750 | 0.999288538 |
| 4.00 | 0.150 | 0.098 | 0.052 | 75.898 | 0.000685112 | 0.999973650 |
| PAN | 0.135 | 0.133 | 0.002 | 75.900 | 0.000026350 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-4: 5.5-6.8 ft


Phi Size

CORE M-4 : 6.8-7.1 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.050 | 0.000 | 0.050 | 0.050 | 0.000758518 | 0.000758518 |
| -1.75 | 0.036 | 0.000 | 0.036 | 0.086 | 0.000546133 | 0.001304651 |
| -1.50 | 0.073 | 0.000 | 0.073 | 0.159 | 0.001107437 | 0.002412088 |
| -1.25 | 0.209 | 0.000 | 0.209 | 0.368 | 0.003170606 | 0.005582694 |
| -1.00 | 0.238 | 0.000 | 0.238 | 0.606 | 0.003610546 | 0.009193240 |
| -0.75 | 0.537 | 0.000 | 0.537 | 1.143 | 0.008146485 | 0.017339725 |
| -0.50 | 0.960 | 0.009 | 0.951 | 2.094 | 0.014427015 | 0.031766740 |
| -0.25 | 1.553 | 0.002 | 1.551 | 3.645 | 0.023529233 | 0.055295974 |
| 0.00 | 2.070 | 0.000 | 2.070 | 5.715 | 0.031402652 | 0.086698626 |
| 0.25 | 3.573 | 0.000 | 3.573 | 9.288 | 0.054203708 | 0.140902333 |
| 0.50 | 4.257 | 0.001 | 4.256 | 13.544 | 0.064565066 | 0.205467399 |
| 0.75 | 5.036 | 0.008 | 5.028 | 18.572 | 0.076276586 | 0.281743985 |
| 1.00 | 6.425 | 0.062 | 6.363 | 24.935 | 0.096529021 | 0.378273006 |
| 1.25 | 6.426 | 0.344 | 6.082 | 31.017 | 0.092266149 | 0.470539155 |
| 1.50 | 6.016 | 0.462 | 5.554 | 36.571 | 0.084256197 | 0.554795352 |
| 1.75 | 6.598 | 0.893 | 5.705 | 42.276 | 0.086546922 | 0.641342274 |
| 2.00 | 5.176 | 1.035 | 4.141 | 46.417 | 0.062820474 | 0.704162748 |
| 2.25 | 4.927 | 1.095 | 3.832 | 50.249 | 0.058132832 | 0.762295579 |
| 2.50 | 5.032 | 1.122 | 3.910 | 54.159 | 0.059316120 | 0.821611699 |
| 2.75 | 4.991 | 1.601 | 3.390 | 57.549 | 0.051427531 | 0.873039231 |
| 3.00 | 5.661 | 2.459 | 3.202 | 60.751 | 0.048575503 | 0.921614733 |
| 3.25 | 5.981 | 3.659 | 2.322 | 63.073 | 0.035225583 | 0.956840317 |
| 3.50 | 5.582 | 4.258 | 1.324 | 64.397 | 0.020085561 | 0.976925878 |
| 3.75 | 4.579 | 3.778 | 0.801 | 65.198 | 0.012151461 | 0.989077339 |
| 4.00 | 1.541 | 1.078 | 0.463 | 65.661 | 0.007023878 | 0.996101217 |
| PAN | 0.540 | 0.283 | 0.257 | 65.918 | 0.003898783 | 1.0 |


| TOTAL WT. | 88.067 | grams |
| :--- | :--- | :--- |
| CO3 WT | 65.918 | grams |
| \% CARBONATE | 74.850 |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-4: 6.8-7.1 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-5 : 0-0.7 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.034 | 0.000 | 0.034 | 0.034 | 0.000614173 | 0.000614173 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.034 | 0.000000000 | 0.000614173 |
| -1.25 | 0.030 | 0.000 | 0.030 | 0.064 | 0.000541917 | 0.001156090 |
| -1.00 | 0.055 | 0.000 | 0.055 | 0.119 | 0.000993515 | 0.002149605 |
| -0.75 | 0.275 | 0.000 | 0.275 | 0.394 | 0.004967575 | 0.007117181 |
| -0.50 | 0.482 | 0.000 | 0.482 | 0.876 | 0.008706805 | 0.015823985 |
| -0.25 | 0.974 | 0.022 | 0.952 | 1.828 | 0.017196842 | 0.033020828 |
| 0.00 | 1.905 | 0.074 | 1.831 | 3.659 | 0.033075019 | 0.066095847 |
| 0.25 | 4.201 | 0.335 | 3.866 | 7.525 | 0.069835077 | 0.135930924 |
| 0.50 | 6.640 | 0.904 | 5.736 | 13.261 | 0.103614588 | 0.239545512 |
| 0.75 | 10.082 | 1.946 | 8.136 | 21.397 | 0.146967973 | 0.386513485 |
| 1.00 | 14.363 | 4.104 | 10.259 | 31.656 | 0.185317654 | 0.571831139 |
| 1.25 | 15.665 | 5.165 | 10.500 | 42.156 | 0.189671056 | 0.761502195 |
| 1.50 | 11.472 | 4.204 | 7.268 | 49.424 | 0.131288499 | 0.892790693 |
| 1.75 | 7.257 | 2.786 | 4.471 | 53.895 | 0.080763742 | 0.973554436 |
| 2.00 | 2.172 | 1.000 | 1.172 | 55.067 | 0.021170903 | 0.994725338 |
| 2.25 | 0.679 | 0.415 | 0.264 | 55.331 | 0.004768872 | 0.999494211 |
| 2.50 | 0.258 | 0.244 | 0.014 | 55.345 | 0.000252895 | 0.999747105 |
| 2.75 | 0.102 | 0.100 | 0.002 | 55.347 | 0.000036128 | 0.999783233 |
| 3.00 | 0.073 | 0.071 | 0.002 | 55.349 | 0.000036128 | 0.999819361 |
| 3.25 | 0.047 | 0.045 | 0.002 | 55.351 | 0.000036128 | 0.999855489 |
| 3.50 | 0.080 | 0.078 | 0.002 | 55.353 | 0.000036128 | 0.999891617 |
| 3.75 | 0.021 | 0.019 | 0.002 | 55.355 | 0.000036128 | 0.999927744 |
| 4.00 | 0.010 | 0.008 | 0.002 | 55.357 | 0.000036128 | 0.999963872 |
| PAN | 0.014 | 0.012 | 0.002 | 55.359 | 0.000036128 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 0-0.7 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-5 : 0.7-1.7 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.147 | 0.000 | 0.147 | 0.147 | 0.001835550 | 0.001835550 |
| -1.75 | 0.109 | 0.000 | 0.109 | 0.256 | 0.001361054 | 0.003196604 |
| -1.50 | 0.254 | 0.000 | 0.254 | 0.510 | 0.003171630 | 0.006368234 |
| -1.25 | 0.093 | 0.000 | 0.093 | 0.603 | 0.001161266 | 0.007529500 |
| -1.00 | 0.153 | 0.000 | 0.153 | 0.756 | 0.001910470 | 0.009439970 |
| -0.75 | 0.414 | 0.000 | 0.414 | 1.170 | 0.005169507 | 0.014609477 |
| -0.50 | 0.751 | 0.000 | 0.751 | 1.921 | 0.009377536 | 0.023987014 |
| -0.25 | 1.417 | 0.002 | 1.415 | 3.336 | 0.017668727 | 0.041655741 |
| 0.00 | 2.430 | 0.083 | 2.347 | 5.683 | 0.029306362 | 0.070962103 |
| 0.25 | 4.497 | 0.295 | 4.202 | 9.885 | 0.052469251 | 0.123431354 |
| 0.50 | 6.703 | 0.909 | 5.794 | 15.679 | 0.072348130 | 0.195779484 |
| 0.75 | 10.038 | 2.174 | 7.864 | 23.543 | 0.098195667 | 0.293975151 |
| 1.00 | 16.368 | 5.091 | 11.277 | 34.820 | 0.140812886 | 0.434788038 |
| 1.25 | 22.215 | 7.451 | 14.764 | 49.584 | 0.184354124 | 0.619142161 |
| 1.50 | 19.419 | 7.303 | 12.116 | 61.700 | 0.151289255 | 0.770431417 |
| 1.75 | 18.736 | 7.265 | 11.471 | 73.171 | 0.143235312 | 0.913666729 |
| 2.00 | 8.277 | 3.121 | 5.156 | 78.327 | 0.064381595 | 0.978048324 |
| 2.25 | 2.596 | 1.162 | 1.434 | 79.761 | 0.017905975 | 0.995954299 |
| 2.50 | 0.681 | 0.411 | 0.270 | 80.031 | 0.003371418 | 0.999325716 |
| 2.75 | 0.196 | 0.153 | 0.043 | 80.074 | 0.000536930 | 0.999862646 |
| 3.00 | 0.091 | 0.089 | 0.002 | 80.076 | 0.000024973 | 0.999887619 |
| 3.25 | 0.058 | 0.056 | 0.002 | 80.078 | 0.000024973 | 0.999912593 |
| 3.50 | 0.045 | 0.044 | 0.001 | 80.079 | 0.000012487 | 0.999925080 |
| 3.75 | 0.037 | 0.035 | 0.002 | 80.081 | 0.000024973 | 0.999950053 |
| 4.00 | 0.029 | 0.027 | 0.002 | 80.083 | 0.000024973 | 0.999975027 |
| PAN | 0.031 | 0.029 | 0.002 | 80.085 | 0.000024973 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  | 80.085 |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 0.7-1.7 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-5 : 1.7-2.1 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.146 | 0.000 | 0.146 | 0.146 | 0.003310583 | 0.003310583 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.146 | 0.000000000 | 0.003310583 |
| -1.50 | 0.049 | 0.000 | 0.049 | 0.195 | 0.001111086 | 0.004421668 |
| -1.25 | 0.165 | 0.000 | 0.165 | 0.360 | 0.003741412 | 0.008163080 |
| -1.00 | 0.186 | 0.000 | 0.186 | 0.546 | 0.004217591 | 0.012380672 |
| -0.75 | 0.317 | 0.000 | 0.317 | 0.863 | 0.007188046 | 0.019568717 |
| -0.50 | 0.654 | 0.000 | 0.654 | 1.517 | 0.014829596 | 0.034398313 |
| -0.25 | 1.138 | 0.018 | 1.120 | 2.637 | 0.025396250 | 0.059794562 |
| 0.00 | 1.717 | 0.061 | 1.656 | 4.293 | 0.037550169 | 0.097344731 |
| 0.25 | 2.963 | 0.209 | 2.754 | 7.047 | 0.062447564 | 0.159792295 |
| 0.50 | 3.945 | 0.536 | 3.409 | 10.456 | 0.077299834 | 0.237092129 |
| 0.75 | 5.428 | 1.146 | 4.282 | 14.738 | 0.097095304 | 0.334187433 |
| 1.00 | 8.467 | 2.890 | 5.577 | 20.315 | 0.126459717 | 0.460647151 |
| 1.25 | 11.150 | 3.978 | 7.172 | 27.487 | 0.162626698 | 0.623273849 |
| 1.50 | 10.571 | 3.652 | 6.919 | 34.406 | 0.156889866 | 0.780163715 |
| 1.75 | 10.697 | 4.721 | 5.976 | 40.382 | 0.135507131 | 0.915670846 |
| 2.00 | 5.118 | 2.298 | 2.820 | 43.202 | 0.063944128 | 0.979614975 |
| 2.25 | 1.801 | 0.943 | 0.858 | 44.060 | 0.019455341 | 0.999070316 |
| 2.50 | 0.559 | 0.341 | 0.218 | 44.278 | 0.004943199 | 1.004013514 |
| 2.75 | 0.161 | 0.114 | 0.047 | 44.325 | 0.001065735 | 1.005079250 |
| 3.00 | 0.058 | 0.068 | -0.010 | 44.315 | -0.000226752 | 1.004852498 |
| 3.25 | 0.029 | 0.069 | -0.040 | 44.275 | -0.000907009 | 1.003945489 |
| 3.50 | 0.021 | 0.075 | -0.054 | 44.221 | -0.001224462 | 1.002721027 |
| 3.75 | 0.013 | 0.064 | -0.051 | 44.170 | -0.001156436 | 1.001564590 |
| 4.00 | 0.010 | 0.038 | -0.028 | 44.142 | -0.000634906 | 1.000929684 |
| PAN | 0.016 | 0.057 | -0.041 | 44.101 | -0.000929684 | 1.0 |
|  |  |  |  |  |  |  |

TOTAL WT.
CO3 WT
\% CARBONATE

| 65.379 | grams |
| :--- | :--- |
| 44.101 | grams |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 1.7-2.1 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 2.1-2.6 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. $\%$ |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.032 | 0.000 | 0.032 | 0.032 | 0.000508720 | 0.000508720 |
| -1.00 | 0.240 | 0.000 | 0.240 | 0.272 | 0.003815398 | 0.004324118 |
| -0.75 | 0.598 | 0.000 | 0.598 | 0.870 | 0.009506701 | 0.013830819 |
| -0.50 | 1.178 | 0.002 | 1.176 | 2.046 | 0.018695452 | 0.032526271 |
| -0.25 | 3.204 | 0.039 | 3.165 | 5.211 | 0.050315565 | 0.082841836 |
| 0.00 | 5.820 | 0.213 | 5.607 | 10.818 | 0.089137243 | 0.171979079 |
| 0.25 | 12.151 | 0.734 | 11.417 | 22.235 | 0.181501677 | 0.353480756 |
| 0.50 | 14.389 | 1.251 | 13.138 | 35.373 | 0.208861263 | 0.562342019 |
| 0.75 | 13.144 | 1.250 | 11.894 | 47.267 | 0.189084781 | 0.751426800 |
| 1.00 | 9.254 | 1.103 | 8.151 | 55.418 | 0.129580465 | 0.881007265 |
| 1.25 | 5.020 | 0.982 | 4.038 | 59.456 | 0.064194077 | 0.945201342 |
| 1.50 | 2.316 | 0.480 | 1.836 | 61.292 | 0.029187797 | 0.974389139 |
| 1.75 | 1.520 | 0.641 | 0.879 | 62.171 | 0.013973896 | 0.988363035 |
| 2.00 | 0.742 | 0.411 | 0.331 | 62.502 | 0.005262070 | 0.993625105 |
| 2.25 | 0.415 | 0.256 | 0.159 | 62.661 | 0.002527701 | 0.996152807 |
| 2.50 | 0.319 | 0.131 | 0.188 | 62.849 | 0.002988729 | 0.999141535 |
| 2.75 | 0.114 | 0.070 | 0.044 | 62.893 | 0.000699490 | 0.999841025 |
| 3.00 | 0.076 | 0.076 | 0.000 | 62.893 | 0.000000000 | 0.999841025 |
| 3.25 | 0.058 | 0.056 | 0.002 | 62.895 | 0.000031795 | 0.999872820 |
| 3.50 | 0.042 | 0.040 | 0.002 | 62.897 | 0.000031795 | 0.999904615 |
| 3.75 | 0.034 | 0.032 | 0.002 | 62.899 | 0.000031795 | 0.999936410 |
| 4.00 | 0.021 | 0.019 | 0.002 | 62.901 | 0.000031795 | 0.999968205 |
| PAN | 0.027 | 0.025 | 0.002 | 62.903 | 0.000031795 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 2.1-2.6 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 2.6-4.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION M-5: 2.6-4.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 4.0-5.1 ft


CARBONATE GRAIN SIZE DISTRIBUTION M-5: 4.0-5.1 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 5.1-5.6 ft


CARBONATE GRAIN SIZE DISTRIBUTION M-5: 5.1-5.6 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 5.6-6.3 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 1.194 | 0.000 | 1.194 | 1.194 | 0.027519764 | 0.027519764 |
| -1.75 | 0.226 | 0.000 | 0.226 | 1.420 | 0.005208934 | 0.032728698 |
| -1.50 | 0.187 | 0.000 | 0.187 | 1.607 | 0.004310047 | 0.037038744 |
| -1.25 | 0.459 | 0.000 | 0.459 | 2.066 | 0.010579206 | 0.047617950 |
| -1.00 | 0.432 | 0.000 | 0.432 | 2.498 | 0.009956900 | 0.057574850 |
| -0.75 | 0.647 | 0.000 | 0.647 | 3.145 | 0.014912301 | 0.072487151 |
| -0.50 | 0.808 | 0.000 | 0.808 | 3.953 | 0.018623090 | 0.091110240 |
| -0.25 | 1.092 | 0.000 | 1.092 | 5.045 | 0.025168829 | 0.116279070 |
| 0.00 | 1.122 | 0.004 | 1.118 | 6.163 | 0.025768087 | 0.142047157 |
| 0.25 | 1.688 | 0.092 | 1.596 | 7.759 | 0.036785212 | 0.178832369 |
| 0.50 | 1.816 | 0.213 | 1.603 | 9.362 | 0.036946551 | 0.215778920 |
| 0.75 | 2.426 | 0.432 | 1.994 | 11.356 | 0.045958467 | 0.261737387 |
| 1.00 | 3.657 | 1.041 | 2.616 | 13.972 | 0.060294558 | 0.322031945 |
| 1.25 | 4.863 | 2.011 | 2.852 | 16.824 | 0.065733976 | 0.387765921 |
| 1.50 | 5.688 | 2.059 | 3.629 | 20.453 | 0.083642566 | 0.471408486 |
| 1.75 | 9.307 | 5.341 | 3.966 | 24.419 | 0.091409869 | 0.562818356 |
| 2.00 | 10.098 | 6.477 | 3.621 | 28.040 | 0.083458179 | 0.646276534 |
| 2.25 | 11.639 | 7.728 | 3.911 | 31.951 | 0.090142208 | 0.736418743 |
| 2.50 | 11.300 | 7.369 | 3.931 | 35.882 | 0.090603176 | 0.827021919 |
| 2.75 | 8.144 | 5.482 | 2.662 | 38.544 | 0.061354784 | 0.888376703 |
| 3.00 | 8.286 | 7.097 | 1.189 | 39.733 | 0.027404522 | 0.915781225 |
| 3.25 | 9.707 | 8.506 | 1.201 | 40.934 | 0.027681103 | 0.943462327 |
| 3.50 | 5.825 | 4.075 | 1.750 | 42.684 | 0.040334662 | 0.983796990 |
| 3.75 | 1.559 | 0.991 | 0.568 | 43.252 | 0.013091479 | 0.996888469 |
| 4.00 | 0.220 | 0.133 | 0.087 | 43.339 | 0.002005209 | 0.998893678 |
| PAN | 0.136 | 0.088 | 0.048 | 43.387 | 0.001106322 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
102.526 grams
43.387 grams
42.318

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 5.6-6.3 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-5 : 6.3-7.1 ft

| PHI <br> SIZE | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | CO3 WT $\%$ | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.203 | 0.000 | 0.203 | 0.203 | 0.007957664 | 0.007957664 |
| -1.75 | 0.097 | 0.000 | 0.097 | 0.300 | 0.003802430 | 0.011760094 |
| -1.50 | 0.014 | 0.000 | 0.014 | 0.314 | 0.000548804 | 0.012308898 |
| -1.25 | 0.093 | 0.000 | 0.093 | 0.407 | 0.003645629 | 0.015954528 |
| -1.00 | 0.168 | 0.000 | 0.168 | 0.575 | 0.006585653 | 0.022540180 |
| -0.75 | 0.183 | 0.000 | 0.183 | 0.758 | 0.007173657 | 0.029713838 |
| -0.50 | 0.330 | 0.000 | 0.330 | 1.088 | 0.012936103 | 0.042649941 |
| -0.25 | 0.346 | 0.000 | 0.346 | 1.434 | 0.013563309 | 0.056213250 |
| 0.00 | 0.395 | 0.004 | 0.391 | 1.825 | 0.015327323 | 0.071540572 |
| 0.25 | 0.504 | 0.052 | 0.452 | 2.277 | 0.017718542 | 0.089259114 |
| 0.50 | 0.627 | 0.085 | 0.542 | 2.819 | 0.021246570 | 0.110505684 |
| 0.75 | 0.846 | 0.176 | 0.670 | 3.489 | 0.026264210 | 0.136769894 |
| 1.00 | 1.353 | 0.426 | 0.927 | 4.416 | 0.036338691 | 0.173108585 |
| 1.25 | 1.829 | 0.874 | 0.955 | 5.371 | 0.037436299 | 0.210544884 |
| 1.50 | 1.895 | 0.627 | 1.268 | 6.639 | 0.049705998 | 0.260250882 |
| 1.75 | 3.677 | 2.027 | 1.650 | 8.289 | 0.064680517 | 0.324931399 |
| 2.00 | 4.236 | 2.497 | 1.739 | 10.028 | 0.068169345 | 0.393100745 |
| 2.25 | 5.511 | 3.340 | 2.171 | 12.199 | 0.085103881 | 0.478204626 |
| 2.50 | 6.343 | 3.889 | 2.454 | 14.653 | 0.096197570 | 0.574402195 |
| 2.75 | 6.574 | 4.671 | 1.903 | 16.556 | 0.074598197 | 0.649000392 |
| 3.00 | 10.976 | 10.974 | 0.002 | 16.558 | 0.000078401 | 0.649078793 |
| 3.25 | 18.370 | 16.339 | 2.031 | 18.589 | 0.079615837 | 0.728694630 |
| 3.50 | 13.220 | 8.257 | 4.963 | 23.552 | 0.194551156 | 0.923245786 |
| 3.75 | 3.988 | 2.279 | 1.709 | 25.261 | 0.066993336 | 0.990239122 |
| 4.00 | 0.391 | 0.206 | 0.185 | 25.446 | 0.007252058 | 0.997491180 |
| PAN | 0.119 | 0.055 | 0.064 | 25.510 | 0.002508820 | 1.0 |
| TOTAL WT. |  |  |  | 82.288 | grams |  |
| CO3 WT |  |  |  | 25.510 | grams |  |
| \% CARBONATE |  |  |  | 31.001 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 6.3-7.1 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 7.1-7.3 ft

| PHI SIZE | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | CO3 WT $\%$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 7.986 | 0.000 | 7.986 | 7.986 | 0.168762283 | 0.168762283 |
| -1.75 | 0.823 | 0.000 | 0.823 | 8.809 | 0.017391856 | 0.186154139 |
| -1.50 | 0.827 | 0.000 | 0.827 | 9.636 | 0.017476385 | 0.203630523 |
| -1.25 | 1.187 | 0.000 | 1.187 | 10.823 | 0.025084001 | 0.228714524 |
| -1.00 | 1.133 | 0.000 | 1.133 | 11.956 | 0.023942858 | 0.252657383 |
| -0.75 | 1.549 | 0.000 | 1.549 | 13.505 | 0.032733881 | 0.285391264 |
| -0.50 | 1.550 | 0.000 | 1.550 | 15.055 | 0.032755014 | 0.318146278 |
| -0.25 | 1.851 | 0.000 | 1.851 | 16.906 | 0.039115826 | 0.357262104 |
| 0.00 | 1.966 | 0.050 | 1.916 | 18.822 | 0.040489423 | 0.397751527 |
| 0.25 | 2.485 | 0.151 | 2.334 | 21.156 | 0.049322711 | 0.447074238 |
| 0.50 | 2.550 | 0.300 | 2.250 | 23.406 | 0.047547600 | 0.494621838 |
| 0.75 | 3.022 | 0.550 | 2.472 | 25.878 | 0.052238964 | 0.546860802 |
| 1.00 | 4.196 | 1.232 | 2.964 | 28.842 | 0.062636039 | 0.609496841 |
| 1.25 | 4.830 | 1.896 | 2.934 | 31.776 | 0.062002071 | 0.671498912 |
| 1.50 | 4.558 | 1.854 | 2.704 | 34.480 | 0.057141650 | 0.728640561 |
| 1.75 | 6.257 | 3.454 | 2.803 | 37.283 | 0.059233744 | 0.787874305 |
| 2.00 | 6.105 | 3.814 | 2.291 | 39.574 | 0.048414023 | 0.836288329 |
| 2.25 | 6.268 | 3.986 | 2.282 | 41.856 | 0.048223833 | 0.884512162 |
| 2.50 | 5.690 | 3.519 | 2.171 | 44.027 | 0.045878151 | 0.930390313 |
| 2.75 | 3.970 | 2.630 | 1.340 | 45.367 | 0.028317238 | 0.958707551 |
| 3.00 | 3.689 | 3.068 | 0.621 | 45.988 | 0.013123138 | 0.971830688 |
| 3.25 | 4.485 | 3.887 | 0.598 | 46.586 | 0.012637096 | 0.984467784 |
| 3.50 | 2.767 | 2.309 | 0.458 | 47.044 | 0.009678578 | 0.994146362 |
| 3.75 | 0.788 | 0.585 | 0.203 | 47.247 | 0.004289850 | 0.998436212 |
| 4.00 | 0.126 | 0.071 | 0.055 | 47.302 | 0.001162275 | 0.999598487 |
| PAN | 0.077 | 0.058 | 0.019 | 47.321 | 0.000401513 | 1.0 |
| total wt. |  |  |  | 80.735 | grams |  |
| CO3 WT |  |  |  | 47.321 | grams |  |
| \% CARBONATE |  |  |  | 58.613 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 7.1-7.3 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-5 : 7.3-7.4 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | \% | WT. \% |
| <-2.00 | 0.203 | 0.000 | 0.203 | 0.203 | 0.007560803 | 0.007560803 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.203 | 0.000000000 | 0.007560803 |
| -1.50 | 0.031 | 0.000 | 0.031 | 0.234 | 0.001154605 | 0.008715408 |
| -1.25 | 0.023 | 0.000 | 0.023 | 0.257 | 0.000856643 | 0.009572051 |
| -1.00 | 0.155 | 0.000 | 0.155 | 0.412 | 0.005773027 | 0.015345078 |
| -0.75 | 0.048 | 0.000 | 0.048 | 0.460 | 0.001787776 | 0.017132854 |
| -0.50 | 0.244 | 0.000 | 0.244 | 0.704 | 0.009087862 | 0.026220716 |
| -0.25 | 0.208 | 0.000 | 0.208 | 0.912 | 0.007747030 | 0.033967746 |
| 0.00 | 0.320 | 0.016 | 0.304 | 1.216 | 0.011322582 | 0.045290327 |
| 0.25 | 0.484 | 0.027 | 0.457 | 1.673 | 0.017021118 | 0.062311445 |
| 0.50 | 0.685 | 0.064 | 0.621 | 2.294 | 0.023129353 | 0.085440799 |
| 0.75 | 0.892 | 0.148 | 0.744 | 3.038 | 0.027710529 | 0.113151328 |
| 1.00 | 1.469 | 0.391 | 1.078 | 4.116 | 0.040150471 | 0.153301799 |
| 1.25 | 2.139 | 0.970 | 1.169 | 5.285 | 0.043539797 | 0.196841596 |
| 1.50 | 2.640 | 1.016 | 1.624 | 6.909 | 0.060486424 | 0.257328020 |
| 1.75 | 5.690 | 3.208 | 2.482 | 9.391 | 0.092442922 | 0.349770941 |
| 2.00 | 7.246 | 4.657 | 2.589 | 11.980 | 0.096428172 | 0.446199114 |
| 2.25 | 9.012 | 5.824 | 3.188 | 15.168 | 0.118738128 | 0.564937242 |
| 2.50 | 9.863 | 6.335 | 3.528 | 18.696 | 0.131401542 | 0.696338784 |
| 2.75 | 8.443 | 5.832 | 2.611 | 21.307 | 0.097247570 | 0.793586353 |
| 3.00 | 9.421 | 7.880 | 1.541 | 22.848 | 0.057395061 | 0.850981415 |
| 3.25 | 10.633 | 8.816 | 1.817 | 24.665 | 0.067674774 | 0.918656188 |
| 3.50 | 6.237 | 4.723 | 1.514 | 26.179 | 0.056389437 | 0.975045626 |
| 3.75 | 1.740 | 1.179 | 0.561 | 26.740 | 0.020894633 | 0.995940258 |
| 4.00 | 0.185 | 0.103 | 0.082 | 26.822 | 0.003054117 | 0.998994376 |
| PAN | 0.103 | 0.076 | 0.027 | 26.849 | 0.001005624 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 78.114 | grams grams |  |
|  |  |  |  | 26.849 |  |  |
|  |  |  |  | 34.372 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 7.3-7.4 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-5 : 7.4-7.7 ft

| $\begin{aligned} & \hline \mathrm{PHI} \\ & \mathrm{SIZE} \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3WT } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 1.228 | 0.000 | 1.228 | 1.228 | 0.020645942 | 0.020645942 |
| -1.75 | 0.380 | 0.000 | 0.380 | 1.608 | 0.006388809 | 0.027034752 |
| -1.50 | 0.253 | 0.000 | 0.253 | 1.861 | 0.004253602 | 0.031288354 |
| -1.25 | 0.308 | 0.000 | 0.308 | 2.169 | 0.005178298 | 0.036466652 |
| -1.00 | 0.528 | 0.000 | 0.528 | 2.697 | 0.008877083 | 0.045343735 |
| -0.75 | 0.801 | 0.000 | 0.801 | 3.498 | 0.013466938 | 0.058810673 |
| -0.50 | 1.078 | 0.000 | 1.078 | 4.576 | 0.018124044 | 0.076934716 |
| -0.25 | 1.558 | 0.000 | 1.558 | 6.134 | 0.026194119 | 0.103128835 |
| 0.00 | 1.847 | 0.001 | 1.846 | 7.980 | 0.031036164 | 0.134164999 |
| 0.25 | 2.966 | 0.181 | 2.785 | 10.765 | 0.046823249 | 0.180988248 |
| 0.50 | 3.516 | 0.454 | 3.062 | 13.827 | 0.051480354 | 0.232468602 |
| 0.75 | 4.846 | 1.012 | 3.834 | 17.661 | 0.064459725 | 0.296928328 |
| 1.00 | 7.532 | 2.209 | 5.323 | 22.984 | 0.089493771 | 0.386422099 |
| 1.25 | 9.965 | 3.840 | 6.125 | 29.109 | 0.102977521 | 0.489399620 |
| 1.50 | 10.028 | 3.678 | 6.350 | 35.459 | 0.106760369 | 0.596159989 |
| 1.75 | 13.118 | 7.038 | 6.080 | 41.539 | 0.102220952 | 0.698380941 |
| 2.00 | 11.821 | 7.066 | 4.755 | 46.294 | 0.079944182 | 0.778325123 |
| 2.25 | 11.644 | 7.349 | 4.295 | 50.589 | 0.072210360 | 0.850535483 |
| 2.50 | 9.799 | 6.190 | 3.609 | 54.198 | 0.060676878 | 0.911212361 |
| 2.75 | 6.214 | 3.912 | 2.302 | 56.500 | 0.038702735 | 0.949915096 |
| 3.00 | 4.663 | 3.668 | 0.995 | 57.495 | 0.016728593 | 0.966643689 |
| 3.25 | 4.128 | 3.189 | 0.939 | 58.434 | 0.015787085 | 0.982430774 |
| 3.50 | 1.974 | 1.282 | 0.692 | 59.126 | 0.011634358 | 0.994065132 |
| 3.75 | 0.576 | 0.283 | 0.293 | 59.419 | 0.004926108 | 0.998991241 |
| 4.00 | 0.145 | 0.089 | 0.056 | 59.475 | 0.000941509 | 0.999932749 |
| PAN | 0.116 | 0.112 | 0.004 | 59.479 | 0.000067251 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | $\begin{gathered} 111.032 \\ 59.479 \\ 53.569 \end{gathered}$ | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-5: 7.4-7.7 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-6 : 0-0.5 ft

| PHI | TOTAL | DIGESTED | CO3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WUM CO3 | CO3 WT | CUM CO3 |  |
|  |  |  |  |  | WT. |  |
| $<-2.00$ | 0.541 | 0.000 | 0.541 | 0.541 | 0.011476453 | 0.011476453 |
| -1.75 | 0.000 | 0.000 | 0.000 | 0.541 | 0.000000000 | 0.011476453 |
| -1.50 | 0.000 | 0.000 | 0.000 | 0.541 | 0.000000000 | 0.011476453 |
| -1.25 | 0.019 | 0.000 | 0.019 | 0.560 | 0.000403055 | 0.011879508 |
| -1.00 | 0.015 | 0.000 | 0.015 | 0.575 | 0.000318201 | 0.012197709 |
| -0.75 | 0.061 | 0.000 | 0.061 | 0.636 | 0.001294018 | 0.013491727 |
| -0.50 | 0.027 | 0.000 | 0.027 | 0.663 | 0.000572762 | 0.014064489 |
| -0.25 | 0.080 | 0.000 | 0.080 | 0.743 | 0.001697073 | 0.015761561 |
| 0.00 | 0.191 | 0.000 | 0.191 | 0.934 | 0.004051761 | 0.019813322 |
| 0.25 | 0.618 | 0.055 | 0.563 | 1.497 | 0.011943148 | 0.031756470 |
| 0.50 | 1.368 | 0.138 | 1.230 | 2.727 | 0.026092490 | 0.057848961 |
| 0.75 | 2.614 | 0.454 | 2.160 | 4.887 | 0.045820959 | 0.103669919 |
| 1.00 | 5.822 | 1.658 | 4.164 | 9.051 | 0.088332626 | 0.192002546 |
| 1.25 | 8.918 | 3.382 | 5.536 | 14.587 | 0.117437420 | 0.309439966 |
| 1.50 | 8.994 | 3.416 | 5.578 | 20.165 | 0.118328384 | 0.427768350 |
| 1.75 | 15.093 | 7.794 | 7.299 | 27.464 | 0.154836657 | 0.582605006 |
| 2.00 | 15.459 | 8.699 | 6.760 | 34.224 | 0.143402630 | 0.726007637 |
| 2.25 | 13.411 | 7.415 | 5.996 | 40.220 | 0.127195588 | 0.853203224 |
| 2.50 | 8.432 | 4.094 | 4.338 | 44.558 | 0.092023759 | 0.945226983 |
| 2.75 | 3.533 | 1.736 | 1.797 | 46.355 | 0.038120492 | 0.983347476 |
| 3.00 | 1.734 | 1.146 | 0.588 | 46.943 | 0.012473483 | 0.995820959 |
| 3.25 | 0.857 | 0.695 | 0.162 | 47.105 | 0.003436572 | 0.999257531 |
| 3.50 | 0.239 | 0.210 | 0.029 | 47.134 | 0.000615189 | 0.999872720 |
| 3.75 | 0.050 | 0.048 | 0.002 | 47.136 | 0.000042427 | 0.999915146 |
| 4.00 | 0.022 | 0.020 | 0.002 | 47.138 | 0.000042427 | 0.999957573 |
| PAN | 0.029 | 0.027 | 0.002 | 47.140 | 0.000042427 | 1.0 |
|  |  |  |  |  |  |  |

TOTAL WT.
CO3 WT
\% CARBONATE
88.127 grams
47.140 grams
53.491

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 0-0.5 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-6 : 0.5-1.2 ft

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO3} \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3WT } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 3.553 | 0.000 | 3.553 | 3.553 | 0.054176451 | 0.054176451 |
| -1.75 | 1.176 | 0.000 | 1.176 | 4.729 | 0.017931750 | 0.072108200 |
| -1.50 | 1.199 | 0.000 | 1.199 | 5.928 | 0.018282456 | 0.090390656 |
| -1.25 | 2.045 | 0.000 | 2.045 | 7.973 | 0.031182337 | 0.121572993 |
| -1.00 | 1.940 | 0.000 | 1.940 | 9.913 | 0.029581288 | 0.151154280 |
| -0.75 | 2.924 | 0.000 | 2.924 | 12.837 | 0.044585405 | 0.195739685 |
| -0.50 | 3.927 | 0.098 | 3.829 | 16.666 | 0.058384923 | 0.254124607 |
| -0.25 | 4.968 | 0.044 | 4.924 | 21.590 | 0.075081577 | 0.329206185 |
| 0.00 | 4.751 | 0.108 | 4.643 | 26.233 | 0.070796865 | 0.400003050 |
| 0.25 | 6.329 | 0.283 | 6.046 | 32.279 | 0.092189930 | 0.492192980 |
| 0.50 | 5.847 | 0.583 | 5.264 | 37.543 | 0.080265927 | 0.572458906 |
| 0.75 | 6.503 | 1.155 | 5.348 | 42.891 | 0.081546766 | 0.654005672 |
| 1.00 | 7.999 | 2.306 | 5.693 | 48.584 | 0.086807356 | 0.740813028 |
| 1.25 | 8.626 | 3.132 | 5.494 | 54.078 | 0.083772986 | 0.824586014 |
| 1.50 | 6.692 | 2.504 | 4.188 | 58.266 | 0.063858986 | 0.888445000 |
| 1.75 | 7.014 | 3.448 | 3.566 | 61.832 | 0.054374676 | 0.942819676 |
| 2.00 | 4.049 | 2.101 | 1.948 | 63.780 | 0.029703272 | 0.972522948 |
| 2.25 | 2.198 | 1.159 | 1.039 | 64.819 | 0.015842762 | 0.988365710 |
| 2.50 | 1.179 | 0.659 | 0.520 | 65.339 | 0.007929005 | 0.996294715 |
| 2.75 | 0.588 | 0.399 | 0.189 | 65.528 | 0.002881888 | 0.999176603 |
| 3.00 | 0.373 | 0.329 | 0.044 | 65.572 | 0.000670916 | 0.999847519 |
| 3.25 | 0.199 | 0.197 | 0.002 | 65.574 | 0.000030496 | 0.999878015 |
| 3.50 | 0.105 | 0.103 | 0.002 | 65.576 | 0.000030496 | 0.999908511 |
| 3.75 | 0.046 | 0.044 | 0.002 | 65.578 | 0.000030496 | 0.999939008 |
| 4.00 | 0.028 | 0.026 | 0.002 | 65.580 | 0.000030496 | 0.999969504 |
| PAN | 0.037 | 0.035 | 0.002 | 65.582 | 0.000030496 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE

| 84.295 | grams |
| :--- | :--- |
| 65.582 | grams |
| 77.801 |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 0.5-1.2 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-6 : 1.2-2.6 ft

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | CO3 WT $\%$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.669 | 0.000 | 0.669 | 0.669 | 0.009123266 | 0.009123266 |
| -1.75 | 0.412 | 0.000 | 0.412 | 1.081 | 0.005618514 | 0.014741780 |
| -1.50 | 0.334 | 0.000 | 0.334 | 1.415 | 0.004554815 | 0.019296595 |
| -1.25 | 0.689 | 0.000 | 0.689 | 2.104 | 0.009396010 | 0.028692605 |
| -1.00 | 0.749 | 0.000 | 0.749 | 2.853 | 0.010214240 | 0.038906844 |
| -0.75 | 1.984 | 0.000 | 1.984 | 4.837 | 0.027056144 | 0.065962989 |
| -0.50 | 3.738 | 0.000 | 3.738 | 8.575 | 0.050975739 | 0.116938728 |
| -0.25 | 6.034 | 0.055 | 5.979 | 14.554 | 0.081536636 | 0.198475364 |
| 0.00 | 8.540 | 0.291 | 8.249 | 22.803 | 0.112493011 | 0.310968375 |
| 0.25 | 13.583 | 0.838 | 12.745 | 35.548 | 0.173805725 | 0.484774100 |
| 0.50 | 13.028 | 1.291 | 11.737 | 47.285 | 0.160059458 | 0.644833558 |
| 0.75 | 11.149 | 1.487 | 9.662 | 56.947 | 0.131762331 | 0.776595890 |
| 1.00 | 8.576 | 1.655 | 6.921 | 63.868 | 0.094382850 | 0.870978740 |
| 1.25 | 5.208 | 1.298 | 3.910 | 67.778 | 0.053321333 | 0.924300072 |
| 1.50 | 2.632 | 0.673 | 1.959 | 69.737 | 0.026715215 | 0.951015287 |
| 1.75 | 2.466 | 1.161 | 1.305 | 71.042 | 0.017796506 | 0.968811793 |
| 2.00 | 1.776 | 0.986 | 0.790 | 71.832 | 0.010773364 | 0.979585157 |
| 2.25 | 1.397 | 0.740 | 0.657 | 72.489 | 0.008959620 | 0.988544778 |
| 2.50 | 0.910 | 0.424 | 0.486 | 72.975 | 0.006627664 | 0.995172442 |
| 2.75 | 0.450 | 0.205 | 0.245 | 73.220 | 0.003341107 | 0.998513549 |
| 3.00 | 0.337 | 0.237 | 0.100 | 73.320 | 0.001363717 | 0.999877265 |
| 3.25 | 0.306 | 0.305 | 0.001 | 73.321 | 0.000013637 | 0.999890903 |
| 3.50 | 0.228 | 0.226 | 0.002 | 73.323 | 0.000027274 | 0.999918177 |
| 3.75 | 0.103 | 0.101 | 0.002 | 73.325 | 0.000027274 | 0.999945451 |
| 4.00 | 0.056 | 0.054 | 0.002 | 73.327 | 0.000027274 | 0.999972726 |
| PAN | 0.050 | 0.048 | 0.002 | 73.329 | 0.000027274 | 1.0 |
| TOTAL WT. |  |  |  | 85.404 | grams |  |
| CO3 WT |  |  |  | 73.329 | grams |  |
| \% CARBONATE |  |  |  | 85.861 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 1.2-2.6 ft


CARBONATE GRAIN SIZE DISTRIBUTION

CORE M-6 : 2.6-3.6 ft

| PHI | TOTAL <br> SIZE | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -2.00 | 0.277 | 0.000 | 0.277 | 0.277 | 0.004514415 | 0.004514415 |
| -1.75 | 0.812 | 0.000 | 0.812 | 1.089 | 0.013233592 | 0.017748008 |
| -1.50 | 0.755 | 0.000 | 0.755 | 1.844 | 0.012304633 | 0.030052641 |
| -1.25 | 0.763 | 0.000 | 0.763 | 2.607 | 0.012435014 | 0.042487655 |
| -1.00 | 1.491 | 0.000 | 1.491 | 4.098 | 0.024299614 | 0.066787268 |
| -0.75 | 2.351 | 0.000 | 2.351 | 6.449 | 0.038315488 | 0.105102756 |
| -0.50 | 4.650 | 0.000 | 4.650 | 11.099 | 0.075783504 | 0.180886260 |
| -0.25 | 6.886 | 0.064 | 6.822 | 17.921 | 0.111181734 | 0.292067993 |
| 0.00 | 8.377 | 0.115 | 8.262 | 26.183 | 0.134650174 | 0.426718167 |
| 0.25 | 10.046 | 0.304 | 9.742 | 35.925 | 0.158770515 | 0.585488681 |
| 0.50 | 7.537 | 0.397 | 7.140 | 43.065 | 0.116364348 | 0.701853029 |
| 0.75 | 5.859 | 0.503 | 5.356 | 48.421 | 0.087289558 | 0.789142587 |
| 1.00 | 4.753 | 0.599 | 4.154 | 52.575 | 0.067699930 | 0.856842517 |
| 1.25 | 3.222 | 0.664 | 2.558 | 55.133 | 0.041689076 | 0.898531593 |
| 1.50 | 1.958 | 0.391 | 1.567 | 56.700 | 0.025538226 | 0.924069819 |
| 1.75 | 2.336 | 0.863 | 1.473 | 58.173 | 0.024006258 | 0.948076077 |
| 2.00 | 1.871 | 0.897 | 0.974 | 59.147 | 0.015873792 | 0.963949869 |
| 2.25 | 1.641 | 0.782 | 0.859 | 60.006 | 0.013999576 | 0.977949445 |
| 2.50 | 1.145 | 0.496 | 0.649 | 60.655 | 0.010577095 | 0.988526541 |
| 2.75 | 0.538 | 0.205 | 0.333 | 60.988 | 0.005427077 | 0.993953617 |
| 3.00 | 0.317 | 0.143 | 0.174 | 61.162 | 0.002835770 | 0.996789387 |
| 3.25 | 0.190 | 0.120 | 0.070 | 61.232 | 0.001140827 | 0.997930214 |
| 3.50 | 0.138 | 0.101 | 0.037 | 61.269 | 0.000603009 | 0.998533223 |
| 3.75 | 0.094 | 0.068 | 0.026 | 61.295 | 0.000423736 | 0.998956958 |
| 4.00 | 0.084 | 0.038 | 0.046 | 61.341 | 0.000749686 | 0.999706645 |
| PAN | 0.084 | 0.066 | 0.018 | 61.359 | 0.000293355 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| \% CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 2.6-3.6 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-6 : 3.6-3.9 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 2.867 | 0.000 | 2.867 | 2.867 | 0.047170122 | 0.047170122 |
| -1.75 | 1.093 | 0.000 | 1.093 | 3.960 | 0.017982889 | 0.065153011 |
| -1.50 | 0.694 | 0.000 | 0.694 | 4.654 | 0.011418230 | 0.076571241 |
| -1.25 | 0.970 | 0.000 | 0.970 | 5.624 | 0.015959197 | 0.092530438 |
| -1.00 | 1.208 | 0.000 | 1.208 | 6.832 | 0.019874959 | 0.112405397 |
| -0.75 | 1.812 | 0.000 | 1.812 | 8.644 | 0.029812438 | 0.142217835 |
| -0.50 | 2.801 | 0.000 | 2.801 | 11.445 | 0.046084238 | 0.188302073 |
| -0.25 | 4.086 | 0.122 | 3.964 | 15.409 | 0.065218822 | 0.253520895 |
| 0.00 | 5.223 | 0.155 | 5.068 | 20.477 | 0.083382692 | 0.336903587 |
| 0.25 | 8.671 | 0.530 | 8.141 | 28.618 | 0.133942086 | 0.470845673 |
| 0.50 | 8.793 | 0.948 | 7.845 | 36.463 | 0.129072063 | 0.599917736 |
| 0.75 | 9.248 | 1.654 | 7.594 | 44.057 | 0.124942415 | 0.724860151 |
| 1.00 | 9.122 | 2.456 | 6.666 | 50.723 | 0.109674235 | 0.834534386 |
| 1.25 | 7.123 | 2.400 | 4.723 | 55.446 | 0.077706482 | 0.912240869 |
| 1.50 | 4.013 | 1.573 | 2.440 | 57.886 | 0.040144784 | 0.952385653 |
| 1.75 | 2.890 | 1.332 | 1.558 | 59.444 | 0.025633432 | 0.978019085 |
| 2.00 | 1.308 | 0.664 | 0.644 | 60.088 | 0.010595591 | 0.988614676 |
| 2.25 | 0.684 | 0.320 | 0.364 | 60.452 | 0.005988812 | 0.994603488 |
| 2.50 | 0.330 | 0.141 | 0.189 | 60.641 | 0.003109576 | 0.997713064 |
| 2.75 | 0.155 | 0.072 | 0.083 | 60.724 | 0.001365581 | 0.999078644 |
| 3.00 | 0.115 | 0.078 | 0.037 | 60.761 | 0.000608753 | 0.999687397 |
| 3.25 | 0.082 | 0.080 | 0.002 | 60.763 | 0.000032906 | 0.999720303 |
| 3.50 | 0.077 | 0.075 | 0.002 | 60.765 | 0.000032906 | 0.999753208 |
| 3.75 | 0.065 | 0.063 | 0.002 | 60.767 | 0.000032906 | 0.999786114 |
| 4.00 | 0.042 | 0.031 | 0.011 | 60.778 | 0.000180981 | 0.999967094 |
| PAN | 0.053 | 0.051 | 0.002 | 60.780 | 0.000032906 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 3.6-3.9 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-6 : 3.9-4.6 ft

| PHI <br> SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | CUM CO3 WT. $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.989 | 0.000 | 2.989 | 2.989 | 0.043952651 | 0.043952651 |
| -1.75 | 2.239 | 0.000 | 2.239 | 5.228 | 0.032924050 | 0.076876700 |
| -1.50 | 1.140 | 0.000 | 1.140 | 6.368 | 0.016763473 | 0.093640174 |
| -1.25 | 1.928 | 0.000 | 1.928 | 8.296 | 0.028350857 | 0.121991030 |
| -1.00 | 2.178 | 0.000 | 2.178 | 10.474 | 0.032027057 | 0.154018087 |
| -0.75 | 3.194 | 0.000 | 3.194 | 13.668 | 0.046967135 | 0.200985222 |
| -0.50 | 4.637 | 0.000 | 4.637 | 18.305 | 0.068186163 | 0.269171384 |
| -0.25 | 5.551 | 0.027 | 5.524 | 23.829 | 0.081229321 | 0.350400706 |
| 0.00 | 6.171 | 0.078 | 6.093 | 29.922 | 0.089596353 | 0.439997059 |
| 0.25 | 7.726 | 0.281 | 7.445 | 37.367 | 0.109477244 | 0.549474303 |
| 0.50 | 6.542 | 0.389 | 6.153 | 43.520 | 0.090478641 | 0.639952945 |
| 0.75 | 6.099 | 0.581 | 5.518 | 49.038 | 0.081141093 | 0.721094037 |
| 1.00 | 6.064 | 0.910 | 5.154 | 54.192 | 0.075788545 | 0.796882582 |
| 1.25 | 5.088 | 1.209 | 3.879 | 58.071 | 0.057039924 | 0.853922506 |
| 1.50 | 3.717 | 0.862 | 2.855 | 60.926 | 0.041982207 | 0.895904713 |
| 1.75 | 4.182 | 1.694 | 2.488 | 63.414 | 0.036585545 | 0.932490258 |
| 2.00 | 3.053 | 1.524 | 1.529 | 64.943 | 0.022483641 | 0.954973899 |
| 2.25 | 2.320 | 1.198 | 1.122 | 66.065 | 0.016498787 | 0.971472686 |
| 2.50 | 1.564 | 0.671 | 0.893 | 66.958 | 0.013131387 | 0.984604073 |
| 2.75 | 0.707 | 0.258 | 0.449 | 67.407 | 0.006602456 | 0.991206529 |
| 3.00 | 0.419 | 0.187 | 0.232 | 67.639 | 0.003411514 | 0.994618043 |
| 3.25 | 0.244 | 0.141 | 0.103 | 67.742 | 0.001514595 | 0.996132637 |
| 3.50 | 0.185 | 0.102 | 0.083 | 67.825 | 0.001220498 | 0.997353136 |
| 3.75 | 0.133 | 0.071 | 0.062 | 67.887 | 0.000911698 | 0.998264833 |
| 4.00 | 0.102 | 0.037 | 0.065 | 67.952 | 0.000955812 | 0.999220646 |
| PAN | 0.115 | 0.062 | 0.053 | 68.005 | 0.000779354 | 1.0 |
| TOTAL WT. |  |  |  | 78.287 | grams |  |
| CO3 WT |  |  |  | 68.005 | grams |  |
| \% CARBONATE |  |  |  | 86.866 |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 3.9-4.6 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE M-6 : 4.6-5.5 ft

| PHI | TOTAL | DIGESTED | CO3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WUM CO3 | CO3 WT | CUM CO3 |  |
| WT. |  | W | WT. \% |  |  |  |
| $<-2.00$ | 2.804 | 0.000 | 2.804 | 2.804 | 0.040537805 | 0.040537805 |
| -1.75 | 0.670 | 0.000 | 0.670 | 3.474 | 0.009686280 | 0.050224086 |
| -1.50 | 0.675 | 0.000 | 0.675 | 4.149 | 0.009758566 | 0.059982651 |
| -1.25 | 1.142 | 0.000 | 1.142 | 5.291 | 0.016510048 | 0.076492699 |
| -1.00 | 1.641 | 0.000 | 1.641 | 6.932 | 0.023724158 | 0.100216857 |
| -0.75 | 1.999 | 0.000 | 1.999 | 8.931 | 0.028899812 | 0.129116669 |
| -0.50 | 3.434 | 0.000 | 3.434 | 12.365 | 0.049645800 | 0.178762469 |
| -0.25 | 5.001 | 0.039 | 4.962 | 17.327 | 0.071736302 | 0.250498771 |
| 0.00 | 5.591 | 0.090 | 5.501 | 22.828 | 0.079528697 | 0.330027469 |
| 0.25 | 7.532 | 0.273 | 7.259 | 30.087 | 0.104944340 | 0.434971809 |
| 0.50 | 7.259 | 0.430 | 6.829 | 36.916 | 0.098727772 | 0.533699581 |
| 0.75 | 7.348 | 0.723 | 6.625 | 43.541 | 0.095778517 | 0.629478097 |
| 1.00 | 7.795 | 1.263 | 6.532 | 50.073 | 0.094434003 | 0.723912101 |
| 1.25 | 7.310 | 1.756 | 5.554 | 55.627 | 0.080294926 | 0.804207026 |
| 1.50 | 6.128 | 1.850 | 4.278 | 59.905 | 0.061847622 | 0.866054648 |
| 1.75 | 6.304 | 2.788 | 3.516 | 63.421 | 0.050831285 | 0.916885933 |
| 2.00 | 4.573 | 2.356 | 2.217 | 65.638 | 0.032051467 | 0.948937401 |
| 2.25 | 3.261 | 1.692 | 1.569 | 67.207 | 0.022683244 | 0.971620645 |
| 2.50 | 1.905 | 0.847 | 1.058 | 68.265 | 0.015295648 | 0.986916293 |
| 2.75 | 0.724 | 0.277 | 0.447 | 68.712 | 0.006462339 | 0.993378632 |
| 3.00 | 0.373 | 0.178 | 0.195 | 68.907 | 0.002819141 | 0.996197774 |
| 3.25 | 0.238 | 0.136 | 0.102 | 69.009 | 0.001474628 | 0.997672401 |
| 3.50 | 0.154 | 0.113 | 0.041 | 69.050 | 0.000592743 | 0.998265144 |
| 3.75 | 0.123 | 0.076 | 0.047 | 69.097 | 0.000679485 | 0.998944629 |
| 4.00 | 0.094 | 0.043 | 0.051 | 69.148 | 0.000737314 | 0.999681943 |
| PAN | 0.103 | 0.081 | 0.022 | 69.170 | 0.000318057 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
84.181 grams
69.170 grams

CARBONATE GRAIN SIZE DISTRIBUTION M-6: 4.6-5.5 ft


Phi Size




| PRIJECT: MMS CIUPERATIVE STUDY CENTRAL FLDRIDA EAST CDAST |  | BORING ID: $\vee B-4$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| INSTALLATIDN DATE: |  | DRILLING METHDD: 2 " PUSH CIRE |  |  |
|  | $40{ }^{\text {TOTAL }}$ |  |  | , |
| DEPTH GEZLDGIC DESCRIPTIDN$(\mathrm{FT})$ |  | LITH. USCS <br> CIMMENT <br> SYMBCL CLASS |  |  |
|  |  |  |  |  |




| PRDJECT: MMS CIDPERATIVE STUDY CENTRAL FLDRIDA EAST CDAST |  | BCRING ID: VB-7/1 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| INSTALLATIDN DATE: |  | DRILLING METHDD: 2 " PUSH CDRE |  |  |
|  |    <br> PRE DIAMETER: TOTAL <br> PEPTH:   <br> SCHEDULE 40 FT. | GEDLD |  | ISTS: H. FREEDENBERG, <br> M. LACHANCE, A. DABDUS |
| DEPTH GEDLOGIC DESCRIPTIUN$(F \mathrm{~F})$ |  | LITH: USCS CIMMENTS SYMBDL CLASS |  |  |
|  |  |  |  |  |






## GRAIN SIZE DISTRIBUTION CHART

CORE VB-1: 0-1.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 3.610 | 3.610 | 0.028696572 | 0.028696572 |
| -1.75 | 0.945 | 4.555 | 0.007511983 | 0.036208555 |
| -1.50 | 0.831 | 5.386 | 0.006605776 | 0.042814331 |
| -1.25 | 1.367 | 6.753 | 0.010866541 | 0.053680872 |
| -1.00 | 1.342 | 8.095 | 0.010667811 | 0.064348683 |
| -0.75 | 1.743 | 9.838 | 0.013855436 | 0.078204119 |
| -0.50 | 2.208 | 12.046 | 0.017551809 | 0.095755928 |
| -0.25 | 2.529 | 14.575 | 0.020103498 | 0.115859427 |
| 0.00 | 2.744 | 17.319 | 0.021812574 | 0.137672001 |
| 0.25 | 4.292 | 21.611 | 0.034117918 | 0.171789919 |
| 0.50 | 5.471 | 27.082 | 0.043490012 | 0.215279931 |
| 0.75 | 7.855 | 34.937 | 0.062440878 | 0.277720809 |
| 1.00 | 11.799 | 46.736 | 0.093792478 | 0.371513287 |
| 1.25 | 14.789 | 61.525 | 0.117560553 | 0.489073840 |
| 1.50 | 12.045 | 73.570 | 0.095747979 | 0.584821819 |
| 1.75 | 17.427 | 90.997 | 0.138530513 | 0.723352332 |
| 2.00 | 16.086 | 107.083 | 0.127870651 | 0.851222983 |
| 2.25 | 12.425 | 119.508 | 0.098768671 | 0.949991653 |
| 2.50 | 4.861 | 124.369 | 0.038641007 | 0.988632660 |
| 2.75 | 0.782 | 125.151 | 0.006216266 | 0.994848926 |
| 3.00 | 0.251 | 125.402 | 0.001995246 | 0.996844172 |
| 3.25 | 0.127 | 125.529 | 0.001009547 | 0.997853719 |
| 3.50 | 0.101 | 125.630 | 0.000802868 | 0.998656587 |
| 3.75 | 0.062 | 125.692 | 0.000492850 | 0.999149437 |
| 4.00 | 0.052 | 125.744 | 0.000413358 | 0.999562795 |
| PAN | 0.055 | 125.799 | 0.000437205 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 125.799 | 62.900 | grams |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 1.0-2.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 4.275 | 4.275 | 0.032339080 | 0.032339080 |
| -1.75 | 1.066 | 5.341 | 0.008063967 | 0.040403047 |
| -1.50 | 1.245 | 6.586 | 0.009418048 | 0.049821095 |
| -1.25 | 1.800 | 8.386 | 0.013616455 | 0.063437550 |
| -1.00 | 2.013 | 10.399 | 0.015227735 | 0.078665285 |
| -0.75 | 2.410 | 12.809 | 0.018230920 | 0.096896205 |
| -0.50 | 2.965 | 15.774 | 0.022429327 | 0.119325532 |
| -0.25 | 3.223 | 18.997 | 0.024381019 | 0.143706550 |
| 0.00 | 3.143 | 22.140 | 0.023775843 | 0.167482393 |
| 0.25 | 4.268 | 26.408 | 0.032286127 | 0.199768520 |
| 0.50 | 5.068 | 31.476 | 0.038337885 | 0.238106405 |
| 0.75 | 7.005 | 38.481 | 0.052990703 | 0.291097108 |
| 1.00 | 10.508 | 48.989 | 0.079489837 | 0.370586945 |
| 1.25 | 13.499 | 62.488 | 0.102115846 | 0.472702791 |
| 1.50 | 11.952 | 74.440 | 0.090413259 | 0.563116050 |
| 1.75 | 17.866 | 92.306 | 0.135150878 | 0.698266928 |
| 2.00 | 17.575 | 109.881 | 0.132949551 | 0.831216479 |
| 2.25 | 14.051 | 123.932 | 0.106291559 | 0.937508037 |
| 2.50 | 6.054 | 129.986 | 0.045796676 | 0.983304714 |
| 2.75 | 1.259 | 131.245 | 0.009523954 | 0.992828667 |
| 3.00 | 0.396 | 131.641 | 0.002995620 | 0.995824287 |
| 3.25 | 0.179 | 131.820 | 0.001354081 | 0.997178368 |
| 3.50 | 0.133 | 131.953 | 0.001006105 | 0.998184473 |
| 3.75 | 0.102 | 132.055 | 0.000771599 | 0.998956072 |
| 4.00 | 0.071 | 132.126 | 0.000537093 | 0.999493165 |
| PAN | 0.067 | 132.193 | 0.000506835 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 132.193 | grams grams |  |
|  |  | 66.097 |  |  |
|  |  | 1.33 | phi | 0.3978 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 2.0-3.0 ft


GRAIN SIZE DISTRIBUTION VB-1 : 2.0-3.0 ft



Phi Size

GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 3.0-4.0 ft



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 4.0-5.0 ft


GRAIN SIZE DISTRIBUTION VB-1: 4.0-5.0 ft


Phi Size

GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 5.0-6.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.338 | 2.338 | 0.018337686 | 0.018337686 |
| -1.75 | 0.995 | 3.333 | 0.007804105 | 0.026141792 |
| -1.50 | 1.391 | 4.724 | 0.010910061 | 0.037051852 |
| -1.25 | 1.167 | 5.891 | 0.009153157 | 0.046205009 |
| -1.00 | 1.660 | 7.551 | 0.013019914 | 0.059224923 |
| -0.75 | 2.092 | 9.643 | 0.016408229 | 0.075633152 |
| -0.50 | 2.713 | 12.356 | 0.021278932 | 0.096912084 |
| -0.25 | 3.083 | 15.439 | 0.024180961 | 0.121093045 |
| 0.00 | 3.403 | 18.842 | 0.026690824 | 0.147783869 |
| 0.25 | 5.366 | 24.208 | 0.042087265 | 0.189871134 |
| 0.50 | 6.685 | 30.893 | 0.052432606 | 0.242303740 |
| 0.75 | 8.647 | 39.540 | 0.067821204 | 0.310124944 |
| 1.00 | 12.131 | 51.671 | 0.095147337 | 0.405272281 |
| 1.25 | 13.647 | 65.318 | 0.107037813 | 0.512310094 |
| 1.50 | 10.981 | 76.299 | 0.086127517 | 0.598437610 |
| 1.75 | 15.245 | 91.544 | 0.119571441 | 0.718009051 |
| 2.00 | 15.030 | 106.574 | 0.117885127 | 0.835894178 |
| 2.25 | 12.855 | 119.429 | 0.100825902 | 0.936720080 |
| 2.50 | 5.690 | 125.119 | 0.044628501 | 0.981348581 |
| 2.75 | 1.228 | 126.347 | 0.009631599 | 0.990980180 |
| 3.00 | 0.390 | 126.737 | 0.003058896 | 0.994039075 |
| 3.25 | 0.178 | 126.915 | 0.001396111 | 0.995435187 |
| 3.50 | 0.181 | 127.096 | 0.001419641 | 0.996854828 |
| 3.75 | 0.171 | 127.267 | 0.001341208 | 0.998196036 |
| 4.00 | 0.128 | 127.395 | 0.001003945 | 0.999199981 |
| PAN | 0.102 | 127.497 | 0.000800019 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 127.497 | grams |  |
|  |  | 63.749 | grams |  |
|  |  | 1.22 | phi | 0.4293 mm |

GRAIN SIZE DISTRIBUTION VB-1: 5.0-6.0 ft


GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 6.0-7.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. \% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.711 | 2.711 | 0.018950223 | 0.018950223 |
| -1.75 | 0.832 | 3.543 | 0.005815782 | 0.024766006 |
| -1.50 | 0.769 | 4.312 | 0.005375405 | 0.030141410 |
| -1.25 | 0.770 | 5.082 | 0.005382395 | 0.035523805 |
| -1.00 | 1.113 | 6.195 | 0.007780007 | 0.043303812 |
| -0.75 | 1.580 | 7.775 | 0.011044394 | 0.054348206 |
| -0.50 | 2.013 | 9.788 | 0.014071118 | 0.068419323 |
| -0.25 | 2.660 | 12.448 | 0.018593727 | 0.087013051 |
| 0.00 | 2.703 | 15.151 | 0.018894302 | 0.105907353 |
| 0.25 | 4.353 | 19.504 | 0.030428005 | 0.136335358 |
| 0.50 | 14.277 | 33.781 | 0.099797985 | 0.236133344 |
| 0.75 | 7.319 | 41.100 | 0.051160710 | 0.287294054 |
| 1.00 | 10.943 | 52.043 | 0.076492916 | 0.363786969 |
| 1.25 | 13.530 | 65.573 | 0.094576364 | 0.458363333 |
| 1.50 | 11.900 | 77.473 | 0.083182463 | 0.541545796 |
| 1.75 | 18.276 | 95.749 | 0.127751487 | 0.669297283 |
| 2.00 | 19.651 | 115.400 | 0.137362906 | 0.806660189 |
| 2.25 | 17.117 | 132.517 | 0.119649935 | 0.926310124 |
| 2.50 | 7.561 | 140.078 | 0.052852320 | 0.979162443 |
| 2.75 | 1.737 | 141.815 | 0.012141844 | 0.991304287 |
| 3.00 | 0.561 | 142.376 | 0.003921459 | 0.995225746 |
| 3.25 | 0.221 | 142.597 | 0.001544817 | 0.996770563 |
| 3.50 | 0.165 | 142.762 | 0.001153370 | 0.997923933 |
| 3.75 | 0.134 | 142.896 | 0.000936676 | 0.998860610 |
| 4.00 | 0.087 | 142.983 | 0.000608141 | 0.999468751 |
| PAN | 0.076 | 143.059 | 0.000531249 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 143.059 | grams grams |  |
|  |  | 71.530 |  |  |
|  |  | 1.38 | phi | 0.3842 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 7.0-8.0 ft

| PHISIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.796 | 0.796 | 0.005862425 | 0.005862425 |
| -1.75 | 0.301 | 1.097 | 0.002216821 | 0.008079246 |
| -1.50 | 0.485 | 1.582 | 0.003571955 | 0.011651200 |
| -1.25 | 0.430 | 2.012 | 0.003166888 | 0.014818088 |
| -1.00 | 0.656 | 2.668 | 0.004831345 | 0.019649433 |
| -0.75 | 0.894 | 3.562 | 0.006584180 | 0.026233613 |
| -0.50 | 1.275 | 4.837 | 0.009390190 | 0.035623803 |
| -0.25 | 1.494 | 6.331 | 0.011003093 | 0.046626896 |
| 0.00 | 1.673 | 8.004 | 0.012321402 | 0.058948299 |
| 0.25 | 2.451 | 10.455 | 0.018051259 | 0.076999558 |
| 0.50 | 3.366 | 13.821 | 0.024790102 | 0.101789660 |
| 0.75 | 5.010 | 18.831 | 0.036897923 | 0.138687583 |
| 1.00 | 8.610 | 27.441 | 0.063411401 | 0.202098984 |
| 1.25 | 12.253 | 39.694 | 0.090241567 | 0.292340551 |
| 1.50 | 12.309 | 52.003 | 0.090653999 | 0.382994550 |
| 1.75 | 20.721 | 72.724 | 0.152607159 | 0.535601709 |
| 2.00 | 24.304 | 97.028 | 0.178995434 | 0.714597142 |
| 2.25 | 22.985 | 120.013 | 0.169281190 | 0.883878333 |
| 2.50 | 11.241 | 131.254 | 0.082788334 | 0.966666667 |
| 2.75 | 2.573 | 133.827 | 0.018949772 | 0.985616438 |
| 3.00 | 0.830 | 134.657 | 0.006112830 | 0.991729268 |
| 3.25 | 0.385 | 135.042 | 0.002835469 | 0.994564737 |
| 3.50 | 0.317 | 135.359 | 0.002334659 | 0.996899396 |
| 3.75 | 0.214 | 135.573 | 0.001576079 | 0.998475475 |
| 4.00 | 0.114 | 135.687 | 0.000839593 | 0.999315068 |
| PÁN | 0.093 | 135.780 | 0.000684932 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 135.780 | grams |  |
|  |  | 67.890 | grams |  |
|  |  | 1.69 | phi | 0.3099 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 8.0-9.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.153 | 2.153 | 0.016505547 | 0.016505547 |
| -1.75 | 0.373 | 2.526 | 0.002859530 | 0.019365077 |
| -1.50 | 0.908 | 3.434 | 0.006961002 | 0.026326078 |
| -1.25 | 1.282 | 4.716 | 0.009828198 | 0.036154277 |
| -1.00 | 1.123 | 5.839 | 0.008609256 | 0.044763533 |
| -0.75 | 1.349 | 7.188 | 0.010341840 | 0.055105373 |
| -0.50 | 1.809 | 8.997 | 0.013868339 | 0.068973712 |
| -0.25 | 2.173 | 11.170 | 0.016658873 | 0.085632585 |
| 0.00 | 2.370 | 13.540 | 0.018169134 | 0.103801719 |
| 0.25 | 3.478 | 17.018 | 0.026663396 | 0.130465114 |
| 0.50 | 4.610 | 21.628 | 0.035341649 | 0.165806763 |
| 0.75 | 6.386 | 28.014 | 0.048957000 | 0.214763763 |
| 1.00 | 9.716 | 37.730 | 0.074485783 | 0.289249546 |
| 1.25 | 12.378 | 50.108 | 0.094893477 | 0.384143023 |
| 1.50 | 11.302 | 61.410 | 0.086644537 | 0.470787559 |
| 1.75 | 18.082 | 79.492 | 0.138622059 | 0.609409618 |
| 2.00 | 19.483 | 98.975 | 0.149362547 | 0.758772165 |
| 2.25 | 18.166 | 117.141 | 0.139266028 | 0.898038194 |
| 2.50 | 9.373 | 126.514 | 0.071856242 | 0.969894435 |
| 2.75 | 2.263 | 128.777 | 0.017348840 | 0.987243275 |
| 3.00 | 0.632 | 129.409 | 0.004845102 | 0.992088377 |
| 3.25 | 0.240 | 129.649 | 0.001839912 | 0.993928289 |
| 3.50 | 0.209 | 129.858 | 0.001602257 | 0.995530546 |
| 3.75 | 0.258 | 130.116 | 0.001977906 | 0.997508452 |
| 4.00 | 0.189 | 130.305 | 0.001448931 | 0.998957383 |
| PAN | 0.136 | 130.441 | 0.001042617 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 130.441 | grams grams |  |
|  |  | 65.221 |  |  |
|  |  | 1.55 | phi | 0.3415 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 9.0-10.0 ft



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 10.0 - 11.0 ft
PHI SIZE _ SAMPLE WT. CUM. WT. WT.\%

| $<-2.00$ | 5.566 | 5.566 | 0.052531735 | 0.052531735 |
| :--- | :---: | :---: | :---: | ---: |
| -1.75 | 0.368 | 5.934 | 0.003473173 | 0.056004908 |
| -1.50 | 0.933 | 6.867 | 0.008805625 | 0.064810533 |
| -1.25 | 0.969 | 7.836 | 0.009145392 | 0.073955925 |
| -1.00 | 1.156 | 8.992 | 0.010910292 | 0.084866217 |
| -0.75 | 1.281 | 10.273 | 0.012090038 | 0.096956255 |
| -0.50 | 1.544 | 11.817 | 0.014572224 | 0.111528479 |
| -0.25 | 1.672 | 13.489 | 0.015780284 | 0.127308763 |
| 0.00 | 1.730 | 15.219 | 0.016327686 | 0.143636449 |
| 0.25 | 2.267 | 17.486 | 0.021395876 | 0.165032325 |
| 0.50 | 2.564 | 20.050 | 0.024198952 | 0.189231277 |
| 0.75 | 3.329 | 23.379 | 0.031418999 | 0.220650276 |
| 1.00 | 5.078 | 28.457 | 0.047926006 | 0.268576282 |
| 1.25 | 6.460 | 34.917 | 0.060969279 | 0.329545562 |
| 1.50 | 6.645 | 41.562 | 0.062715304 | 0.392260865 |
| 1.75 | 12.581 | 54.143 | 0.118739087 | 0.510999953 |
| 2.00 | 16.462 | 70.605 | 0.155367845 | 0.666367798 |
| 2.25 | 18.590 | 89.195 | 0.175451843 | 0.841819640 |
| 2.50 | 10.643 | 99.838 | 0.100448304 | 0.942267944 |
| 2.75 | 2.997 | 102.835 | 0.028285593 | 0.970553537 |
| 3.00 | 1.223 | 104.058 | 0.011542636 | 0.982096173 |
| 3.25 | 0.641 | 104.699 | 0.006049738 | 0.988145911 |
| 3.50 | 0.468 | 105.167 | 0.004416969 | 0.992562880 |
| 3.75 | 0.375 | 105.542 | 0.003539238 | 0.996102119 |
| 4.00 | 0.235 | 105.777 | 0.002217923 | 0.998320042 |
| PAN | 0.178 | 105.955 | 0.001679958 | 1.0 |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 11.0-12.0 ft



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 12.0-13.0 ft



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 13.0-14.0 ft
PHISIZE SAMPLE WT. CUM. W

| -2.00 | 0.934 | 0.934 | 0.008378936 | 0.008378936 |
| :---: | :---: | :---: | :---: | ---: |
| -1.75 | 0.391 | 1.325 | 0.003507670 | 0.011886606 |
| -1.50 | 0.483 | 1.808 | 0.004333004 | 0.016219611 |
| -1.25 | 0.613 | 2.421 | 0.005499237 | 0.021718848 |
| -1.00 | 0.655 | 3.076 | 0.005876020 | 0.027594869 |
| -0.75 | 0.821 | 3.897 | 0.007365210 | 0.034960079 |
| -0.50 | 1.266 | 5.163 | 0.011357316 | 0.046317395 |
| -0.25 | 1.656 | 6.819 | 0.014856015 | 0.061173410 |
| 0.00 | 2.027 | 8.846 | 0.018184265 | 0.079357675 |
| 0.25 | 3.222 | 12.068 | 0.028904638 | 0.108262313 |
| 0.50 | 4.162 | 16.230 | 0.037337400 | 0.145599713 |
| 0.75 | 5.931 | 22.161 | 0.053207141 | 0.198806854 |
| 1.00 | 8.937 | 31.098 | 0.080174038 | 0.278980892 |
| 1.25 | 11.150 | 42.248 | 0.100026913 | 0.379007805 |
| 1.50 | 10.047 | 52.295 | 0.090131874 | 0.469139679 |
| 1.75 | 15.635 | 67.930 | 0.140261954 | 0.609401633 |
| 2.00 | 17.090 | 85.020 | 0.153314793 | 0.762716426 |
| 2.25 | 15.065 | 100.085 | 0.135148470 | 0.897864896 |
| 2.50 | 7.133 | 107.218 | 0.063990311 | 0.961855208 |
| 2.75 | 1.889 | 109.107 | 0.016946264 | 0.978801471 |
| 3.00 | 0.739 | 109.846 | 0.006629586 | 0.985431058 |
| 3.25 | 0.422 | 110.268 | 0.003785772 | 0.989216830 |
| 3.50 | 0.382 | 110.650 | 0.003426931 | 0.992643761 |
| 3.75 | 0.356 | 111.006 | 0.003193684 | 0.995837445 |
| 4.00 | 0.237 | 111.243 | 0.002126133 | 0.997963578 |
| PAN | 0.227 | 111.470 | 0.002036422 | 1.0 |
|  |  |  |  |  |
| TOTAL WT. |  | 111.470 |  | grams |
| MEDIAN WT. |  | 1.56 | grams |  |
| MEAN GRAIN SIZE |  |  | 0.3392 mm |  |

GRAIN SIZE DISTRIBUTION VB-1: 13.0-14.0 ft


GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 14.0-15.0 ft



GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: $15.0-16.0 \mathrm{ft}$
PHI SIZE SAMPLE WT. CUM. WT.
WT. \%

| $<-2.00$ | 0.305 | 0.305 | 0.002559992 | 0.002559992 |
| :--- | :---: | :---: | :---: | :---: |
| -1.75 | 0.035 | 0.340 | 0.000293770 | 0.002853762 |
| -1.50 | 0.063 | 0.403 | 0.000528785 | 0.003382547 |
| -1.25 | 0.028 | 0.431 | 0.000235016 | 0.003617562 |
| -1.00 | 0.059 | 0.490 | 0.000495212 | 0.004112774 |
| -0.75 | 0.113 | 0.603 | 0.000948456 | 0.005061230 |
| -0.50 | 0.190 | 0.793 | 0.001594749 | 0.006655979 |
| -0.25 | 0.195 | 0.988 | 0.001636716 | 0.008292695 |
| 0.00 | 0.252 | 1.240 | 0.002115141 | 0.010407836 |
| 0.25 | 0.402 | 1.642 | 0.003374153 | 0.013781989 |
| 0.50 | 0.674 | 2.316 | 0.005657163 | 0.019439152 |
| 0.75 | 1.097 | 3.413 | 0.009207578 | 0.028646730 |
| 1.00 | 2.283 | 5.696 | 0.019162169 | 0.047808899 |
| 1.25 | 4.002 | 9.698 | 0.033590452 | 0.081399350 |
| 1.50 | 5.680 | 15.378 | 0.047674604 | 0.129073954 |
| 1.75 | 14.446 | 29.824 | 0.121251290 | 0.250325245 |
| 2.00 | 25.300 | 55.124 | 0.212353430 | 0.462678675 |
| 2.25 | 34.279 | 89.403 | 0.287717914 | 0.750396589 |
| 2.50 | 21.329 | 110.732 | 0.179023174 | 0.929419763 |
| 2.75 | 5.467 | 116.199 | 0.045886806 | 0.975306570 |
| 3.00 | 1.496 | 117.695 | 0.012556551 | 0.987863120 |
| 3.25 | 0.518 | 118.213 | 0.004347790 | 0.992210910 |
| 3.50 | 0.346 | 118.559 | 0.002904122 | 0.995115032 |
| 3.75 | 0.267 | 118.826 | 0.002241042 | 0.997356074 |
| 4.00 | 0.154 | 118.980 | 0.001292586 | 0.998648660 |
| PAN | 0.161 | 119.141 | 0.001351340 | 1.0 |

TOTAL WT. MEDIAN WT.
MEAN GRAIN SIZE
119.141
59.571
2.03
grams
grams
phi
0.2449 mm


GRAIN SIZE DISTRIBUTION CHART
CORE VB-1: 16.0-17.0 ft

| PHI SIZE | DISH | SAMPLE + | SAMPLE WI |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $<-2.00$ | 1.750 | 2.640 | 0.890 |
| -1.75 | 1.581 | 1.775 | 0.194 |
| -1.50 | 1.681 | 2.163 | 0.482 |
| -1.25 | 1.598 | 2.145 | 0.547 |
| -1.00 | 1.705 | 2.382 | 0.677 |
| -0.75 | 1.686 | 2.777 | 1.091 |
| -0.50 | 1.663 | 3.100 | 1.437 |
| -0.25 | 1.673 | 3.459 | 1.786 |
| 0.00 | 1.674 | 3.518 | 1.844 |
| 0.25 | 1.689 | 4.202 | 2.513 |
| 0.50 | 1.723 | 4.738 | 3.015 |
| 0.75 | 1.679 | 5.512 | 3.833 |
| 1.00 | 1.661 | 6.833 | 5.172 |
| 1.25 | 1.670 | 7.552 | 5.882 |
| 1.50 | 1.679 | 7.864 | 6.185 |
| 1.75 | 1.683 | 12.165 | 10.482 |
| 2.00 | 1.770 | 15.843 | 14.073 |
| 2.25 | 1.722 | 19.034 | 17.312 |
| 2.50 | 1.671 | 15.413 | 13.742 |
| 2.75 | 1.715 | 7.406 | 5.691 |
| 3.00 | 1.655 | 3.854 | 2.199 |
| 3.25 | 1.685 | 2.412 | 0.727 |
| 3.50 | 1.707 | 2.072 | 0.365 |
| 3.75 | 1.657 | 1.993 | 0.336 |
| 4.00 | 1.717 | 1.916 | 0.199 |
| PAN | 1.673 | 1.870 | 0.197 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
100.871 grams 50.436 grams
1.83 phi
0.2813 mm

GRAIN SIZE DISTRIBUTION VB-1: 16.0-17.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-2: 0-2.0 ft


GRAIN SIZE DISTRIBUTION VB-2 : 0-2.0 ft


Phi Size

## GRAIN SIZE DISTRIBUTION CHART

## CORE VB-2: 2 - 4.0 ft



GRAIN SIZE DISTRIBUTION VB-2: 2 - 4.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-2: 4.0-6.0 ft
PHI SIZE _ SAMPLE WT. CUM. WT.

WT.\%

| 0.031062931 | 0.031062931 |
| :--- | ---: |
| 0.006514412 | 0.037577343 |
| 0.011494542 | 0.049071885 |
| 0.008224760 | 0.057296645 |
| 0.007218673 | 0.06415318 |
| 0.007973238 | 0.072488556 |
| 0.008602042 | 0.081090598 |
| 0.008627195 | 0.089717793 |
| 0.007470195 | 0.097187987 |
| 0.010412999 | 0.106600986 |
| 0.002676694 | 0.120277680 |
| 0.020448715 | 0.140726395 |
| 0.042783842 | 0.183510237 |
| 0.069696665 | 0.253206902 |
| 0.068766035 | 0.321972936 |
| 0.099300770 | 0.421273706 |
| 0.05783990 | 0.497057196 |
| 0.052316515 | 0.549373711 |
| 0.028522561 | 0.577896272 |
| 0.019316867 | 0.597213139 |
| 0.035640626 | 0.632853765 |
| 0.091604205 | 0.724457971 |
| 0.130791287 | 0.855249258 |
| 0.088711706 | 0.943960964 |
| 0.036370039 | 0.980331003 |
| 0.019668997 | 1.0 |

<-2.00
1.235
-1.75
0.259
-1.50
0.457
-1.25
0.327
0.287
$-0.75$
$-0.50$
$-0.25$
0.00
0.25
0.50
0.75
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
3.00
3.25
3.50 $3.75 \quad 3.527$
$4.00 \quad 1.446$
PAN
0.317
0.342
0.343
0.297
0.414
0.504
0.813
1.701
2.771
2.734
3.948
3.013
2.080
1.134
0.768
1.417
3.642
5.200
0.782

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
39.758
19.879
2.01
grams
grams
phi
0.2483 mm

GRAIN SIZE DISTRIBUTION VB-2 : 4.0-6.0 ft


GRAIN SIZE DISTRIBUTION CHART
CORE VB-2: 6.0-8.0 ft


GRAIN SIZE DISTRIBUTION VB-2: 6.0-8.0 ft


GRAIN SIZE DISTRIBUTION CHART
CORE VB-3: 0.0-2.0 ft
PHI SIZE SAMPLEWT. CUM.WT.
WT.\% CUM. WT. \%

| $<-2.00$ | 0.881 | 0.881 | 0.010449531 | 0.010449531 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0.277 | 1.158 | 0.003285494 | 0.013735026 |
| -1.50 | 0.568 | 1.726 | 0.006737042 | 0.020472067 |
| -1.25 | 0.718 | 2.444 | 0.008516190 | 0.028988258 |
| -1.00 | 0.919 | 3.363 | 0.010900249 | 0.039888507 |
| -0.75 | 1.187 | 4.550 | 0.014078994 | 0.053967501 |
| -0.50 | 1.521 | 6.071 | 0.018040565 | 0.072008065 |
| -0.25 | 1.973 | 8.044 | 0.023401732 | 0.095409797 |
| 0.00 | 1.943 | 9.987 | 0.023045902 | 0.118455699 |
| 0.25 | 2.906 | 12.893 | 0.034468035 | 0.152923734 |
| 0.50 | 3.466 | 16.359 | 0.041110189 | 0.194033922 |
| 0.75 | 4.346 | 20.705 | 0.051547859 | 0.245581782 |
| 1.00 | 6.815 | 27.520 | 0.080832641 | 0.326414423 |
| 1.25 | 8.897 | 36.417 | 0.105527221 | 0.431941644 |
| 1.50 | 8.703 | 45.120 | 0.103226189 | 0.535167833 |
| 1.75 | 11.716 | 56.836 | 0.138963350 | 0.674131183 |
| 2.00 | 10.261 | 67.097 | 0.121705610 | 0.795836793 |
| 2.25 | 9.770 | 76.867 | 0.115881865 | 0.911718657 |
| 2.50 | 5.331 | 82.198 | 0.063230933 | 0.974949591 |
| 2.75 | 1.177 | 83.375 | 0.013960384 | 0.988909975 |
| 3.00 | 0.238 | 83.613 | 0.002822915 | 0.991732891 |
| 3.25 | 0.124 | 83.737 | 0.001470763 | 0.993203653 |
| 3.50 | 0.163 | 83.900 | 0.001933341 | 0.995136994 |
| 3.75 | 0.159 | 84.059 | 0.001855897 | 0.997022892 |
| 4.00 | 0.125 | 84.184 | 0.001482624 | 0.998505515 |
| PAN | 0.126 | 84.310 | 0.001494485 | 1.0 |
|  |  |  |  |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
84.310
42.155
1.41
grams
grams phi
0.3763 mm

GRAIN SIZE DISTRIBUTION VB-3: 0.0-2.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-3: 2.0-4.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.813 | 0.813 | 0.009220091 | 0.009220091 |
| -1.75 | 0.346 | 1.159 | 0.003923926 | 0.013144017 |
| -1.50 | 0.228 | 1.387 | 0.002585708 | 0.015729725 |
| -1.25 | 0.460 | 1.847 | 0.005216780 | 0.020946505 |
| -1.00 | 0.359 | 2.206 | 0.004071356 | 0.025017862 |
| -0.75 | 0.391 | 2.597 | 0.004434263 | 0.029452125 |
| -0.50 | 0.439 | 3.036 | 0.004978623 | 0.034430747 |
| -0.25 | 0.675 | 3.711 | 0.007655057 | 0.042085805 |
| 0.00 | 0.625 | 4.336 | 0.007088016 | 0.049173821 |
| 0.25 | 1.044 | 5.380 | 0.011839822 | 0.061013643 |
| 0.50 | 1.446 | 6.826 | 0.016398834 | 0.077412477 |
| 0.75 | 2.061 | 8.887 | 0.023373442 | 0.100785919 |
| 1.00 | 3.176 | 12.063 | 0.036018463 | 0.136804382 |
| 1.25 | 5.136 | 17.199 | 0.058246482 | 0.195050864 |
| 1.50 | 6.915 | 24.114 | 0.078421811 | 0.273472674 |
| 1.75 | 12.904 | 37.018 | 0.146342017 | 0.419814691 |
| 2.00 | 14.497 | 51.515 | 0.164407952 | 0.584222643 |
| 2.25 | 16.595 | 68.110 | 0.188201005 | 0.772423648 |
| 2.50 | 12.120 | 80.230 | 0.137450809 | 0.909874457 |
| 2.75 | 4.274 | 84.504 | 0.048470690 | 0.958345147 |
| 3.00 | 1.105 | 85.609 | 0.012531613 | 0.970876759 |
| 3.25 | 0.406 | 86.015 | 0.004604375 | 0.975481135 |
| 3.50 | 0.662 | 86.677 | 0.007507627 | 0.982988761 |
| 3.75 | 0.869 | 87.546 | 0.009855178 | 0.992843939 |
| 4.00 | 0.431 | 87.977 | 0.004887896 | 0.997731835 |
| PAN | 0.200 | 88.177 | 0.002268165 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 88.177 <br> 44.089 <br> 1.87 | grams grams phi | 0.2736 mm |



## CORE VB-3: 4.0-6.0 ft

PHI SIZE SAMPLE WT. CUM. WT.
WT.\% CUM. WT. \%

| $<-2.00$ | 0.569 | 0.569 | 0.007824855 | 0.007824855 |
| :---: | :---: | :---: | :---: | :---: |
| -1.75 | 0.369 | 0.938 | 0.005074467 | 0.012899322 |
| -1.50 | 0.202 | 1.140 | 0.002777892 | 0.015677214 |
| -1.25 | 0.444 | 1.584 | 0.006105862 | 0.021783077 |
| -1.00 | 0.443 | 2.027 | 0.006092111 | 0.027875187 |
| -0.75 | 0.457 | 2.484 | 0.006284638 | 0.034159825 |
| -0.50 | 0.530 | 3.014 | 0.007288530 | 0.041448355 |
| -0.25 | 0.593 | 3.607 | 0.008154902 | 0.049603256 |
| 0.00 | 0.725 | 4.332 | 0.009970158 | 0.059573415 |
| 0.25 | 1.232 | 5.564 | 0.016942393 | 0.076515808 |
| 0.50 | 1.690 | 7.254 | 0.023240783 | 0.099756591 |
| 0.75 | 2.456 | 9.710 | 0.033774771 | 0.133531361 |
| 1.00 | 3.352 | 13.062 | 0.046096511 | 0.179627872 |
| 1.25 | 4.796 | 17.858 | 0.065954316 | 0.245582188 |
| 1.50 | 5.580 | 23.438 | 0.076735839 | 0.322318027 |
| 1.75 | 8.686 | 32.124 | 0.119449372 | 0.441767400 |
| 2.00 | 9.002 | 41.126 | 0.123794986 | 0.565562386 |
| 2.25 | 11.048 | 52.174 | 0.151931460 | 0.717493846 |
| 2.50 | 10.614 | 62.788 | 0.145963117 | 0.863456963 |
| 2.75 | 5.006 | 67.794 | 0.068842224 | 0.932299187 |
| 3.00 | 1.392 | 69.186 | 0.019142704 | 0.951441891 |
| 3.25 | 0.471 | 69.657 | 0.006477165 | 0.957919056 |
| 3.50 | 0.787 | 70.444 | 0.010822779 | 0.968741835 |
| 3.75 | 1.221 | 71.665 | 0.016791122 | 0.985532957 |
| 4.00 | 0.655 | 72.320 | 0.009007522 | 0.994540479 |
| PAN | 0.397 | 72.717 | 0.005459521 | 1.0 |


| TOTAL WT. | 72.717 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 36.359 | grams |  |
| MEAN GRAIN SIZE | 1.87 | phi | 0.2736 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE VB-3 : 6.0-8.0 ft

PHI SIZE SAMPLE WT. CUM. WT.

| $<-2.00$ | 3.246 | 3.246 | 0.049493779 | 0.049493779 |
| :--- | :---: | :---: | :---: | ---: |
| -1.75 | 1.129 | 4.375 | 0.017214565 | 0.066708343 |
| -1.50 | 1.339 | 5.714 | 0.020416565 | 0.087124909 |
| -1.25 | 1.194 | 6.908 | 0.018205660 | 0.105330568 |
| -1.00 | 1.375 | 8.283 | 0.020965479 | 0.126296048 |
| -0.75 | 1.158 | 9.441 | 0.017656746 | 0.143952793 |
| -0.50 | 1.223 | 10.664 | 0.018647841 | 0.162600634 |
| -0.25 | 1.067 | 11.731 | 0.016269212 | 0.178869846 |
| 0.00 | 0.955 | 12.686 | 0.014561478 | 0.193431325 |
| 0.25 | 1.056 | 13.742 | 0.016101488 | 0.209532813 |
| 0.50 | 0.987 | 14.729 | 0.015049402 | 0.224582215 |
| 0.75 | 1.109 | 15.838 | 0.016909612 | 0.241491827 |
| 1.00 | 1.579 | 17.417 | 0.024075994 | 0.265567821 |
| 1.25 | 2.241 | 19.658 | 0.034169919 | 0.299737741 |
| 1.50 | 2.720 | 22.378 | 0.041473530 | 0.341211271 |
| 1.75 | 5.448 | 27.826 | 0.083069041 | 0.424280312 |
| 2.00 | 6.602 | 34.428 | 0.100664796 | 0.524945109 |
| 2.25 | 8.477 | 42.905 | 0.129254086 | 0.654199195 |
| 2.50 | 8.659 | 51.564 | 0.132029153 | 0.786228348 |
| 2.75 | 6.565 | 58.129 | 0.100100634 | 0.886328983 |
| 3.00 | 3.538 | 61.667 | 0.053946084 | 0.940275067 |
| 3.25 | 1.141 | 62.808 | 0.017397536 | 0.957672603 |
| 3.50 | 0.871 | 63.679 | 0.013280678 | 0.970953281 |
| 3.75 | 1.057 | 64.736 | 0.016116736 | 0.987070017 |
| 4.00 | 0.515 | 65.251 | 0.007852525 | 0.994922542 |
| PAN | 0.333 | 65.584 | 0.005077458 | 1.0 |


|  |  |  |  |
| :--- | :---: | :---: | :---: |
| TOTAL WT. | 65.584 | grams |  |
| MEDIAN WT. | 32.792 | grams |  |
| MEAN GRAIN SIZE | 1.94 | phi | 0.2606 mm |



CORE VB-3 : 10.0-12.0 ft

PHI SIZE SAMPLE WT. CUM. WT.

WT. \%

| $<-2.00$ | 0.454 | 0.454 | 0.005766983 | 0.005766983 |
| :--- | :--- | :--- | :--- | ---: |
| -1.75 | 0.474 | 0.928 | 0.006021036 | 0.011788019 |
| -1.50 | 0.234 | 1.162 | 0.002972410 | 0.014760429 |
| -1.25 | 0.605 | 1.767 | 0.007685077 | 0.022445506 |
| -1.00 | 0.767 | 2.534 | 0.009742899 | 0.032188405 |
| -0.75 | 0.891 | 3.425 | 0.011318022 | 0.043506428 |
| -0.50 | 1.117 | 4.542 | 0.014188812 | 0.057695239 |
| -0.25 | 1.274 | 5.816 | 0.016183121 | 0.073878360 |
| 0.00 | 1.448 | 7.264 | 0.018393374 | 0.092271734 |
| 0.25 | 2.881 | 10.145 | 0.036596210 | 0.128867944 |
| 0.50 | 2.649 | 12.794 | 0.033649205 | 0.162517149 |
| 0.75 | 3.332 | 16.126 | 0.042325085 | 0.204842234 |
| 1.00 | 4.439 | 20.565 | 0.056386871 | 0.261229104 |
| 1.25 | 5.090 | 25.655 | 0.064656267 | 0.325885372 |
| 1.50 | 5.495 | 31.150 | 0.069800823 | 0.395686195 |
| 1.75 | 8.786 | 39.936 | 0.111605101 | 0.507291296 |
| 2.00 | 9.321 | 49.257 | 0.118400996 | 0.625692292 |
| 2.25 | 10.302 | 59.559 | 0.130862253 | 0.756554545 |
| 2.50 | 8.262 | 67.821 | 0.104948936 | 0.861503481 |
| 2.75 | 3.543 | 71.364 | 0.045005335 | 0.906508816 |
| 3.00 | 1.445 | 72.809 | 0.018355267 | 0.924864082 |
| 3.25 | 0.808 | 73.617 | 0.010263706 | 0.935127788 |
| 3.50 | 1.063 | 74.680 | 0.013502871 | 0.948630659 |
| 3.75 | 1.775 | 76.455 | 0.022547127 | 0.971177786 |
| 4.00 | 1.350 | 77.805 | 0.017148519 | 0.988326305 |
| PAN | 0.919 | 78.724 | 0.011673695 | 1.0 |


|  |  |  |  |
| :--- | :---: | :---: | :---: |
| TOTAL WT. | 78.724 | grams |  |
| MEDIAN WT. | 39.362 | grams |  |
| MEAN GRAIN SIZE | 1.73 | phi | 0.3015 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE VB-3 : 12.0-14.0 ft

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 1.719 | 1.719 | 0.018072479 | 0.018072479 |
| :--- | :---: | :---: | ---: | ---: |
| -1.75 | 0.610 | 2.329 | 0.006413154 | 0.024485633 |
| -1.50 | 1.371 | 3.700 | 0.014413827 | 0.038899461 |
| -1.25 | 2.094 | 5.794 | 0.022014992 | 0.060914453 |
| -1.00 | 2.298 | 8.092 | 0.024159719 | 0.085074172 |
| -0.75 | 2.942 | 11.034 | 0.030930328 | 0.116004500 |
| -0.50 | 3.743 | 14.777 | 0.039351535 | 0.155356035 |
| -0.25 | 4.440 | 19.217 | 0.046679353 | 0.202035388 |
| 0.00 | 3.797 | 23.014 | 0.039919257 | 0.241954645 |
| 0.25 | 4.640 | 27.654 | 0.048782026 | 0.290736672 |
| 0.50 | 4.146 | 31.800 | 0.043588423 | 0.334325094 |
| 0.75 | 4.567 | 36.367 | 0.048014551 | 0.382339645 |
| 1.00 | 6.251 | 42.618 | 0.065719062 | 0.448058707 |
| 1.25 | 8.517 | 51.135 | 0.089542353 | 0.537601060 |
| 1.50 | 9.550 | 60.685 | 0.100402662 | 0.638003722 |
| 1.75 | 15.328 | 76.013 | 0.161148901 | 0.799152623 |
| 2.00 | 10.228 | 86.241 | 0.107530725 | 0.906683348 |
| 2.25 | 5.135 | 91.376 | 0.053986143 | 0.960669491 |
| 2.50 | 2.151 | 93.527 | 0.022614254 | 0.983283745 |
| 2.75 | 0.826 | 94.353 | 0.008684042 | 0.991967787 |
| 3.00 | 0.392 | 94.745 | 0.004121240 | 0.996089027 |
| 3.25 | 0.124 | 94.869 | 0.001303658 | 0.997392685 |
| 3.50 | 0.077 | 94.946 | 0.000809529 | 0.998202214 |
| 3.75 | 0.051 | 94.997 | 0.000536182 | 0.998738396 |
| 4.00 | 0.046 | 95.043 | 0.000483615 | 0.999222011 |
| PAN | 0.074 | 95.117 | 0.000777989 | 1.0 |


| TOTAL WT. | 95.117 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 47.559 | grams |  |
| MEAN GRAIN SIZE | 1.15 | phi | 0.4506 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE VB-3 : 14.0-16.0 ft

PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.378 | 0.378 | 0.004332577 | 0.004332577 |
| :--- | :---: | :---: | :---: | ---: |
| -1.75 | 0.502 | 0.880 | 0.005753845 | 0.010086422 |
| -1.50 | 0.946 | 1.826 | 0.010842904 | 0.020929326 |
| -1.25 | 1.066 | 2.892 | 0.012218325 | 0.033147651 |
| -1.00 | 1.428 | 4.320 | 0.016367513 | 0.049515164 |
| -0.75 | 1.879 | 6.199 | 0.021536804 | 0.071051968 |
| -0.50 | 2.470 | 8.669 | 0.028310754 | 0.099362722 |
| -0.25 | 2.875 | 11.544 | 0.032952800 | 0.132315522 |
| 0.00 | 2.971 | 14.515 | 0.034053137 | 0.166368659 |
| 0.25 | 3.910 | 18.425 | 0.044815808 | 0.211184467 |
| 0.50 | 3.699 | 22.124 | 0.042397359 | 0.253581826 |
| 0.75 | 4.346 | 26.470 | 0.049813172 | 0.303394998 |
| 1.00 | 6.195 | 32.665 | 0.071006121 | 0.374401119 |
| 1.25 | 8.626 | 41.291 | 0.098869862 | 0.473270981 |
| 1.50 | 10.291 | 51.582 | 0.117953832 | 0.591224813 |
| 1.75 | 16.139 | 67.721 | 0.184982693 | 0.776207505 |
| 2.00 | 10.840 | 78.561 | 0.124246384 | 0.900453889 |
| 2.25 | 5.224 | 83.785 | 0.059876671 | 0.960330560 |
| 2.50 | 1.905 | 85.690 | 0.021834812 | 0.982165371 |
| 2.75 | 0.795 | 86.485 | 0.009112166 | 0.991277537 |
| 3.00 | 0.399 | 86.884 | 0.004573276 | 0.995850813 |
| 3.25 | 0.122 | 87.006 | 0.001398345 | 0.997249158 |
| 3.50 | 0.071 | 87.077 | 0.000813791 | 0.998062948 |
| 3.75 | 0.052 | 87.129 | 0.000596016 | 0.998658964 |
| 4.00 | 0.047 | 87.176 | 0.000538707 | 0.999197671 |
| PAN | 0.070 | 87.246 | 0.000802329 | 1.0 |


| TOTAL WT. | 87.246 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 43.623 | grams |  |
| MEAN GRAIN SIZE | 1.31 | phi | 0.4033 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE VB-3 : 18.0-20.0 ft

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%

| $<-2.00$ | 0.166 | 0.166 | 0.002197191 | 0.002197191 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0.235 | 0.401 | 0.003110482 | 0.005307673 |
| -1.50 | 0.207 | 0.608 | 0.002739871 | 0.008047544 |
| -1.25 | 0.695 | 1.303 | 0.009199084 | 0.017246628 |
| -1.00 | 0.585 | 1.888 | 0.007743114 | 0.024989742 |
| -0.75 | 0.786 | 2.674 | 0.010403568 | 0.035393310 |
| -0.50 | 1.120 | 3.794 | 0.014824423 | 0.050217734 |
| -0.25 | 0.950 | 4.744 | 0.012574288 | 0.062792021 |
| 0.00 | 1.031 | 5.775 | 0.013646411 | 0.076438432 |
| 0.25 | 1.179 | 6.954 | 0.015605353 | 0.092043785 |
| 0.50 | 1.152 | 8.106 | 0.015247978 | 0.107291763 |
| 0.75 | 1.216 | 9.322 | 0.016095088 | 0.123386851 |
| 1.00 | 1.717 | 11.039 | 0.022726370 | 0.146113222 |
| 1.25 | 2.340 | 13.379 | 0.030972456 | 0.177085677 |
| 1.50 | 2.947 | 16.326 | 0.039006764 | 0.216092441 |
| 1.75 | 7.611 | 23.937 | 0.100739898 | 0.316832338 |
| 2.00 | 9.721 | 33.658 | 0.128668052 | 0.445500390 |
| 2.25 | 12.374 | 46.032 | 0.163783405 | 0.609283795 |
| 2.50 | 12.713 | 58.745 | 0.168270440 | 0.777554235 |
| 2.75 | 8.624 | 67.369 | 0.114148059 | 0.891702294 |
| 3.00 | 5.174 | 72.543 | 0.068483541 | 0.960185835 |
| 3.25 | 1.906 | 74.449 | 0.025227992 | 0.985413826 |
| 3.50 | 0.697 | 75.146 | 0.009225556 | 0.994639383 |
| 3.75 | 0.218 | 75.364 | 0.002885468 | 0.997524851 |
| 4.00 | 0.095 | 75.459 | 0.001257429 | 0.998782280 |
| PAN | 0.092 | 75.551 | 0.001217720 |  |


| TOTAL WT. | 75.551 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 37.776 | grams |  |
| MEAN GRAIN SIZE | 2.08 | phi | 0.2365 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-4: 0.0-2.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 1.769 | 1.769 | 0.020271819 | 0.020271819 |
| -1.75 | 0.233 | 2.002 | 0.002670059 | 0.022941878 |
| -1.50 | 0.404 | 2.406 | 0.004629630 | 0.027571507 |
| -1.25 | 0.782 | 3.188 | 0.008961313 | 0.036532820 |
| -1.00 | 0.825 | 4.013 | 0.009454070 | 0.045986890 |
| -0.75 | 0.863 | 4.876 | 0.009889531 | 0.055876421 |
| -0.50 | 0.841 | 5.717 | 0.009637422 | 0.065513843 |
| -0.25 | 0.889 | 6.606 | 0.010187477 | 0.075701320 |
| 0.00 | 0.852 | 7.458 | 0.009763476 | 0.085464796 |
| 0.25 | 1.446 | 8.904 | 0.016570407 | 0.102035204 |
| 0.50 | 2.531 | 11.435 | 0.029003942 | 0.131039146 |
| 0.75 | 4.543 | 15.978 | 0.052060414 | 0.183099560 |
| 1.00 | 7.056 | 23.034 | 0.080858086 | 0.263957646 |
| 1.25 | 9.332 | 32.366 | 0.106939861 | 0.370897506 |
| 1.50 | 9.716 | 42.082 | 0.111340301 | 0.482237807 |
| 1.75 | 14.242 | 56.324 | 0.163205904 | 0.645443711 |
| 2.00 | 12.409 | 68.733 | 0.142200678 | 0.787644389 |
| 2.25 | 10.241 | 78.974 | 0.117356527 | 0.905000917 |
| 2.50 | 5.839 | 84.813 | 0.066911900 | 0.971912816 |
| 2.75 | 1.545 | 86.358 | 0.017704895 | 0.989617712 |
| 3.00 | 0.345 | 86.703 | 0.003953520 | 0.993571232 |
| 3.25 | 0.140 | 86.843 | 0.001604327 | 0.995175559 |
| 3.50 | 0.150 | 86.993 | 0.001718922 | 0.996894481 |
| 3.75 | 0.115 | 87.108 | 0.001317840 | 0.998212321 |
| 4.00 | 0.083 | 87.191 | 0.000951137 | 0.999163458 |
| PAN | 0.073 | 87.264 | 0.000836542 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 87.264 | grams |  |
|  |  | 43.632 | grams |  |
|  |  | 1.53 | phi | 0.3463 mm |



## GRAIN SIZE DISTRIBUTION CHART

CORE VB-4: 2.0-4.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| <-2.00 | 7.651 | 7.651 | 0.171766608 | 0.171766608 |
| -1.75 | 2.614 | 10.265 | 0.058684866 | 0.230451474 |
| -1.50 | 3.105 | 13.370 | 0.069707923 | 0.300159397 |
| -1.25 | 4.062 | 17.432 | 0.091192780 | 0.391352177 |
| -1.00 | 3.939 | 21.371 | 0.088431403 | 0.479783580 |
| -0.75 | 4.206 | 25.577 | 0.094425611 | 0.574209191 |
| -0.50 | 4.178 | 29.755 | 0.093797005 | 0.668006196 |
| -0.25 | 3.374 | 33.129 | 0.075747031 | 0.743753227 |
| 0.00 | 2.605 | 35.734 | 0.058482814 | 0.802236042 |
| 0.25 | 2.010 | 37.744 | 0.045124935 | 0.847360977 |
| 0.50 | 1.103 | 38.847 | 0.024762589 | 0.872123566 |
| 0.75 | 0.778 | 39.625 | 0.017466269 | 0.889589835 |
| 1.00 | 0.756 | 40.381 | 0.016972364 | 0.906562198 |
| 1.25 | 0.687 | 41.068 | 0.015423299 | 0.921985497 |
| 1.50 | 0.479 | 41.547 | 0.010753654 | 0.932739151 |
| 1.75 | 0.764 | 42.311 | 0.017151966 | 0.949891116 |
| 2.00 | 0.596 | 42.907 | 0.013380329 | 0.963271446 |
| 2.25 | 0.539 | 43.446 | 0.012100667 | 0.975372112 |
| 2.50 | 0.333 | 43.779 | 0.007475922 | 0.982848034 |
| 2.75 | 0.155 | 43.934 | 0.003479784 | 0.986327818 |
| 3.00 | 0.124 | 44.058 | 0.002783827 | 0.989111645 |
| 3.25 | 0.087 | 44.145 | 0.001953169 | 0.991064814 |
| 3.50 | 0.100 | 44.245 | 0.002245022 | 0.993309835 |
| 3.75 | 0.083 | 44.328 | 0.001863368 | 0.995173203 |
| 4.00 | 0.086 | 44.414 | 0.001930719 | 0.997103922 |
| PAN | 0.129 | 44.543 | 0.002896078 |  |
|  |  |  |  | 1.0 |
| TOTAL WT. |  | 44.543 | grams |  |
| MEDIAN WT. |  | 22.272 | grams |  |
| MEAN GRAIN SIZE | -0.95 | phi | 1.9319 mm |  |
|  |  |  |  |  |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-9: 0.0-2.0 ft

PHI SIZE SAMPLE WT. CUM. WT.
WT. \%
CUM. WT. \%

| $<-2.00$ | 19.874 | 19.874 | 0.190892413 | 0.190892413 |
| :--- | :---: | :---: | :---: | ---: |
| -1.75 | 4.266 | 24.140 | 0.040975497 | 0.231867910 |
| -1.50 | 4.786 | 28.926 | 0.045970166 | 0.277838077 |
| -1.25 | 5.782 | 34.708 | 0.055536879 | 0.333374956 |
| -1.00 | 5.899 | 40.607 | 0.056660679 | 0.390035635 |
| -0.75 | 6.212 | 46.819 | 0.059667086 | 0.449702721 |
| -0.50 | 6.593 | 53.412 | 0.063326642 | 0.513029363 |
| -0.25 | 6.722 | 60.134 | 0.064565704 | 0.577595067 |
| 0.00 | 5.680 | 65.814 | 0.054557155 | 0.632152222 |
| 0.25 | 6.223 | 72.037 | 0.059772743 | 0.691924965 |
| 0.50 | 5.547 | 77.584 | 0.053279673 | 0.745204637 |
| 0.75 | 5.692 | 83.276 | 0.054672417 | 0.799877054 |
| 1.00 | 6.120 | 89.396 | 0.058783414 | 0.858660468 |
| 1.25 | 5.073 | 94.469 | 0.048726840 | 0.907387308 |
| 1.50 | 2.456 | 96.925 | 0.023590207 | 0.930977514 |
| 1.75 | 1.761 | 98.686 | 0.016914639 | 0.947892154 |
| 2.00 | 1.027 | 99.713 | 0.009864472 | 0.957756625 |
| 2.25 | 0.967 | 100.680 | 0.009288164 | 0.967044789 |
| 2.50 | 0.871 | 101.551 | 0.008366071 | 0.975410860 |
| 2.75 | 0.555 | 102.106 | 0.005330849 | 0.980741708 |
| 3.00 | 0.389 | 102.495 | 0.003736397 | 0.984478105 |
| 3.25 | 0.248 | 102.743 | 0.002382073 | 0.986860178 |
| 3.50 | 0.296 | 103.039 | 0.002843119 | 0.989703297 |
| 3.75 | 0.301 | 103.340 | 0.002891145 | 0.992594442 |
| 4.00 | 0.252 | 103.592 | 0.002420494 | 0.995014936 |
| PAN | 0.519 | 104.111 | 0.004985064 | 1.0 |


| TOTAL WT. | 104.111 | grams |  |
| :--- | :---: | :---: | :---: |
| MEDIAN WT. | 52.056 | grams |  |
| MEAN GRAIN SIZE | -0.055 | phi | 1.4641 mm |



| $\begin{aligned} & \text { GRAIN SIZE DISTF } \\ & \text { CORE VB-9: 2.0-4.0 f } \end{aligned}$ | BUTION |  |  |
| :---: | :---: | :---: | :---: |
| PHISIZE SAMPLEWT. | CUM. WT. | WT.\% | CUM. WT. \% |
| $<-2.00 \quad 3.779$ | 3.779 | 0.032677308 | 0.032677308 |
| -1.75 0.444 | 4.223 | 0.003839303 | 0.036516611 |
| -1.50 0.715 | 4.938 | 0.006182661 | 0.042699272 |
| -1.25 0.409 | 5.347 | 0.003536655 | 0.046235927 |
| -1.00 0.893 | 6.240 | 0.007721841 | 0.053957768 |
| $\begin{array}{ll}-0.75 & 0.974\end{array}$ | 7.214 | 0.008422254 | 0.062380022 |
| -0.50 $\quad 1.373$ | 8.587 | 0.011872438 | 0.074252460 |
| -0.25 2.455 | 11.042 | 0.021228577 | 0.095481037 |
| $0.00 \quad 3.666$ | 14.708 | 0.031700189 | 0.127181225 |
| $0.25 \quad 7.403$ | 22.111 | 0.064014320 | 0.191195545 |
| $0.50 \quad 10.402$ | 32.513 | 0.089946907 | 0.281142452 |
| $0.75 \quad 14.423$ | 46.936 | 0.124716808 | 0.405859260 |
| $1.00 \quad 18.125$ | 65.061 | 0.156728292 | 0.562587552 |
| $1.25 \quad 16.384$ | 81.445 | 0.141673728 | 0.704261280 |
| $1.50 \quad 28.607$ | 110.052 | 0.247366965 | 0.951628245 |
| $1.75 \quad 0.962$ | 111.014 | 0.008318489 | 0.959946734 |
| $2.00 \quad 1.400$ | 112.414 | 0.012105909 | 0.972052643 |
| $2.25 \quad 1.375$ | 113.789 | 0.011889732 | 0.983942376 |
| $2.50 \quad 0.796$ | 114.585 | 0.006883074 | 0.990825450 |
| $2.75 \quad 0.459$ | 115.044 | 0.003969009 | 0.994794459 |
| $3.00-0.272$ | 115.316 | 0.002352005 | 0.997146464 |
| $3.25 \quad 0.120$ | 115.436 | 0.001037649 | 0.998184114 |
| $3.50 \quad 0.067$ | 115.503 | 0.000579354 | 0.998763468 |
| $3.75 \quad 0.066$ | 115.569 | 0.000570707 | 0.999334175 |
| $4.00-0.054$ | 115.623 | 0.000466942 | 0.999801117 |
| PAN 0.023 | 115.646 | 0.000198883 | 1.0 |
| TOTAL WT. MEDIAN WT. mean grain size | 115.646 | grams |  |
|  | 57.823 | grams |  |
|  | 0.9 | phi | 0.5359 mm |

GRAIN SIZE DISTRIBUTION VB-9: 2.0-4.0 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE VB-9: 4.0-6.0 ft

| PHI SIZE | MPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.126 | 2.126 | 0.021871978 | 0.021871978 |
| -1.75 | 0.244 | 2.370 | 0.002510236 | 0.024382214 |
| -1.50 | 0.554 | 2.924 | 0.005699471 | 0.030081686 |
| -1.25 | 0.345 | 3.269 | 0.003549310 | 0.033630995 |
| -1.00 | 0.484 | 3.753 | 0.004979321 | 0.038610317 |
| -0.75 | 0.543 | 4.296 | 0.005586305 | 0.044196621 |
| -0.50 | 1.058 | 5.354 | 0.010884550 | 0.055081171 |
| -0.25 | 1.609 | 6.963 | 0.016553157 | 0.071634329 |
| 0.00 | 2.221 | 9.184 | 0.022849324 | 0.094483653 |
| 0.25 | 4.191 | 13.375 | 0.043116397 | 0.137600049 |
| 0.50 | 6.305 | 19.680 | 0.064864920 | 0.202464970 |
| 0.75 | 8.905 | 28.585 | 0.091613341 | 0.294078311 |
| 1.00 | 13.054 | 41.639 | 0.134297648 | 0.428375959 |
| 1.25 | 14.608 | 56.247 | 0.150284974 | 0.578660933 |
| 1.50 | 10.843 | 67.090 | 0.111551203 | 0.690212136 |
| 1.75 | 10.629 | 77.719 | 0.109349602 | 0.799561737 |
| 2.00 | 7.786 | 85.505 | 0.080101232 | 0.879662970 |
| 2.25 | 6.125 | 91.630 | 0.063013107 | 0.942676077 |
| 2.50 | 3.101 | 94.731 | 0.031902636 | 0.974578712 |
| 2.75 | 1.133 | 95.864 | 0.011656139 | 0.986234851 |
| 3.00 | 0.519 | 96.383 | 0.005339396 | 0.991574247 |
| 3.25 | 0.228 | 96.611 | 0.002345631 | 0.993919878 |
| 3.50 | 0.144 | 96.755 | 0.001481451 | 0.995401329 |
| 3.75 | 0.124 | 96.879 | 0.001275694 | 0.996677023 |
| 4.00 | 0.103 | 96.982 | 0.001059649 | 0.997736672 |
| PAN | 0.220 | 97.202 | 0.002263328 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 97.202 | gramsgrams |  |
|  |  | 48.601 |  |  |
|  |  | 1.12 | phi | 0.4601 mm |

GRAIN SIZE DISTRIBUTION VB-9: 4.0-6.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-9: 6.0-8.0 ft


GRAIN SIZE DISTRIBUTION VB-9: 6.0-8.0 ft


| GRAIN SIZE DISTR CORE VB-9: 8.0-10.0 | UTION |  |  |
| :---: | :---: | :---: | :---: |
| PHISİE . SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| <-2.00 0.225 | 0.225 | 0.002333686 | 0.002333686 |
| -1.75 0.303 | 0.528 | 0.003142697 | 0.005476383 |
| -1.50 0.323 | 0.851 | 0.003350136 | 0.008826519 |
| -1.25 0.414 | 1.265 | 0.004293982 | 0.013120501 |
| -1.00 0.459 | 1.724 | 0.004760719 | 0.017881221 |
| $\begin{array}{ll}-0.75 & 0.729\end{array}$ | 2.453 | 0.007561143 | 0.025442363 |
| -0.50 1.113 | 3.566 | 0.011543967 | 0.036986330 |
| -0.25 1.832 | 5.398 | 0.019001390 | 0.055987720 |
| $0.00 \quad 2.506$ | 7.904 | 0.025992076 | 0.081979795 |
| $0.25 \quad 4.617$ | 12.521 | 0.047887236 | 0.129867032 |
| 0.50 5.804 | 18.325 | 0.060198726 | 0.190065758 |
| $0.75 \quad 7.615$ | 25.940 | 0.078982305 | 0.269048064 |
| $1.00 \quad 10.144$ | 36.084 | 0.105212936 | 0.374260999 |
| $1.25 \quad 11.435$ | 47.519 | 0.118603107 | 0.492864107 |
| $1.50 \quad 10.052$ | 57.571 | 0.104258718 | 0.597122824 |
| $1.75 \quad 12.291$ | 69.862 | 0.127481486 | 0.724604311 |
| $2.00 \quad 8.951$ | 78.813 | 0.092839214 | 0.817443525 |
| $2.25 \quad 6.816$ | 85.629 | 0.070695127 | 0.888138652 |
| $2.50 \quad 4.583$ | 90.212 | 0.047534590 | 0.935673242 |
| $2.75 \quad 2.447$ | 92.659 | 0.025380132 | 0.961053374 |
| 3.00 - 1.294 | 93.953 | 0.013421287 | 0.974474661 |
| $3.25 \quad 0.565$ | 94.518 | 0.005860145 | 0.980334806 |
| $3.50 \quad 0.384$ | 94.902 | 0.003982824 | 0.984317630 |
| $3.75 \quad 0.398$ | 95.300 | 0.004128031 | 0.988445661 |
| $4.00 \quad 0.426$ | 95.726 | 0.004418445 | 0.992864107 |
| PAN 0.688 | 96.414 | 0.007135893 | 1.0 |
| tOTAL WT. MEDIAN WT. mean grain size | 96.414 | grams |  |
|  | 48.207 | grams |  |
|  | 1.27 | phi | 0.4147 mm |



GRAIN SIZE DISTRIBUTION CHART
CORE VB-9: 10.0-12.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 12.687 | 12.687 | 0.112507316 | 0.112507316 |
| -1.75 | 1.971 | 14.658 | 0.017478673 | 0.129985989 |
| -1.50 | 1.964 | 16.622 | 0.017416597 | 0.147402586 |
| -1.25 | 2.455 | 19.077 | 0.021770747 | 0.169173332 |
| -1.00 | 2.702 | 21.779 | 0.023961123 | 0.193134455 |
| -0.75 | 2.898 | 24.677 | 0.025699236 | 0.218833691 |
| -0.50 | 4.052 | 28.729 | 0.035932817 | 0.254766508 |
| -0.25 | 5.625 | 34.354 | 0.049882057 | 0.304648564 |
| 0.00 | 7.613 | 41.967 | 0.067511484 | 0.372160048 |
| 0.25 | 11.178 | 53.145 | 0.099125623 | 0.471285671 |
| 0.50 | 10.877 | 64.022 | 0.096456379 | 0.567742050 |
| 0.75 | 10.910 | 74.932 | 0.096749020 | 0.664491070 |
| 1.00 | 10.614 | 85.546 | 0.094124115 | 0.758615185 |
| 1.25 | 8.974 | 94.520 | 0.079580725 | 0.838195910 |
| 1.50 | 12.869 | 107.389 | 0.114121278 | 0.952317188 |
| 1.75 | 1.879 | 109.268 | 0.016662824 | 0.968980012 |
| 2.00 | 1.308 | 110.576 | 0.011599241 | 0.980579253 |
| 2.25 | 0.783 | 111.359 | 0.006943582 | 0.987522835 |
| 2.50 | 0.436 | 111.795 | 0.003866414 | 0.991389249 |
| 2.75 | 0.264 | 112.059 | 0.002341131 | 0.993730380 |
| 3.00 | 0.208 | 112.267 | 0.001844528 | 0.995574907 |
| 3.25 | 0.136 | 112.403 | 0.001206037 | 0.996780945 |
| 3.50 | 0.082 | 112.485 | 0.000727170 | 0.997508114 |
| 3.75 | 0.088 | 112.573 | 0.000780377 | 0.998288491 |
| 4.00 | 0.098 | 112.671 | 0.000869056 | 0.999157547 |
| PAN | 0.095 | 112.766 | 0.000842453 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
112.766
56.383
0.32
grams
grams
phi
0.8011 mm

GRAIN SIZE DISTRIBUTION VB-9: 10.0-12.0 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE VB-9: 12.0-14.0 ft

PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 9.292 | 9.292 | 0.075528750 | 0.075528750 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 2.403 | 11.695 | 0.019532457 | 0.095061207 |
| -1.50 | 2.887 | 14.582 | 0.023466584 | 0.118527791 |
| -1.25 | 3.913 | 18.495 | 0.031806285 | 0.150334076 |
| -1.00 | 4.969 | 23.464 | 0.04038936 | 0.190723912 |
| -0.75 | 4.609 | 28.073 | 0.037463626 | 0.228187538 |
| -0.50 | 4.961 | 33.034 | 0.040324809 | 0.268512347 |
| -0.25 | 5.687 | 38.721 | 0.046226001 | 0.314738348 |
| 0.00 | 6.855 | 45.576 | 0.055719929 | 0.370458277 |
| 0.25 | 10.233 | 55.809 | 0.083177540 | 0.453635817 |
| 0.50 | 10.869 | 66.678 | 0.088347179 | 0.541982995 |
| 0.75 | 11.21 | 77.899 | 0.091208362 | 0.633191358 |
| 1.00 | 11.243 | 89.142 | 0.091387186 | 0.724578544 |
| 1.25 | 9.638 | 98.780 | 0.078341164 | 0.802919708 |
| 1.50 | 6.859 | 105.639 | 0.055752443 | 0.858672151 |
| 1.75 | 6.973 | 112.612 | 0.05667976 | 0.915351227 |
| 2.00 | 3.993 | 116.605 | 0.032456554 | 0.947807780 |
| 2.25 | 2.515 | 119.120 | 0.020442833 | 0.968250614 |
| 2.50 | 1.675 | 120.795 | 0.013615008 | 0.981865622 |
| 2.75 | 0.745 | 121.540 | 0.006055631 | 0.987921252 |
| 3.00 | 0.356 | 121.896 | 0.002893697 | 0.990814950 |
| 3.25 | 0.163 | 122.059 | 0.001324923 | 0.992139873 |
| 3.50 | 0.188 | 122.247 | 0.001528132 | 0.993668005 |
| 3.75 | 0.178 | 122.425 | 0.001446849 | 0.995114854 |
| 4.00 | 0.227 | 122.652 | 0.001845138 | 0.996959992 |
| PAN | 0.374 | 123.026 | 0.003040008 | 1.0 |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
123.026
61.513
0.38
grams
grams
phi
0.7684 mm

GRAIN SIZE DISTRIBUTION VB-9: 12.0-14.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-9: 14.0-16.0 ft



## GRAIN SIZE DISTRIBUTION CHART

CORE VB-9: 16-18.0 ft


GRAIN SIZE DISTRIBUTION VB-9: 16.0-18.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-9: 18.0-20.0 ft

| PHI SIZE | MPLE W | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 4.823 | 4.823 | 0.045653758 | 0.045653758 |
| -1.75 | 0.732 | 5.555 | 0.006928997 | 0.052582755 |
| -1.50 | 0.961 | 6.516 | 0.009096675 | 0.061679430 |
| -1.25 | 1.246 | 7.762 | 0.011794440 | 0.073473870 |
| -1.00 | 1.745 | 9.507 | 0.016517895 | 0.089991765 |
| -0.75 | 1.664 | 11.171 | 0.015751162 | 0.105742927 |
| -0.50 | 2.758 | 13.929 | 0.026106794 | 0.131849720 |
| -0.25 | 5.689 | 19.618 | 0.053851178 | 0.185700898 |
| 0.00 | 6.759 | 26.377 | 0.063979630 | 0.249680528 |
| 0.25 | 7.805 | 34.182 | 0.073880901 | 0.323561429 |
| 0.50 | 7.058 | 41.240 | 0.066809916 | 0.390371345 |
| 0.75 | 7.295 | 48.535 | 0.069053321 | 0.459424666 |
| 1.00 | 8.381 | 56.916 | 0.079333226 | 0.538757892 |
| 1.25 | 9.452 | 66.368 | 0.089471143 | 0.628229036 |
| 1.50 | 9.298 | 75.666 | 0.088013404 | 0.716242439 |
| 1.75 | 11.905 | 87.571 | 0.112690855 | 0.828933294 |
| 2.00 | 8.072 | 95.643 | 0.076408281 | 0.905341575 |
| 2.25 | 4.810 | 100.453 | 0.045530702 | 0.950872277 |
| 2.50 | 2.484 | 102.937 | 0.023513153 | 0.974385430 |
| 2.75 | 1.035 | 103.972 | 0.009797147 | 0.984182577 |
| 3.00 | 0.442 | 104.414 | 0.004183902 | 0.988366480 |
| 3.25 | 0.239 | 104.653 | 0.002262336 | 0.990628816 |
| 3.50 | 0.262 | 104.915 | 0.002480051 | 0.993108867 |
| 3.75 | 0.234 | 105.149 | 0.002215007 | 0.995323874 |
| 4.00 | 0.192 | 105.341 | 0.001817442 | 0.997141316 |
| PAN | 0.302 | 105.643 | 0.002858684 | 1.0 |
| TOTAL WT. MEDIAN WT. MEAN GRAIN SIZE |  | 105.643 | grams <br> grams <br> phi | 0.5434 mm |
|  |  | 52.822 |  |  |
|  |  | 0.88 |  |  |

GRAIN SIZE DISTRIBUTION VB-9: 18.0-20.0 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE VB-10: 0.0-2.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT. $\%$ | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $<-2.00$ | 0.802 | 0.802 | 0.008165343 | 0.008165343 |
| -1.75 | 0.387 | 1.189 | 0.003940134 | 0.012105477 |
| -1.50 | 0.490 | 1.679 | 0.004988801 | 0.017094278 |
| -1.25 | 0.442 | 2.121 | 0.004500102 | 0.021594380 |
| -1.00 | 0.631 | 2.752 | 0.006424353 | 0.028018733 |
| -0.75 | 0.762 | 3.514 | 0.007758094 | 0.035776828 |
| -0.50 | 1.662 | 5.176 | 0.016921197 | 0.052698025 |
| -0.25 | 5.406 | 10.582 | 0.055039707 | 0.107737732 |
| 0.00 | 12.177 | 22.759 | 0.123976787 | 0.231714518 |
| 0.25 | 18.815 | 41.574 | 0.191559764 | 0.423274282 |
| 0.50 | 13.775 | 55.349 | 0.140246386 | 0.563520668 |
| 0.75 | 11.235 | 66.584 | 0.114386072 | 0.677906740 |
| 1.00 | 9.525 | 76.109 | 0.096976176 | 0.774882916 |
| 1.25 | 7.772 | 83.881 | 0.079128487 | 0.854011403 |
| 1.50 | 5.062 | 88.943 | 0.051537365 | 0.905548768 |
| 1.75 | 4.295 | 93.238 | 0.043728365 | 0.949277133 |
| 2.00 | 2.177 | 95.415 | 0.022164529 | 0.971441662 |
| 2.25 | 1.260 | 96.675 | 0.012828345 | 0.984270006 |
| 2.50 | 0.596 | 97.271 | 0.006068011 | 0.990338017 |
| 2.75 | 0.272 | 97.543 | 0.002769293 | 0.993107310 |
| 3.00 | 0.163 | 97.706 | 0.001659540 | 0.994766850 |
| 3.25 | 0.102 | 97.808 | 0.001038485 | 0.995805335 |
| 3.50 | 0.101 | 97.909 | 0.001028304 | 0.996833639 |
| 3.75 | 0.094 | 98.003 | 0.000957035 | 0.997790674 |
| 4.00 | 0.085 | 98.088 | 0.000865404 | 0.998656078 |
| PAN | 0.132 | 98.220 | 0.001343922 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
98.220
49.110
0.39
grams
grams
phi $\quad 0.7631 \mathrm{~mm}$

GRAIN SIZE DISTRIBUTION VB-10 : 0.0-2.0 ft


## GRAIN SIZE DISTRIBUTION CHART

## CORE VB-10: $2.0-4.0 \mathrm{ft}$

PHI SIZE SAMPLE WT. CUM. WT. WT.\% CUM. WT. \%

| $<-2.00$ | 0.613 | 0.613 | 0.004719305 | 0.004719305 |
| :--- | :--- | :--- | :--- | :--- |
| -1.75 | 0.365 | 0.978 | 0.002810027 | 0.007529332 |
| -1.50 | 0.473 | 1.451 | 0.003641487 | 0.011170819 |
| -1.25 | 0.906 | 2.357 | 0.006975025 | 0.018145844 |
| -1.00 | 0.848 | 3.205 | 0.006528501 | 0.024674345 |
| -0.75 | 1.024 | 4.229 | 0.007883472 | 0.032557817 |
| -0.50 | 1.328 | 5.557 | 0.010223878 | 0.042781696 |
| -0.25 | 2.786 | 8.343 | 0.021448588 | 0.064230284 |
| 0.00 | 6.053 | 14.396 | 0.046600253 | 0.110830536 |
| 0.25 | 12.495 | 26.891 | 0.096195301 | 0.207025837 |
| 0.50 | 14.274 | 41.165 | 0.109891294 | 0.316917131 |
| 0.75 | 15.171 | 56.336 | 0.116797031 | 0.433714163 |
| 1.00 | 15.450 | 71.786 | 0.118944970 | 0.552659132 |
| 1.25 | 14.759 | 86.545 | 0.113625166 | 0.666284298 |
| 1.50 | 10.956 | 97.501 | 0.084346996 | 0.750631294 |
| 1.75 | 11.949 | 109.450 | 0.091991809 | 0.842623102 |
| 2.00 | 8.231 | 117.681 | 0.063368029 | 0.905991131 |
| 2.25 | 5.558 | 123.239 | 0.042789394 | 0.948780525 |
| 2.50 | 2.794 | 126.033 | 0.021510178 | 0.970290703 |
| 2.75 | 1.125 | 127.158 | 0.008661041 | 0.978951745 |
| 3.00 | 0.555 | 127.713 | 0.004272780 | 0.983224525 |
| 3.25 | 0.452 | 128.165 | 0.003479814 | 0.986704339 |
| 3.50 | 0.517 | 128.682 | 0.003980230 | 0.990684569 |
| 3.75 | 0.450 | 129.132 | 0.003464417 | 0.994148985 |
| 4.00 | 0.329 | 129.461 | 0.002532873 | 0.996681859 |
| PAN | 0.431 | 129.892 | 0.003318141 |  |

TOTAL WT.
MEDIAN WT.
MEAN GRAIN SIZE
129.892
64.946
0.89
grams
grams
phi $\quad 0.5396 \mathrm{~mm}$

GRAIN SIZE DISTRIBUTION VB-10 : 2.0-4.0 ft


## GRAIN SIZE DISTRIBUTION CHART

CORE VB-10: 4.0-6.0 ft

| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 7.646 | 7.646 | 0.067405429 | 0.067405429 |
| -1.75 | 2.979 | 10.625 | 0.026262199 | 0.093667628 |
| -1.50 | 2.853 | 13.478 | 0.025151411 | 0.118819039 |
| -1.25 | 2.440 | 15.918 | 0.021510495 | 0.140329534 |
| -1.00 | 2.489 | 18.407 | 0.021942468 | 0.162272002 |
| -0.75 | 2.171 | 20.578 | 0.019139051 | 0.181411053 |
| -0.50 | 2.165 | 22.743 | 0.019086157 | 0.200497210 |
| -0.25 | 3.146 | 25.889 | 0.027734434 | 0.228231643 |
| 0.00 | 5.759 | 31.648 | 0.050770058 | 0.279001701 |
| 0.25 | 9.609 | 41.257 | 0.084710798 | 0.363712500 |
| 0.50 | 9.405 | 50.662 | 0.082912380 | 0.446624880 |
| 0.75 | 9.731 | 60.393 | 0.085786323 | 0.532411203 |
| 1.00 | 10.091 | 70.484 | 0.088960003 | 0.621371206 |
| 1.25 | 9.963 | 80.447 | 0.087831583 | 0.709202789 |
| 1.50 | 7.564 | 88.011 | 0.066682535 | 0.775885324 |
| 1.75 | 8.524 | 96.535 | 0.075145681 | 0.851031005 |
| 2.00 | 5.973 | 102.508 | 0.052656634 | 0.903687639 |
| 2.25 | 4.169 | 106.677 | 0.036752973 | 0.940440613 |
| 2.50 | 2.523 | 109.200 | 0.022242205 | 0.962682817 |
| 2.75 | 1.180 | 110.380 | 0.010402617 | 0.973085434 |
| 3.00 | 0.646 | 111.026 | 0.005694992 | 0.978780425 |
| 3.25 | 0.466 | 111.492 | 0.004108152 | 0.982888577 |
| 3.50 | 0.450 | 111.942 | 0.003967100 | 0.986855677 |
| 3.75 | 0.458 | 112.400 | 0.004037626 | 0.990893303 |
| 4.00 | 0.396 | 112.796 | 0.003491048 | 0.994384350 |
| PAN | 0.637 | 113.433 | 0.005615650 | 1.0 |
| TOTAL W MEDIAN MEAN GR | T. <br> NT. <br> AIN SIZE | 113.433 56.717 0.66 | grams grams phi | 0.6329 mm |



| GRAIN <br> CORE | $\begin{aligned} & \text { SIZE DIST } \\ & \text { B-10: 18.0-2 } \end{aligned}$ | BUTION <br> 0 ft |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PHI SIZE | SAMPLE WT. | CUM. WT. | WT.\% | CUM. WT. \% |
| $<-2.00$ | 0.530 | 0.530 | 0.004587791 | 0.004587791 |
| -1.75 | 0.150 | 0.680 | 0.001298431 | 0.005886223 |
| -1.50 | 0.472 | 1.152 | 0.004085731 | 0.009971954 |
| -1.25 | 0.695 | 1.847 | 0.006016066 | 0.015988020 |
| -1.00 | 0.536 | 2.383 | 0.004639729 | 0.020627748 |
| -0.75 | 0.707 | 3.090 | 0.006119940 | 0.026747689 |
| -0.50 | 1.097 | 4.187 | 0.009495862 | 0.036243551 |
| -0.25 | 1.673 | 5.860 | 0.014481839 | 0.050725390 |
| 0.00 | 1.811 | 7.671 | 0.015676396 | 0.066401787 |
| 0.25 | 2.300 | 9.971 | 0.019909283 | 0.086311070 |
| 0.50 | 2.472 | 12.443 | 0.021398151 | 0.107709221 |
| 0.75 | 3.905 | 16.348 | 0.033802500 | 0.141511721 |
| 1.00 | 7.501 | 23.849 | 0.064930231 | 0.206441951 |
| 1.25 | 13.557 | 37.406 | 0.117352238 | 0.323794190 |
| 1.50 | 15.536 | 52.942 | 0.134482878 | 0.458277068 |
| 1.75 | 22.843 | 75.785 | 0.197733804 | 0.656010872 |
| 2.00 | 16.867 | 92.652 | 0.146004293 | 0.802015166 |
| 2.25 | 10.826 | 103.478 | 0.093712129 | 0.895727295 |
| 2.50 | 5.446 | 108.924 | 0.047141719 | 0.942869014 |
| 2.75 | 2.723 | 111.647 | 0.023570860 | 0.966439874 |
| 3.00 | 1.573 | 113.220 | 0.013616218 | 0.980056092 |
| 3.25 | 0.806 | 114.026 | 0.006976905 | 0.987032997 |
| 3.50 | 0.364 | 114.390 | 0.003150860 | 0.990183858 |
| 3.75 | 0.246 | 114.636 | 0.002129428 | 0.992313286 |
| 4.00 | 0.325 | 114.961 | 0.002813268 | 0.995126554 |
| PAN | 0.563 | 115.524 | 0.004873446 | 1.0 |
| TOTAL W |  | 115.524 | grams |  |
| MEDIAN | WT. | 57.762 | grams |  |
| MEAN GR | AIN SIZE | 1.55 | phi | 0.3415 mm |



CARBONATE GRAIN SIZE DISTRIBUTION

## CORE VB 1: 1.0-2.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 4.275 | 0.000 | 4.275 | 4.275 | 0.070696213 | 0.070696213 |
| -1.75 | 1.066 | 0.000 | 1.066 | 5.341 | 0.017628576 | 0.088324789 |
| -1.50 | 1.245 | 0.000 | 1.245 | 6.586 | 0.020588722 | 0.108913511 |
| -1.25 | 1.800 | 0.000 | 1.800 | 8.386 | 0.029766827 | 0.138680337 |
| -1.00 | 2.013 | 0.000 | 2.013 | 10.399 | 0.033289234 | 0.171969572 |
| -0.75 | 2.410 | 0.000 | 2.410 | 12.809 | 0.039854473 | 0.211824045 |
| -0.50 | 2.965 | 0.007 | 2.958 | 15.767 | 0.048916818 | 0.260740863 |
| -0.25 | 3.223 | 0.046 | 3.177 | 18.944 | 0.052538449 | 0.313279312 |
| 0.00 | 3.143 | 0.262 | 2.881 | 21.825 | 0.047643460 | 0.360922772 |
| 0.25 | 4.268 | 0.985 | 3.283 | 25.108 | 0.054291384 | 0.415214156 |
| 0.50 | 5.068 | 1.956 | 3.112 | 28.220 | 0.051463536 | 0.466677691 |
| 0.75 | 7.005 | 3.314 | 3.691 | 31.911 | 0.061038532 | 0.527716223 |
| 1.00 | 10.508 | 5.713 | 4.795 | 36.706 | 0.079295518 | 0.607011741 |
| 1.25 | 13.499 | 7.297 | 6.202 | 42.908 | 0.102563255 | 0.709574996 |
| 1.50 | 11.952 | 7.400 | 4.552 | 47.460 | 0.075276997 | 0.784851993 |
| 1.75 | 17.866 | 12.732 | 5.134 | 52.594 | 0.084901604 | 0.869753597 |
| 2.00 | 17.575 | 13.927 | 3.648 | 56.242 | 0.060327435 | 0.930081032 |
| 2.25 | 14.051 | 11.539 | 2.512 | 58.754 | 0.041541260 | 0.971622292 |
| 2.50 | 6.054 | 4.796 | 1.258 | 60.012 | 0.020803704 | 0.992425996 |
| 2.75 | 1.259 | 0.947 | 0.312 | 60.324 | 0.005159583 | 0.997585580 |
| 3.00 | 0.396 | 0.318 | 0.078 | 60.402 | 0.001289896 | 0.998875475 |
| 3.25 | 0.179 | 0.141 | 0.038 | 60.440 | 0.000628411 | 0.999503886 |
| 3.50 | 0.133 | 0.122 | 0.011 | 60.451 | 0.000181908 | 0.999685795 |
| 3.75 | 0.102 | 0.089 | 0.013 | 60.464 | 0.000214983 | 0.999900777 |
| 4.00 | 0.071 | 0.066 | 0.005 | 60.469 | 0.000082686 | 0.999983463 |
| PAN | 0.067 | 0.066 | 0.001 | 60.470 | 0.000016537 | 1.0 |
|  |  |  |  |  |  |  |

TOTAL WT.
CO3 WT
\% CARBONATE

### 132.193 grams

60.470 grams

CARBONATE GRAIN SIZE DISTRIBUTION VB 1: 1.0-2.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 1: 3.0-4.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 2.913 | 0.042 | 2.871 | 2.871 | 0.044923602 | 0.044923602 |
| -1.75 | 0.826 | 0.000 | 0.826 | 3.697 | 0.012924728 | 0.057848330 |
| -1.50 | 1.227 | 0.000 | 1.227 | 4.924 | 0.019199324 | 0.077047654 |
| -1.25 | 1.371 | 0.044 | 1.327 | 6.251 | 0.020764061 | 0.097811715 |
| -1.00 | 1.904 | 0.010 | 1.894 | 8.145 | 0.029636120 | 0.127447836 |
| -0.75 | 2.100 | 0.046 | 2.054 | 10.199 | 0.032139700 | 0.159587535 |
| -0.50 | 2.765 | 0.036 | 2.729 | 12.928 | 0.042701675 | 0.202289210 |
| -0.25 | 3.486 | 0.115 | 3.371 | 16.299 | 0.052747287 | 0.255036497 |
| 0.00 | 3.689 | 0.450 | 3.239 | 19.538 | 0.050681834 | 0.305718332 |
| 0.25 | 5.481 | 1.552 | 3.929 | 23.467 | 0.061478520 | 0.367196852 |
| 0.50 | 7.070 | 3.182 | 3.888 | 27.355 | 0.060836978 | 0.428033830 |
| 0.75 | 9.470 | 4.728 | 4.742 | 32.097 | 0.074199833 | 0.502233662 |
| 1.00 | 13.591 | 7.714 | 5.877 | 37.974 | 0.091959598 | 0.594193261 |
| 1.25 | 16.351 | 9.570 | 6.781 | 44.755 | 0.106104822 | 0.700298082 |
| 1.50 | 14.008 | 8.673 | 5.235 | 50.090 | 0.083478723 | 0.783776806 |
| 1.75 | 20.849 | 15.238 | 5.611 | 55.701 | 0.087797398 | 0.871574204 |
| 2.00 | 21.338 | 17.423 | 3.915 | 59.616 | 0.061259457 | 0.932833661 |
| 2.25 | 18.145 | 15.504 | 2.641 | 62.257 | 0.041324706 | 0.974158367 |
| 2.50 | 8.169 | 6.900 | 1.269 | 63.526 | 0.019856514 | 0.994014881 |
| 2.75 | 1.741 | 1.423 | 0.318 | 63.844 | 0.004975864 | 0.998990745 |
| 3.00 | 0.450 | 0.398 | 0.052 | 63.896 | 0.000813663 | 0.999804408 |
| 3.25 | 0.172 | 0.163 | 0.008 | 63.905 | 0.000133003 | 0.999937411 |
| 3.50 | 0.132 | 0.131 | 0.001 | 63.906 | 0.000015647 | 0.999953058 |
| 3.75 | 0.114 | 0.113 | 0.001 | 63.907 | 0.000015647 | 0.999968705 |
| 4.00 | 0.081 | 0.080 | 0.001 | 63.908 | 0.000015647 | 0.999984353 |
| PAN | 0.059 | 0.058 | 0.001 | 63.909 | 0.000015647 | 1.0 |
|  |  |  |  |  |  |  |

TOTAL WT.
157.502 grams

CO3 WT
\% CARBONATE
63.909 grams
40.576


CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 1: 5.0-6.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 2.338 | 0.000 | 2.338 | 2.338 | 0.041309610 | 0.041309610 |
| -1.75 | 0.995 | 0.000 | 0.995 | 3.333 | 0.017580437 | 0.058890047 |
| -1.50 | 1.391 | 0.000 | 1.391 | 4.724 | 0.024577274 | 0.083467322 |
| -1.25 | 1.167 | 0.000 | 1.167 | 5.891 | 0.020619467 | 0.104086789 |
| -1.00 | 1.660 | 0.000 | 1.660 | 7.551 | 0.029330177 | 0.133416966 |
| -0.75 | 2.092 | 0.000 | 2.092 | 9.643 | 0.036963090 | 0.170380055 |
| -0.50 | 2.713 | 0.000 | 2.713 | 12.356 | 0.047935403 | 0.218315458 |
| -0.25 | 3.083 | 0.099 | 2.984 | 15.340 | 0.052723643 | 0.271039101 |
| 0.00 | 3.403 | 0.449 | 2.954 | 18.294 | 0.052193579 | 0.323232680 |
| 0.25 | 5.366 | 1.503 | .3 .863 | 22.157 | 0.068254501 | 0.391487181 |
| 0.50 | 6.685 | 2.989 | 3.696 | 25.853 | 0.065303815 | 0.456790996 |
| 0.75 | 8.647 | 4.412 | 4.235 | 30.088 | 0.074827288 | 0.531618284 |
| 1.00 | 12.131 | 6.797 | 5.334 | 35.422 | 0.094245278 | 0.625863562 |
| 1.25 | 13.647 | 7.661 | 5.986 | 41.408 | 0.105765323 | 0.731628885 |
| 1.50 | 10.981 | 7.275 | 3.706 | 45.114 | 0.065480503 | 0.797109387 |
| 1.75 | 15.245 | 10.911 | 4.334 | 49.448 | 0.076576497 | 0.873685884 |
| 2.00 | 15.030 | 12.091 | 2.939 | 52.387 | 0.051928547 | 0.925614432 |
| 2.25 | 12.855 | 10.480 | 2.375 | 54.762 | 0.041963355 | 0.967577787 |
| 2.50 | 5.690 | 4.459 | 1.231 | 55.993 | 0.021750269 | 0.989328056 |
| 2.75 | 1.228 | 0.851 | 0.377 | 56.370 | 0.006661130 | 0.995989187 |
| 3.00 | 0.390 | 0.279 | 0.111 | 56.481 | 0.001961235 | 0.997950421 |
| 3.25 | 0.178 | 0.129 | 0.049 | 56.530 | 0.000865770 | 0.998816192 |
| 3.50 | 0.181 | 0.142 | 0.039 | 56.569 | 0.000689082 | 0.999505274 |
| 3.75 | 0.171 | 0.167 | 0.004 | 56.573 | 0.000070675 | 0.999575949 |
| 4.00 | 0.128 | 0.105 | 0.023 | 56.596 | 0.000406382 | 0.999982331 |
| PAN | 0.102 | 0.101 | 0.001 | 56.597 | 0.000017669 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 1: 7.0-8.0 ft



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 1: 9.0 - 10.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | $\begin{aligned} & \text { CO3 WT } \\ & \% \end{aligned}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  |  |  |  |  |
| <-2.00 | 1.676 | 0.000 | 1.676 | 1.676 | 0.033941554 | 0.033941554 |
| -1.75 | 0.205 | 0.000 | 0.205 | 1.881 | 0.004151562 | 0.038093117 |
| -1.50 | 0.667 | 0.000 | 0.667 | 2.548 | 0.013507766 | 0.051600883 |
| -1.25 | 0.587 | 0.000 | 0.587 | 3.135 | 0.011887645 | 0.063488528 |
| -1.00 | 0.757 | 0.000 | 0.757 | 3.892 | 0.015330404 | 0.078818931 |
| -0.75 | 1.261 | 0.000 | 1.261 | 5.153 | 0.025537172 | 0.104356103 |
| -0.50 | 1.547 | 0.000 | 1.547 | 6.700 | 0.031329108 | 0.135685210 |
| -0.25 | 2.171 | 0.062 | 2.109 | 8.809 | 0.042710464 | 0.178395674 |
| 0.00 | 2.389 | 0.196 | 2.193 | 11.002 | 0.044411592 | 0.222807266 |
| 0.25 | 3.604 | 0.872 | 2.732 | 13.734 | 0.055327163 | 0.278134430 |
| 0.50 | 4.693 | 2.022 | 2.671 | 16.405 | 0.054091820 | 0.332226250 |
| 0.75 | 6.670 | 3.387 | 3.283 | 19.688 | 0.066485753 | 0.398712003 |
| 1.00 | 10.267 | 5.739 | 4.528 | 24.216 | 0.091698900 | 0.490410903 |
| 1.25 | 12.833 | 7.101 | 5.732 | 29.948 | 0.116081735 | 0.606492639 |
| 1.50 | 10.876 | 7.052 | 3.824 | 33.772 | 0.077441827 | 0.683934466 |
| 1.75 | 16.807 | 11.822 | 4.985 | 38.757 | 0.100953847 | 0.784888313 |
| 2.00 | 18.602 | 14.737 | 3.865 | 42.622 | 0.078272140 | 0.863160453 |
| 2.25 | 18.498 | 15.240 | 3.258 | 45.880 | 0.065979465 | 0.929139918 |
| 2.50 | 10.193 | 8.011 | 2.182 | 48.062 | 0.044188825 | 0.973328743 |
| 2.75 | 2.522 | 1.741 | 0.781 | 48.843 | 0.015816440 | 0.989145183 |
| 3.00 | 0.712 | 0.439 | 0.273 | 49.116 | 0.005528666 | 0.994673849 |
| 3.25 | 0.270 | 0.159 | 0.111 | 49.227 | 0.002247919 | 0.996921768 |
| 3.50 | 0.190 | 0.109 | 0.081 | 49.308 | 0.001640373 | 0.998562142 |
| 3.75 | 0.159 | 0.121 | 0.038 | 49.346 | 0.000769558 | 0.999331700 |
| 4.00 | 0.127 | 0.097 | 0.030 | 49.376 | 0.000607546 | 0.999939245 |
| PAN | 0.122 | 0.119 | 0.003 | 49.379 | 0.000060755 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | $\begin{array}{r} 128.405 \\ 49.379 \\ 38.456 \end{array}$ | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB 1: 9.0-10.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 1: 13.0-14.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION VB 1: 13.0-14.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 2: 0-2.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION VB 2: 0-2.0 ft


Phl Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 2: 2.0-4.0 ft

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 4.975 | 0.000 | 4.975 | 4.975 | 0.166996744 | 0.166996744 |
| -1.75 | 0.623 | 0.000 | 0.623 | 5.598 | 0.020912356 | 0.187909100 |
| -1.50 | 0.544 | 0.000 | 0.544 | 6.142 | 0.018260548 | 0.206169649 |
| -1.25 | 0.401 | 0.000 | 0.401 | 6.543 | 0.013460441 | 0.219630090 |
| -1.00 | 0.299 | 0.000 | 0.299 | 6.842 | 0.010036588 | 0.229666678 |
| -0.75 | 0.383 | 0.000 | 0.383 | 7.225 | 0.012856232 | 0.242522910 |
| -0.50 | 0.273 | 0.000 | 0.273 | 7.498 | 0.009163841 | 0.251686751 |
| -0.25 | 0.262 | 0.006 | 0.256 | 7.754 | 0.008593199 | 0.260279950 |
| 0.00 | 0.307 | 0.014 | 0.293 | 8.047 | 0.009835185 | 0.270115135 |
| 0.25 | 0.344 | 0.051 | 0.293 | 8.340 | 0.009835185 | 0.279950321 |
| 0.50 | 0.397 | 0.105 | 0.292 | 8.632 | 0.009801618 | 0.289751939 |
| 0.75 | 0.571 | 0.280 | 0.291 | 8.923 | 0.009768051 | 0.299519989 |
| 1.00 | 1.151 | 0.733 | 0.418 | 9.341 | 0.014031083 | 0.313551072 |
| 1.25 | 1.696 | 1.203 | 0.493 | 9.834 | 0.016548622 | 0.330099695 |
| 1.50 | 1.703 | 1.200 | 0.503 | 10.337 | 0.016884294 | 0.346983988 |
| 1.75 | 2.631 | 1.843 | 0.788 | 11.125 | 0.026450942 | 0.373434930 |
| 2.00 | 2.390 | 1.782 | 0.608 | 11.733 | 0.020408848 | 0.393843778 |
| 2.25 | 2.608 | 1.716 | 0.892 | 12.625 | 0.029941929 | 0.423785707 |
| 2.50 | 2.779 | 1.503 | 1.276 | 13.901 | 0.042831728 | 0.466617435 |
| 2.75 | 3.499 | 1.914 | 1.585 | 15.486 | 0.053203988 | 0.519821423 |
| 3.00 | 8.832 | 6.568 | 2.264 | 17.750 | 0.075996106 | 0.595817529 |
| 3.25 | 21.071 | 16.882 | 4.189 | 21.939 | 0.140612937 | 0.736430466 |
| 3.50 | 25.931 | 22.596 | 3.335 | 25.274 | 0.111946561 | 0.848377027 |
| 3.75 | 15.174 | 13.518 | 1.656 | 26.930 | 0.055587258 | 0.903964285 |
| 4.00 | 8.655 | 7.651 | 1.004 | 27.934 | 0.033701453 | 0.937665738 |
| PAN | 7.097 | 5.240 | 1.857 | 29.791 | 0.062334262 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 114.596 29.791 25.997 | grams grams |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 2: 4.0-6.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 1.235 | 0.000 | 1.235 | 1.235 | 0.096923560 | 0.096923560 |
| -1.75 | 0.259 | 0.000 | 0.259 | 1.494 | 0.020326479 | 0.117250039 |
| -1.50 | 0.457 | 0.000 | 0.457 | 1.951 | 0.035865641 | 0.153115680 |
| -1.25 | 0.327 | 0.000 | 0.327 | 2.278 | 0.025663161 | 0.178778842 |
| -1.00 | 0.287 | 0.000 | 0.287 | 2.565 | 0.022523937 | 0.201302778 |
| -0.75 | 0.317 | 0.000 | 0.317 | 2.882 | 0.024878355 | 0.226181133 |
| -0.50 | 0.342 | 0.000 | 0.342 | 3.224 | 0.026840370 | 0.253021504 |
| -0.25 | 0.343 | 0.006 | 0.337 | 3.561 | 0.026447967 | 0.279469471 |
| 0.00 | 0.297 | 0.024 | 0.273 | 3.834 | 0.021425208 | 0.300894679 |
| 0.25 | 0.414 | 0.054 | 0.360 | 4.194 | 0.028253022 | 0.329147701 |
| 0.50 | 0.504 | 0.119 | 0.385 | 4.579 | 0.030215037 | 0.359362737 |
| 0.75 | 0.813 | 0.347 | 0.466 | 5.045 | 0.036571967 | 0.395934704 |
| 1.00 | 1.701 | 1.047 | 0.654 | 5.699 | 0.051326322 | 0.447261027 |
| 1.25 | 2.771 | 1.910 | 0.861 | 6.560 | 0.067571810 | 0.514832836 |
| 1.50 | 2.734 | 1.911 | 0.823 | 7.383 | 0.064589546 | 0.579422383 |
| 1.75 | 3.948 | 2.818 | 1.130 | 8.513 | 0.088683095 | 0.668105478 |
| 2.00 | 3.013 | 2.312 | 0.701 | 9.214 | 0.055014911 | 0.723120389 |
| 2.25 | 2.080 | 1.494 | 0.586 | 9.800 | 0.045989641 | 0.769110030 |
| 2.50 | 1.134 | 0.661 | 0.473 | 10.273 | 0.037121331 | 0.806231361 |
| 2.75 | 0.768 | 0.449 | 0.319 | 10.592 | 0.025035316 | 0.831266677 |
| 3.00 | 1.417 | 1.025 | 0.392 | 10.984 | 0.030764401 | 0.862031078 |
| 3.25 | 3.642 | 2.836 | 0.806 | 11.790 | 0.063255376 | 0.925286454 |
| 3.50 | 5.200 | 4.778 | 0.422 | 12.212 | 0.033118820 | 0.958405274 |
| 3.75 | 3.527 | 3.306 | 0.221 | 12.433 | 0.017344216 | 0.975749490 |
| 4.00 | 1.446 | 1.290 | 0.156 | 12.589 | 0.012242976 | 0.987992466 |
| PAN | 0.782 | 0.629 | 0.153 | 12.742 | 0.012007534 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB 2: 4.0-6.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 2: 6.0-8.0 ft

| $\begin{aligned} & \text { PHII } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. } \end{aligned}$ | $\begin{gathered} \text { CO3WT } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| <-2.00 | 2.794 | 0.000 | 2.794 | 2.794 | 0.110295279 | 0.110295279 |
| -1.75 | 0.590 | 0.000 | 0.590 | 3.384 | 0.023290700 | 0.133585978 |
| -1.50 | 0.263 | 0.000 | 0.263 | 3.647 | 0.010382125 | 0.143968104 |
| -1.25 | 0.423 | 0.000 | 0.423 | 4.070 | 0.016698247 | 0.160666351 |
| -1.00 | 0.583 | 0.000 | 0.583 | 4.653 | 0.023014369 | 0.183680720 |
| -0.75 | 0.505 | 0.000 | 0.505 | 5.158 | 0.019935260 | 0.203615980 |
| -0.50 | 0.482 | 0.000 | 0.482 | 5.640 | 0.019027317 | 0.222643297 |
| -0.25 | 0.499 | 0.006 | 0.493 | 6.133 | 0.019461551 | 0.242104848 |
| 0.00 | 0.457 | 0.024 | 0.433 | 6.566 | 0.017093005 | 0.259197853 |
| 0.25 | 0.621 | 0.047 | 0.574 | 7.140 | 0.022659087 | 0.281856940 |
| 0.50 | 0.709 | 0.117 | 0.592 | 7.732 | 0.023369651 | 0.305226591 |
| 0.75 | 1.203 | 0.363 | 0.840 | 8.572 | 0.033159640 | 0.338386231 |
| 1.00 | 2.754 | 1.314 | 1.440 | 10.012 | 0.056845097 | 0.395231328 |
| 1.25 | 5.598 | 3.293 | 2.305 | 12.317 | 0.090991631 | 0.486222959 |
| 1.50 | 7.002 | 4.915 | 2.087 | 14.404 | 0.082385915 | 0.568608874 |
| 1.75 | 11.034 | 7.414 | 3.620 | 18.024 | 0.142902258 | 0.711511132 |
| 2.00 | 8.372 | 5.627 | 2.745 | 20.769 | 0.108360966 | 0.819872099 |
| 2.25 | 4.899 | 3.001 | 1.898 | 22.667 | 0.074924996 | 0.894797095 |
| 2.50 | 1.924 | 0.935 | 0.989 | 23.656 | 0.039041529 | 0.933838623 |
| 2.75 | 0.693 | 0.359 | 0.334 | 23.990 | 0.013184904 | 0.947023528 |
| 3.00 | 0.646 | 0.424 | 0.222 | 24.212 | 0.008763619 | 0.955787147 |
| 3.25 | 0.890 | 0.637 | 0.253 | 24.465 | 0.009987368 | 0.965774514 |
| 3.50 | 1.194 | 1.043 | 0.151 | 24.616 | 0.005960840 | 0.971735354 |
| 3.75 | 1.388 | 1.152 | 0.236 | 24.852 | 0.009316280 | 0.981051634 |
| 4.00 | 0.965 | 0.760 | 0.205 | 25.057 | 0.008092531 | 0.989144165 |
| PAN | 0.964 | 0.689 | 0.275 | 25.332 | 0.010855835 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE

| 57.452 | grams |
| :--- | :--- |
| 25.332 | grams |

44.092

CARBONATE GRAIN SIZE DISTRIBUTION VB 2: 6.0-8.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 3: $0-2.0 \mathrm{ft}$

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.881 | 0.000 | 0.881 | 0.881 | 0.025256579 | 0.025256579 |
| -1.75 | 0.277 | 0.000 | 0.277 | 1.158 | 0.007941058 | 0.033197638 |
| -1.50 | 0.568 | 0.000 | 0.568 | 1.726 | 0.016283470 | 0.049481108 |
| -1.25 | 0.718 | 0.000 | 0.718 | 2.444 | 0.020583682 | 0.070064790 |
| -1.00 | 0.919 | 0.000 | 0.919 | 3.363 | 0.026345966 | 0.096410756 |
| -0.75 | 1.187 | 0.000 | 1.187 | 4.550 | 0.034029012 | 0.130439768 |
| -0.50 | 1.521 | 0.000 | 1.521 | 6.071 | 0.043604151 | 0.174043920 |
| -0.25 | 1.973 | 0.030 | 1.943 | 8.014 | 0.055702081 | 0.229746001 |
| 0.00 | 1.943 | 0.102 | 1.841 | 9.855 | 0.052777937 | 0.282523938 |
| 0.25 | 2.906 | 0.525 | 2.381 | 12.236 | 0.068258701 | 0.350782639 |
| 0.50 | 3.466 | 1.072 | 2.394 | 14.630 | 0.068631386 | 0.419414024 |
| 0.75 | 4.346 | 1.995 | 2.351 | 16.981 | 0.067398658 | 0.486812683 |
| 1.00 | 6.815 | 3.965 | 2.850 | 19.831 | 0.081704031 | 0.568516713 |
| 1.25 | 8.897 | 5.756 | 3.141 | 22.972 | 0.090046442 | 0.658563156 |
| 1.50 | 8.703 | 5.977 | 2.726 | 25.698 | 0.078149189 | 0.736712344 |
| 1.75 | 11.716 | 9.157 | 2.559 | 28.257 | 0.073361619 | 0.810073964 |
| 2.00 | 10.261 | 8.079 | 2.182 | 30.439 | 0.062553753 | 0.872627716 |
| 2.25 | 9.770 | 7.688 | 2.082 | 32.521 | 0.059686945 | 0.932314661 |
| 2.50 | 5.331 | 3.731 | 1.600 | 34.121 | 0.045868930 | 0.978183590 |
| 2.75 | 1.177 | 0.628 | 0.549 | 34.670 | 0.015738776 | 0.993922367 |
| 3.00 | 0.238 | 0.152 | 0.086 | 34.756 | 0.002465455 | 0.996387822 |
| 3.25 | 0.124 | 0.083 | 0.041 | 34.797 | 0.001175391 | 0.997563213 |
| 3.50 | 0.163 | 0.142 | 0.021 | 34.818 | 0.000602030 | 0.998165243 |
| 3.75 | 0.159 | 0.134 | 0.025 | 34.843 | 0.000716702 | 0.998881945 |
| 4.00 | 0.125 | 0.108 | 0.017 | 34.860 | 0.000487357 | 0.999369302 |
| PAN | 0.126 | 0.104 | 0.022 | 34.882 | 0.000630698 | 1.0 |
|  |  |  |  |  |  |  |

TOTAL WT.
CO3 WT
\% CARBONATE
84.310 grams
34.882 grams
41.374

CARBONATE GRAIN SIZE DISTRIBUTION VB 3: 0 - 2.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 3: 2.0-4.0 ft

| PHI <br> SIZE | TOTAL <br> WT. | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: |
|  |  |  |  |  |  |  |
| -2.00 | 0.813 | 0.000 | 0.813 | 0.813 | 0.027902667 | 0.027902667 |
| -1.75 | 0.346 | 0.000 | 0.346 | 1.159 | 0.011874936 | 0.039777602 |
| -1.50 | 0.228 | 0.000 | 0.228 | 1.387 | 0.007825102 | 0.047602704 |
| -1.25 | 0.460 | 0.000 | 0.460 | 1.847 | 0.015787487 | 0.063390191 |
| -1.00 | 0.359 | 0.000 | 0.359 | 2.206 | 0.012321104 | 0.075711295 |
| -0.75 | 0.391 | 0.000 | 0.391 | 2.597 | 0.013419364 | 0.089130659 |
| -0.50 | 0.439 | 0.000 | 0.439 | 3.036 | 0.015066754 | 0.104197412 |
| -0.25 | 0.675 | 0.020 | 0.655 | 3.691 | 0.022480008 | 0.126677420 |
| 0.00 | 0.625 | 0.028 | 0.597 | 4.288 | 0.020489412 | 0.147166833 |
| 0.25 | 1.044 | 0.155 | 0.889 | 5.177 | 0.030511034 | 0.177677867 |
| 0.50 | 1.446 | 0.338 | 1.108 | 6.285 | 0.038027251 | 0.215705117 |
| 0.75 | 2.061 | 0.715 | 1.346 | 7.631 | 0.046195559 | 0.261900676 |
| 1.00 | 3.176 | 1.488 | 1.688 | 9.319 | 0.057933212 | 0.319833888 |
| 1.25 | 5.136 | 3.227 | 1.909 | 11.228 | 0.065518070 | 0.385351958 |
| 1.50 | 6.915 | 5.444 | 1.471 | 12.699 | 0.050485637 | 0.435837595 |
| 1.75 | 12.904 | 10.333 | 2.571 | 15.270 | 0.088238322 | 0.524075917 |
| 2.00 | 14.497 | 11.566 | 2.931 | 18.201 | 0.100593747 | 0.624669664 |
| 2.25 | 16.595 | 12.706 | 3.889 | 22.090 | 0.133472904 | 0.758142568 |
| 2.50 | 12.120 | 8.201 | 3.919 | 26.009 | 0.134502523 | 0.892645090 |
| 2.75 | 4.274 | 2.193 | 2.081 | 28.090 | 0.071421217 | 0.964066307 |
| 3.00 | 1.105 | 0.508 | 0.597 | 28.687 | 0.020489412 | 0.984555720 |
| 3.25 | 0.406 | 0.260 | 0.146 | 28.833 | 0.005010811 | 0.989566531 |
| 3.50 | 0.662 | 0.539 | 0.123 | 28.956 | 0.004221437 | 0.993787967 |
| 3.75 | 0.869 | 0.782 | 0.087 | 29.043 | 0.002985894 | 0.996773861 |
| 4.00 | 0.431 | 0.371 | 0.060 | 29.103 | 0.002059237 | 0.998833099 |
| PAN | 0.200 | 0.166 | 0.034 | 29.137 | 0.001166901 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
88.177 grams
29.137 grams 33.044

CARBONATE GRAIN SIZE DISTRIBUTION VB 3: 2.0-4.0 ft


Phl Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB-3: 4.0-6.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 0.569 | 0.000 | 0.569 | 0.569 | 0.023654126 | 0.023654126 |
| -1.75 | 0.369 | 0.000 | 0.369 | 0.938 | 0.015339846 | 0.038993972 |
| -1.50 | 0.202 | 0.000 | 0.202 | 1.140 | 0.008397423 | 0.047391395 |
| -1.25 | 0.444 | 0.000 | 0.444 | 1.584 | 0.018457701 | 0.065849096 |
| -1.00 | 0.443 | 0.000 | 0.443 | 2.027 | 0.018416130 | 0.084265226 |
| -0.75 | 0.457 | 0.000 | 0.457 | 2.484 | 0.018998129 | 0.103263355 |
| -0.50 | 0.530 | 0.000 | 0.530 | 3.014 | 0.022032841 | 0.125296196 |
| -0.25 | 0.593 | 0.015 | 0.578 | 3.592 | 0.024028269 | 0.149324465 |
| 0.00 | 0.725 | 0.079 | 0.646 | 4.238 | 0.026855124 | 0.176179588 |
| 0.25 | 1.232 | 0.354 | 0.878 | 5.116 | 0.036499688 | 0.212679277 |
| 0.50 | 1.690 | 0.827 | 0.863 | 5.979 | 0.035876117 | 0.248555394 |
| 0.75 | 2.456 | 1.275 | 1.181 | 7.160 | 0.049095822 | 0.297651216 |
| 1.00 | 3.352 | 2.124 | 1.228 | 8.388 | 0.051049678 | 0.348700894 |
| 1.25 | 4.796 | 3.270 | 1.526 | 9.914 | 0.063437955 | 0.412138848 |
| 1.50 | 5.580 | 4.142 | 1.438 | 11.352 | 0.059779672 | 0.471918520 |
| 1.75 | 8.686 | 7.024 | 1.662 | 13.014 | 0.069091665 | 0.541010185 |
| 2.00 | 9.002 | 7.198 | 1.804 | 14.818 | 0.074994804 | 0.616004989 |
| 2.25 | 11.048 | 8.623 | 2.425 | 17.243 | 0.100810642 | 0.716815631 |
| 2.50 | 10.614 | 7.433 | 3.181 | 20.424 | 0.132238620 | 0.849054251 |
| 2.75 | 5.006 | 2.829 | 2.177 | 22.601 | 0.090500935 | 0.939555186 |
| 3.00 | 1.392 | 0.658 | 0.734 | 23.335 | 0.030513407 | 0.970068593 |
| 3.25 | 0.471 | 0.267 | 0.204 | 23.539 | 0.008480565 | 0.978549158 |
| 3.50 | 0.787 | 0.637 | 0.150 | 23.689 | 0.006235710 | 0.984784868 |
| 3.75 | 1.221 | 1.060 | 0.161 | 23.850 | 0.006692995 | 0.991477863 |
| 4.00 | 0.655 | 0.538 | 0.117 | 23.967 | 0.004863854 | 0.996341717 |
| PAN | 0.397 | 0.309 | 0.088 | 24.055 | 0.003658283 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
72.717 grams
24.055 grams 33.080

CARBONATE GRAIN SIZE DISTRIBUTION VB-3: 4.0-6.0 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE VB 3: 6.0-8.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \mathrm{CO3} \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{gathered} \text { CUM CO3 } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - |  |  |  |  |  |  |
| <-2.00 | 3.246 | 0.000 | 3.246 | 3.246 | 0.111050291 | 0.111050291 |
| -1.75 | 1.129 | 0.000 | 1.129 | 4.375 | 0.038624701 | 0.149674991 |
| -1.50 | 1.339 | 0.000 | 1.339 | 5.714 | 0.045809100 | 0.195484092 |
| -1.25 | 1.194 | 0.000 | 1.194 | 6.908 | 0.040848443 | 0.236332535 |
| -1.00 | 1.375 | 0.000 | 1.375 | 8.283 | 0.047040712 | 0.283373247 |
| -0.75 | 1.158 | 0.000 | 1.158 | 9.441 | 0.039616832 | 0.322990079 |
| -0.50 | 1.223 | 0.000 | 1.223 | 10.664 | 0.041840575 | 0.364830653 |
| -0.25 | 1.067 | 0.009 | 1.058 | 11.722 | 0.036195689 | 0.401026343 |
| 0.00 | 0.955 | 0.018 | 0.937 | 12.659 | 0.032056107 | 0.433082450 |
| 0.25 | 1.056 | 0.069 | 0.987 | 13.646 | 0.033766678 | 0.466849128 |
| 0.50 | 0.987 | 0.133 | 0.854 | 14.500 | 0.029216558 | 0.496065686 |
| 0.75 | 1.109 | 0.280 | 0.829 | 15.329 | 0.028361273 | 0.524426959 |
| 1.00 | 1.579 | 0.626 | 0.953 | 16.282 | 0.032603490 | 0.557030448 |
| 1.25 | 2.241 | 1.343 | 0.898 | 17.180 | 0.030721861 | 0.587752309 |
| 1.50 | 2.720 | 1.967 | 0.753 | 17.933 | 0.025761204 | 0.613513514 |
| 1.75 | 5.448 | 4.227 | 1.221 | 19.154 | 0.041772152 | 0.655285665 |
| 2.00 | 6.602 | 5.413 | 1.189 | 20.343 | 0.040677386 | 0.695963052 |
| 2.25 | 8.477 | 6.781 | 1.696 | 22.039 | 0.058022580 | 0.753985631 |
| 2.50 | 8.659 | 6.331 | 2.328 | 24.367 | 0.079644201 | 0.833629832 |
| 2.75 | 6.565 | 4.211 | 2.354 | 26.721 | 0.080533698 | 0.914163531 |
| 3.00 | 3.538 | 2.024 | 1.514 | 28.235 | 0.051796100 | 0.965959631 |
| 3.25 | 1.141 | 0.632 | 0.509 | 28.744 | 0.017413616 | 0.983373247 |
| 3.50 | 0.871 | 0.719 | 0.152 | 28.896 | 0.005200137 | 0.988573384 |
| 3.75 | 1.057 | 0.911 | 0.146 | 29.042 | 0.004994868 | 0.993568252 |
| 4.00 | 0.515 | 0.422 | 0.093 | 29.135 | 0.003181663 | 0.996749914 |
| PAN | 0.333 | 0.238 | 0.095 | 29.230 | 0.003250086 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
65.584 grams
29.230 grams

CARBONATE GRAIN SIZE DISTRIBUTION VB 3: 6.0-8.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 3: 10.0 - 12.0 ft

| PHI | TOTAL | DIGESTED | CO3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | CUM CO3 | CO3 WT | CUM CO3 |  |
| WT. |  |  | W | WT. \% |  |  |
| $<-2.00$ | 0.454 | 0.000 | 0.454 | 0.454 | 0.011624632 | 0.011624632 |
| -1.75 | 0.474 | 0.000 | 0.474 | 0.928 | 0.012136730 | 0.023761362 |
| -1.50 | 0.234 | 0.000 | 0.234 | 1.162 | 0.005991550 | 0.029752913 |
| -1.25 | 0.605 | 0.000 | 0.605 | 1.767 | 0.015490974 | 0.045243887 |
| -1.00 | 0.767 | 0.000 | 0.767 | 2.534 | 0.019638971 | 0.064882858 |
| -0.75 | 0.891 | 0.000 | 0.891 | 3.425 | 0.022813980 | 0.087696838 |
| -0.50 | 1.117 | 0.000 | 1.117 | 4.542 | 0.028600691 | 0.116297529 |
| -0.25 | 1.274 | 0.029 | 1.245 | 5.787 | 0.031878121 | 0.148175650 |
| 0.00 | 1.448 | 0.046 | 1.402 | 7.189 | 0.035898092 | 0.184073742 |
| 0.25 | 2.881 | 0.213 | 2.668 | 9.857 | 0.068313916 | 0.252387658 |
| 0.50 | 2.649 | 0.419 | 2.230 | 12.087 | 0.057098963 | 0.309486621 |
| 0.75 | 3.332 | 0.813 | 2.519 | 14.606 | 0.064498784 | 0.373985405 |
| 1.00 | 4.439 | 1.490 | 2.949 | 17.555 | 0.075508898 | 0.449494303 |
| 1.25 | 5.090 | 2.259 | 2.831 | 20.386 | 0.072487518 | 0.521981821 |
| 1.50 | 5.495 | 3.063 | 2.432 | 22.818 | 0.062271156 | 0.584252977 |
| 1.75 | 8.786 | 5.867 | 2.919 | 25.737 | 0.074740750 | 0.658993727 |
| 2.00 | 9.321 | 6.590 | 2.731 | 28.468 | 0.069927026 | 0.728920753 |
| 2.25 | 10.302 | 7.525 | 2.777 | 31.245 | 0.071104852 | 0.800025605 |
| 2.50 | 8.262 | 5.436 | 2.826 | 34.071 | 0.072359493 | 0.872385098 |
| 2.75 | 3.543 | 1.753 | 1.790 | 35.861 | 0.045832800 | 0.918217898 |
| 3.00 | 1.445 | 0.637 | 0.808 | 36.669 | 0.020688772 | 0.938906670 |
| 3.25 | 0.808 | 0.385 | 0.423 | 37.092 | 0.010830880 | 0.949737550 |
| 3.50 | 1.063 | 0.732 | 0.331 | 37.423 | 0.008475227 | 0.958212777 |
| 3.75 | 1.775 | 1.384 | 0.391 | 37.814 | 0.010011522 | 0.968224299 |
| 4.00 | 1.350 | 0.364 | 0.986 | 38.800 | 0.025246447 | 0.993470746 |
| PAN | 0.919 | 0.664 | 0.255 | 39.055 | 0.006529254 | 1.0 |

TOTAL WT.
CO3 WT \% CARBONATE

| 78.724 | grams |
| :--- | :--- |
| 39.055 | grams |

grams

CARBONATE GRAIN SIZE DISTRIBUTION VB 3: 10.0-12.0 ft


Phl Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 3: 12.0-14.0 ft

| PHI | TOTAL <br> WT. | DIGESTED <br> WT. | CO3 <br> WT. | CUM CO3 <br> WT. | CO3 WT <br> $\%$ | CUM CO3 <br> WT. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| $<-2.00$ | 1.719 | 0.000 | 1.719 | 1.719 | 0.029895652 | 0.029895652 |
| -1.75 | 0.610 | 0.000 | 0.610 | 2.329 | 0.010608696 | 0.040504348 |
| -1.50 | 1.371 | 0.000 | 1.371 | 3.700 | 0.023843478 | 0.064347826 |
| -1.25 | 2.094 | 0.000 | 2.094 | 5.794 | 0.036417391 | 0.100765217 |
| -1.00 | 2.298 | 0.000 | 2.298 | 8.092 | 0.039965217 | 0.140730435 |
| -0.75 | 2.942 | 0.015 | 2.927 | 11.019 | 0.050904348 | 0.191634783 |
| -0.50 | 3.743 | 0.027 | 3.716 | 14.735 | 0.064626087 | 0.256260870 |
| -0.25 | 4.440 | 0.076 | 4.364 | 19.099 | 0.075895652 | 0.332156522 |
| 0.00 | 3.797 | 0.139 | 3.658 | 22.757 | 0.063617391 | 0.395773913 |
| 0.25 | 4.640 | 0.269 | 4.371 | 27.128 | 0.076017391 | 0.471791304 |
| 0.50 | 4.146 | 0.484 | 3.662 | 30.790 | 0.063686957 | 0.535478261 |
| 0.75 | 4.567 | 0.902 | 3.665 | 34.455 | 0.063739130 | 0.599217391 |
| 1.00 | 6.251 | 1.999 | 4.252 | 38.707 | 0.073947826 | 0.673165217 |
| 1.25 | 8.517 | 3.758 | 4.759 | 43.466 | 0.082765217 | 0.755930435 |
| 1.50 | 9.550 | 6.177 | 3.373 | 46.839 | 0.058660870 | 0.814591304 |
| 1.75 | 15.328 | 10.509 | 4.819 | 51.658 | 0.083808696 | 0.898400000 |
| 2.00 | 10.228 | 7.238 | 2.990 | 54.648 | 0.052000000 | 0.950400000 |
| 2.25 | 5.135 | 3.593 | 1.542 | 56.190 | 0.026817391 | 0.977217391 |
| 2.50 | 2.151 | 1.379 | 0.772 | 56.962 | 0.013426087 | 0.990643478 |
| 2.75 | 0.826 | 0.482 | 0.344 | 57.306 | 0.005982609 | 0.996626087 |
| 3.00 | 0.392 | 0.250 | 0.142 | 57.448 | 0.002469565 | 0.999095652 |
| 3.25 | 0.124 | 0.107 | 0.017 | 57.465 | 0.000295652 | 0.999391304 |
| 3.50 | 0.077 | 0.076 | 0.001 | 57.466 | 0.000017391 | 0.999408696 |
| 3.75 | 0.051 | 0.050 | 0.001 | 57.467 | 0.000017391 | 0.999426087 |
| 4.00 | 0.046 | 0.045 | 0.001 | 57.468 | 0.000017391 | 0.999443478 |
| PAN | 0.074 | 0.042 | 0.032 | 57.500 | 0.000556522 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| WO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 3: $14.0-16.0 \mathrm{ft}$

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | CUM CO3 |  |
|  |  |  |  |  | WT. \% |  |
| $<-2.00$ | 0.378 | 0.000 | 0.378 | 0.378 | 0.008378402 | 0.008378402 |
| -1.75 | 0.502 | 0.000 | 0.502 | 0.880 | 0.011126873 | 0.019505275 |
| -1.50 | 0.946 | 0.000 | 0.946 | 1.826 | 0.020968171 | 0.040473446 |
| -1.25 | 1.066 | 0.000 | 1.066 | 2.892 | 0.023627981 | 0.064101427 |
| -1.00 | 1.428 | 0.000 | 1.428 | 4.320 | 0.031651742 | 0.095753170 |
| -0.75 | 1.879 | 0.009 | 1.870 | 6.190 | 0.041448710 | 0.137201880 |
| -0.50 | 2.470 | 0.014 | 2.456 | 8.646 | 0.054437450 | 0.191639330 |
| -0.25 | 2.875 | 0.032 | 2.843 | 11.489 | 0.063015338 | 0.254654668 |
| 0.00 | 2.971 | 0.121 | 2.850 | 14.339 | 0.063170494 | 0.317825162 |
| 0.25 | 3.910 | 0.226 | 3.684 | 18.023 | 0.081656175 | 0.399481337 |
| 0.50 | 3.699 | 0.446 | 3.253 | 21.276 | 0.072103023 | 0.471584360 |
| 0.75 | 4.346 | 0.816 | 3.530 | 24.806 | 0.078242752 | 0.549827112 |
| 1.00 | 6.195 | 2.025 | 4.170 | 28.976 | 0.092428407 | 0.642255519 |
| 1.25 | 8.626 | 4.089 | 4.537 | 33.513 | 0.100562993 | 0.742818512 |
| 1.50 | 10.291 | 6.832 | 3.459 | 36.972 | 0.076669031 | 0.819487543 |
| 1.75 | 16.139 | 12.093 | 4.046 | 41.018 | 0.089679936 | 0.909167479 |
| 2.00 | 10.840 | 8.647 | 2.193 | 43.211 | 0.048608033 | 0.957775512 |
| 2.25 | 5.224 | 4.261 | 0.963 | 44.174 | 0.021344977 | 0.979120489 |
| 2.50 | 1.905 | 1.393 | 0.512 | 44.686 | 0.011348524 | 0.990469013 |
| 2.75 | 0.795 | 0.521 | 0.274 | 44.960 | 0.006073233 | 0.996542247 |
| 3.00 | 0.399 | 0.274 | 0.125 | 45.085 | 0.002770636 | 0.999312882 |
| 3.25 | 0.122 | 0.109 | 0.013 | 45.098 | 0.000288146 | 0.999601028 |
| 3.50 | 0.071 | 0.070 | 0.001 | 45.099 | 0.000022165 | 0.999623194 |
| 3.75 | 0.052 | 0.051 | 0.001 | 45.100 | 0.000022165 | 0.999645359 |
| 4.00 | 0.047 | 0.044 | 0.003 | 45.103 | 0.000066495 | 0.999711854 |
| PAN | 0.070 | 0.057 | 0.013 | 45.116 | 0.000288146 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 3: 18.0-20.0 ft

| PHI <br> SIZE | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.166 | 0.000 | 0.166 | 0.166 | 0.005896352 | 0.005896352 |
| -1.75 | 0.235 | 0.000 | 0.235 | 0.401 | 0.008347245 | 0.014243597 |
| -1.50 | 0.207 | 0.000 | 0.207 | 0.608 | 0.007352680 | 0.021596277 |
| -1.25 | 0.695 | 0.000 | 0.695 | 1.303 | 0.024686534 | 0.046282812 |
| -1.00 | 0.585 | 0.000 | 0.585 | 1.888 | 0.020779313 | 0.067062125 |
| -0.75 | 0.786 | 0.000 | 0.786 | 2.674 | 0.027918872 | 0.094980997 |
| -0.50 | 1.120 | 0.013 | 1.107 | 3.781 | 0.039320854 | 0.134301851 |
| -0.25 | 0.950 | 0.026 | 0.924 | 4.705 | 0.032820659 | 0.167122509 |
| 0.00 | 1.031 | 0.039 | 0.992 | 5.697 | 0.035236032 | 0.202358541 |
| 0.25 | 1.179 | 0.076 | 1.103 | 6.800 | 0.039178773 | 0.241537314 |
| 0.50 | 1.152 | 0.151 | 1.001 | 7.801 | 0.035555713 | 0.277093027 |
| 0.75 | 1.216 | 0.222 | 0.994 | 8.795 | 0.035307072 | 0.312400099 |
| 1.00 | 1.717 | 0.431 | 1.286 | 10.081 | 0.045678968 | 0.358079068 |
| 1.25 | 2.340 | 0.936 | 1.404 | 11.485 | 0.049870351 | 0.407949419 |
| 1.50 | 2.947 | 1.772 | 1.175 | 12.660 | 0.041736227 | 0.449685646 |
| 1.75 | 7.611 | 5.072 | 2.539 | 15.199 | 0.090185771 | 0.539871417 |
| 2.00 | 9.721 | 7.463 | 2.258 | 17.457 | 0.080204596 | 0.620076013 |
| 2.25 | 12.374 | 9.785 | 2.589 | 20.046 | 0.091961780 | 0.712037793 |
| 2.50 | 12.713 | 9.865 | 2.848 | 22.894 | 0.101161510 | 0.813199304 |
| 2.75 | 8.624 | 6.084 | 2.540 | 25.434 | 0.090221291 | 0.903420595 |
| 3.00 | 5.174 | 3.437 | 1.737 | 27.171 | 0.061698576 | 0.965119170 |
| 3.25 | 1.906 | 1.244 | 0.662 | 27.833 | 0.023514368 | 0.988633538 |
| 3.50 | 0.697 | 0.505 | 0.192 | 28.025 | 0.006819877 | 0.995453415 |
| 3.75 | 0.218 | 0.163 | 0.055 | 28.080 | 0.001953611 | 0.997407026 |
| 4.00 | 0.095 | 0.057 | 0.038 | 28.118 | 0.001349767 | 0.998756793 |
| PAN | 0.092 | 0.057 | 0.035 | 28.153 | 0.001243207 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | 75.551 28.153 37.264 | grams grams |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 4: 0-2.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 1.769 | 0.000 | 1.769 | 1.769 | 0.055769231 | 0.055769231 |
| -1.75 | 0.233 | 0.000 | 0.233 | 2.002 | 0.007345523 | 0.063114754 |
| -1.50 | 0.404 | 0.000 | 0.404 | 2.406 | 0.012736444 | 0.075851198 |
| -1.25 | 0.782 | 0.000 | 0.782 | 3.188 | 0.024653216 | 0.100504414 |
| -1.00 | 0.825 | 0.000 | 0.825 | 4.013 | 0.026008827 | 0.126513241 |
| -0.75 | 0.863 | 0.000 | 0.863 | 4.876 | 0.027206810 | 0.153720050 |
| -0.50 | 0.841 | 0.000 | 0.841 | 5.717 | 0.026513241 | 0.180233291 |
| -0.25 | 0.889 | 0.000 | 0.889 | 6.606 | 0.028026482 | 0.208259773 |
| 0.00 | 0.852 | 0.021 | 0.831 | 7.437 | 0.026197982 | 0.234457755 |
| 0.25 | 1.446 | 0.214 | 1.232 | 8.669 | 0.038839849 | 0.273297604 |
| 0.50 | 2.531 | 1.040 | 1.491 | 10.160 | 0.047005044 | 0.320302648 |
| 0.75 | 4.543 | 2.454 | 2.089 | 12.249 | 0.065857503 | 0.386160151 |
| 1.00 | 7.056 | 4.334 | 2.722 | 14.971 | 0.085813367 | 0.471973518 |
| 1.25 | 9.332 | 5.970 | 3.362 | 18.333 | 0.105989912 | 0.577963430 |
| 1.50 | 9.716 | 7.619 | 2.097 | 20.430 | 0.066109710 | 0.644073140 |
| 1.75 | 14.242 | 10.948 | 3.294 | 23.724 | 0.103846154 | 0.747919294 |
| 2.00 | 12.409 | 9.781 | 2.628 | 26.352 | 0.082849937 | 0.830769231 |
| 2.25 | 10.241 | 7.775 | 2.466 | 28.818 | 0.077742749 | 0.908511980 |
| 2.50 | 5.839 | 3.877 | 1.962 | 30.780 | 0.061853720 | 0.970365700 |
| 2.75 | 1.545 | 0.786 | 0.759 | 31.539 | 0.023928121 | 0.994293821 |
| 3.00 | 0.345 | 0.195 | 0.150 | 31.689 | 0.004728878 | 0.999022699 |
| 3.25 | 0.140 | 0.114 | 0.026 | 31.715 | 0.000819672 | 0.999842371 |
| 3.50 | 0.150 | 0.149 | 0.001 | 31.716 | 0.000031526 | 0.999873897 |
| 3.75 | 0.115 | 0.115 | 0.000 | 31.716 | 0.000000000 | 0.999873897 |
| 4.00 | 0.083 | 0.080 | 0.003 | 31.719 | 0.000094578 | 0.999968474 |
| PAN | 0.073 | 0.072 | 0.001 | 31.720 | 0.000031526 | 1.0 |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  | 37.264 | grams |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 4: 2.0-4.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION VB4: 2.0-4.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 9: 0-2.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION VB 9: 0-2.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION

CORE VB 9: 2.0-4.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION VB 9: 2.0-4.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 9: 6.0-8.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION VB 9: 6.0-8.0 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

CORE VB 9: 8.0-10.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO} 3 \\ & \mathrm{WT} . \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.225 | 0.000 | 0.225 | 0.225 | 0.002831934 | 0.002831934 |
| -1.75 | 0.303 | 0.000 | 0.303 | 0.528 | 0.003813671 | 0.006645605 |
| -1.50 | 0.323 | 0.000 | 0.323 | 0.851 | 0.004065399 | 0.010711004 |
| -1.25 | 0.414 | 0.000 | 0.414 | 1.265 | 0.005210759 | 0.015921763 |
| -1.00 | 0.459 | 0.000 | 0.459 | 1.724 | 0.005777146 | 0.021698909 |
| -0.75 | 0.729 | 0.009 | 0.720 | 2.444 | 0.009062189 | 0.030761098 |
| -0.50 | 1.113 | 0.032 | 1.081 | 3.525 | 0.013605870 | 0.044366968 |
| -0.25 | 1.832 | 0.058 | 1.774 | 5.299 | 0.022328227 | 0.066695196 |
| 0.00 | 2.506 | 0.132 | 2.374 | 7.673 | 0.029880052 | 0.096575248 |
| 0.25 | 4.617 | 0.327 | 4.290 | 11.963 | 0.053995544 | 0.150570792 |
| 0.50 | 5.804 | 0.394 | 5.410 | 17.373 | 0.068092283 | 0.218663075 |
| 0.75 | 7.615 | 0.638 | 6.977 | 24.350 | 0.087815131 | 0.306478207 |
| 1.00 | 10.144 | 1.157 | 8.987 | 33.337 | 0.113113743 | 0.419591950 |
| 1.25 | 11.435 | 1.993 | 9.442 | 42.779 | 0.118840543 | 0.538432493 |
| 1.50 | 10.052 | 2.801 | 7.251 | 50.030 | 0.091263798 | 0.629696291 |
| 1.75 | 12.291 | 3.692 | 8.599 | 58.629 | 0.108230230 | 0.737926521 |
| 2.00 | 8.951 | 2.541 | 6.410 | 65.039 | 0.080678657 | 0.818605178 |
| 2.25 | 6.816 | 1.514 | 5.302 | 70.341 | 0.066732955 | 0.885338133 |
| 2.50 | 4.583 | 0.615 | 3.968 | 74.309 | 0.049942732 | 0.935280865 |
| 2.75 | 2.447 | 0.221 | 2.226 | 76.535 | 0.028017269 | 0.963298133 |
| 3.00 | 1.294 | 0.180 | 1.114 | 77.649 | 0.014021221 | 0.977319354 |
| 3.25 | 0.565 | 0.103 | 0.462 | 78.111 | 0.005814905 | 0.983134259 |
| 3.50 | 0.384 | 0.099 | 0.285 | 78.396 | 0.003587117 | 0.986721375 |
| 3.75 | 0.398 | 0.118 | 0.280 | 78.676 | 0.003524185 | 0.990245560 |
| 4.00 | 0.426 | 0.150 | 0.276 | 78.952 | 0.003473839 | 0.993719399 |
| PAN | 0.688 | 0.189 | 0.499 | 79.451 | 0.006280601 | 1.0 |
| TOTAL WT. CO3 WT \% CARBONATE |  |  |  | 96.414 79.451 82.406 | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB 9: 8.0-10.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 9: 10.0-12.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. |  | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 12.687 | 0.000 | 12.687 | 12.687 | 0.133401329 | 0.133401329 |
| -1.75 | 1.971 | 0.000 | 1.971 | 14.658 | 0.020724680 | 0.154126009 |
| -1.50 | 1.964 | 0.000 | 1.964 | 16.622 | 0.020651077 | 0.174777086 |
| -1.25 | 2.455 | 0.000 | 2.455 | 19.077 | 0.025813846 | 0.200590932 |
| -1.00 | 2.702 | 0.000 | 2.702 | 21.779 | 0.028411003 | 0.229001935 |
| -0.75 | 2.898 | 0.036 | 2.862 | 24.641 | 0.030093371 | 0.259095306 |
| -0.50 | 4.052 | 0.282 | 3.770 | 28.411 | 0.039640814 | 0.298736120 |
| -0.25 | 5.625 | 0.611 | 5.014 | 33.425 | 0.052721231 | 0.351457352 |
| 0.00 | 7.613 | 1.282 | 6.331 | 39.756 | 0.066569229 | 0.418026581 |
| 0.25 | 11.178 | 1.772 | 9.406 | 49.162 | 0.098902254 | 0.516928836 |
| 0.50 | 10.877 | 1.723 | 9.154 | 58.316 | 0.096252524 | 0.613181359 |
| 0.75 | 10.910 | 1.659 | 9.251 | 67.567 | 0.097272460 | 0.710453819 |
| 1.00 | 10.614 | 1.853 | 8.761 | 76.328 | 0.092120205 | 0.802574024 |
| 1.25 | 8.974 | 2.095 | 6.879 | 83.207 | 0.072331343 | 0.874905367 |
| 1.50 | 12.869 | 1.877 | 10.992 | 94.199 | 0.115578735 | 0.990484102 |
| 1.75 | 1.879 | 1.878 | 0.001 | 94.200 | 0.000010515 | 0.990494616 |
| 2.00 | 1.308 | 1.307 | 0.001 | 94.201 | 0.000010515 | 0.990505131 |
| 2.25 | 0.783 | 0.568 | 0.215 | 94.416 | 0.002260683 | 0.992765814 |
| 2.50 | 0.436 | 0.211 | 0.225 | 94.641 | 0.002365831 | 0.995131645 |
| 2.75 | 0.264 | 0.076 | 0.188 | 94.829 | 0.001976783 | 0.997108429 |
| 3.00 | 0.208 | 0.071 | 0.137 | 94.966 | 0.001440528 | 0.998548957 |
| 3.25 | 0.136 | 0.057 | 0.079 | 95.045 | 0.000830670 | 0.999379627 |
| 3.50 | 0.082 | 0.063 | 0.019 | 95.064 | 0.000199781 | 0.999579408 |
| 3.75 | 0.088 | 0.066 | 0.022 | 95.086 | 0.000231326 | 0.999810734 |
| 4.00 | 0.098 | 0.081 | 0.017 | 95.103 | 0.000178752 | 0.999989485 |
| PAN | 0.095 | 0.094 | 0.001 | 95.104 | 0.000010515 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 9: 12.0-14.0 ft



CARBONATE GRAIN SIZE DISTRIBUTION

## CORE VB 9: 14.0-16.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | $\begin{aligned} & \mathrm{CO3} \\ & \mathrm{WT} . \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.772 | 0.000 | 0.772 | 0.772 | 0.008830426 | 0.008830426 |
| --2.75 | 0.908 | 0.000 | 0.908 | 1.680 | 0.010386045 | 0.019216471 |
| -1.50 | 1.208 | 0.000 | 1.208 | 2.888 | 0.013817558 | 0.033034029 |
| -1.25 | 1.975 | 0.000 | 1.975 | 4.863 | 0.022590792 | 0.055624821 |
| -1.00 | 2.212 | 0.000 | 2.212 | 7.075 | 0.025301687 | 0.080926508 |
| -0.75 | 2.384 | 0.015 | 2.369 | 9.444 | 0.027097512 | 0.108024021 |
| -0.50 | 3.272 | 0.036 | 3.236 | 12.680 | 0.037014584 | 0.145038605 |
| -0.25 | 4.222 | 0.308 | 3.914 | 16.594 | 0.044769803 | 0.189808407 |
| 0.00 | 4.736 | 0.585 | 4.151 | 20.745 | 0.047480698 | 0.237289105 |
| 0.25 | 7.575 | 0.963 | 6.612 | 27.357 | 0.075630540 | 0.312919645 |
| 0.50 | 8.244 | 1.018 | 7.226 | 34.583 | 0.082653703 | 0.395573349 |
| 0.75 | 8.944 | 1.014 | 7.930 | 42.513 | 0.090706320 | 0.486279668 |
| 1.00 | 10.127 | 1.487 | 8.640 | 51.153 | 0.098827566 | 0.585107235 |
| 1.25 | 10.877 | 2.772 | 8.105 | 59.258 | 0.092708035 | 0.677815270 |
| 1.50 | 9.456 | 4.116 | 5.340 | 64.598 | 0.061080927 | 0.738896197 |
| 1.75 | 11.357 | 4.790 | 6.567 | 71.165 | 0.075115814 | 0.814012010 |
| 2.00 | 7.165 | 2.615 | 4.550 | 75.715 | 0.052044610 | 0.866056620 |
| 2.25 | 5.654 | 1.437 | 4.217 | 79.932 | 0.048235631 | 0.914292251 |
| 2.50 | 4.575 | 0.903 | 3.672 | 83.604 | 0.042001716 | 0.956293966 |
| 2.75 | 2.276 | 0.433 | 1.843 | 85.447 | 0.021080927 | 0.977374893 |
| 3.00 | 0.937 | 0.236 | 0.701 | 86.148 | 0.008018301 | 0.985393194 |
| 3.25 | 0.462 | 0.169 | 0.293 | 86.441 | 0.003351444 | 0.988744638 |
| 3.50 | 0.621 | 0.366 | 0.255 | 86.696 | 0.002916786 | 0.991661424 |
| 3.75 | 0.649 | 0.393 | 0.256 | 86.952 | 0.002928224 | 0.994589648 |
| 4.00 | 0.387 | 0.183 | 0.204 | 87.156 | 0.002333429 | 0.996923077 |
| PAN | 0.446 | 0.177 | 0.269 | 87.425 | 0.003076923 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 111.441 87.425 78.450 | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB 9: 14.0-16.0 ft


Phi Size

CARBONATE GRAIN SIZE DISTRIBUTION

CORE VB 9: 16.0-18.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \hline \mathrm{CO3} \\ & \mathrm{WT} . \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 5.133 | 0.000 | 5.133 | 5.133 | 0.067635587 | 0.067635587 |
| -1.75 | 1.356 | 0.000 | 1.356 | 6.489 | 0.017867496 | 0.085503083 |
| -1.50 | 1.321 | 0.000 | 1.321 | 7.810 | 0.017406314 | 0.102909398 |
| -1.25 | 1.617 | 0.000 | 1.617 | 9.427 | 0.021306594 | 0.124215991 |
| -1.00 | 2.561 | 0.000 | 2.561 | 11.988 | 0.033745322 | 0.157961313 |
| -0.75 | 2.394 | 0.013 | 2.381 | 14.369 | 0.031373531 | 0.189334844 |
| -0.50 | 2.516 | 0.076 | 2.440 | 16.809 | 0.032150951 | 0.221485796 |
| -0.25 | 3.227 | 0.304 | 2.923 | 19.732 | 0.038515259 | 0.260001054 |
| 0.00 | 5.021 | 0.985 | 4.036 | 23.768 | 0.053180836 | 0.313181890 |
| 0.25 | 9.496 | 1.930 | 7.566 | 31.334 | 0.099694302 | 0.412876192 |
| 0.50 | 10.210 | 1.879 | 8.331 | 39.665 | 0.109774416 | 0.522650609 |
| 0.75 | 10.067 | 1.703 | 8.364 | 48.029 | 0.110209245 | 0.632859853 |
| 1.00 | 9.951 | 1.984 | 7.967 | 55.996 | 0.104978127 | 0.737837980 |
| 1.25 | 9.178 | 2.812 | 6.366 | 62.362 | 0.083882359 | 0.821720339 |
| 1.50 | 6.989 | 3.118 | 3.871 | 66.233 | 0.051006694 | 0.872727033 |
| 1.75 | 6.847 | 3.248 | 3.599 | 69.832 | 0.047422653 | 0.920149686 |
| 2.00 | 3.688 | 1.722 | 1.966 | 71.798 | 0.025905234 | 0.946054920 |
| 2.25 | 2.267 | 0.805 | 1.462 | 73.260 | 0.019264218 | 0.965319138 |
| 2.50 | 1.528 | 0.383 | 1.145 | 74.405 | 0.015087229 | 0.980406367 |
| 2.75 | 0.766 | 0.173 | 0.593 | 74.998 | 0.007813735 | 0.988220102 |
| 3.00 | 0.399 | 0.121 | 0.278 | 75.276 | 0.003663100 | 0.991883202 |
| 3.25 | 0.193 | 0.091 | 0.102 | 75.378 | 0.001344015 | 0.993227218 |
| 3.50 | 0.314 | 0.176 | 0.138 | 75.516 | 0.001818373 | 0.995045591 |
| 3.75 | 0.335 | 0.219 | 0.116 | 75.632 | 0.001528488 | 0.996574079 |
| 4.00 | 0.244 | 0.128 | 0.116 | 75.748 | 0.001528488 | 0.998102567 |
| PAN | 0.310 | 0.166 | 0.144 | 75.892 | 0.001897433 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | 97.928 75.892 <br> 77.498 | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB 9: 16.0-18.0 ft


CARBONATE GRAIN SIZE DISTRIBUTION



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 10: 0-2.0 ft



CARBONATE GRAIN SIZE DISTRIBUTION
CORE VB 10: 2.0-4.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | $\begin{aligned} & \hline \text { CO3 } \\ & \text { WT. } \end{aligned}$ | CUM CO3 WT. | $\begin{gathered} \text { CO3 WT } \\ \% \end{gathered}$ | $\begin{aligned} & \text { CUM CO3 } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.613 | 0.000 | 0.613 | 0.613 | 0.009351212 | 0.009351212 |
| -1.75 | 0.365 | 0.000 | 0.365 | 0.978 | 0.005568014 | 0.014919226 |
| -1.50 | 0.473 | 0.052 | 0.421 | 1.399 | 0.006422284 | 0.021341510 |
| -1.25 | 0.906 | 0.021 | 0.885 | 2.284 | 0.013500526 | 0.034842036 |
| -1.00 | 0.848 | 0.030 | 0.818 | 3.102 | 0.012478453 | 0.047320489 |
| -0.75 | 1.024 | 0.009 | 1.015 | 4.117 | 0.015483654 | 0.062804143 |
| -0.50 | 1.328 | 0.190 | 1.138 | 5.255 | 0.017359999 | 0.080164142 |
| -0.25 | 2.786 | 1.328 | 1.458 | 6.713 | 0.022241545 | 0.102405687 |
| 0.00 | 6.053 | 4.500 | 1.553 | 8.266 | 0.023690754 | 0.126096441 |
| 0.25 | 12.495 | 8.311 | 4.184 | 12.450 | 0.063826217 | 0.189922658 |
| 0.50 | 14.274 | 7.882 | 6.392 | 18.842 | 0.097508886 | 0.287431544 |
| 0.75 | 15.171 | 6.608 | 8.563 | 27.405 | 0.130627126 | 0.418058670 |
| 1.00 | 15.450 | 6.449 | 9.001 | 36.406 | 0.137308743 | 0.555367413 |
| 1.25 | 14.759 | 6.619 | 8.140 | 44.546 | 0.124174332 | 0.679541745 |
| 1.50 | 10.956 | 5.553 | 5.403 | 49.949 | 0.082421857 | 0.761963602 |
| 1.75 | 11.949 | 6.238 | 5.711 | 55.660 | 0.087120345 | 0.849083947 |
| 2.00 | 8.231 | 4.461 | 3.770 | 59.430 | 0.057510717 | 0.906594664 |
| 2.25 | 5.558 | 2.846 | 2.712 | 62.142 | 0.041371104 | 0.947965768 |
| 2.50 | 2.794 | 1.149 | 1.645 | 63.787 | 0.025094199 | 0.973059967 |
| 2.75 | $1: 125$ | 0.399 | 0.726 | 64.513 | 0.011075008 | 0.984134975 |
| 3.00 | 0.555 | 0.222 | 0.333 | 64.846 | 0.005079859 | 0.989214834 |
| 3.25 | 0.452 | 0.195 | 0.257 | 65.103 | 0.003920492 | 0.993135326 |
| 3.50 | 0.517 | 0.340 | 0.177 | 65.280 | 0.002700105 | 0.995835431 |
| 3.75 | 0.450 | 0.315 | 0.135 | 65.415 | 0.002059402 | 0.997894833 |
| 4.00 | 0.329 | 0.249 | 0.080 | 65.495 | 0.001220387 | 0.999115220 |
| PAN | 0.431 | 0.373 | 0.058 | 65.553 | 0.000884780 | 1.0 |
| $\begin{aligned} & \text { TOTAL WT. } \\ & \text { CO3 WT } \\ & \% \text { CARBONATE } \end{aligned}$ |  |  |  | $\begin{aligned} & 129.892 \\ & 65.553 \\ & 50.467 \end{aligned}$ | grams grams |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB 10: 2.0-4.0 ft


Phi Size

## CARBONATE GRAIN SIZE DISTRIBUTION

## CORE VB-10: 4.0-6.0 ft

| PHI | TOTAL | DIGESTED | CO3 | CUM CO3 | CO3 WT | CUM CO3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. | $\%$ | WT. \% |
|  |  |  |  |  |  |  |
| $<-2.00$ | 7.646 | 0.000 | 7.646 | 7.646 | 0.117059877 | 0.117059877 |
| -1.75 | 2.979 | 0.000 | 2.979 | 10.625 | 0.045608341 | 0.162668218 |
| -1.50 | 2.853 | 0.000 | 2.853 | 13.478 | 0.043679287 | 0.206347505 |
| -1.25 | 2.440 | 0.000 | 2.440 | 15.918 | 0.037356278 | 0.243703783 |
| -1.00 | 2.489 | 0.000 | 2.489 | 18.407 | 0.038106465 | 0.281810248 |
| -0.75 | 2.171 | 0.019 | 2.152 | 20.559 | 0.032947012 | 0.314757261 |
| -0.50 | 2.165 | 0.197 | 1.968 | 22.527 | 0.030129981 | 0.344887242 |
| -0.25 | 3.146 | 1.520 | 1.626 | 24.153 | 0.024893979 | 0.369781221 |
| 0.00 | 5.759 | 4.095 | 1.664 | 25.817 | 0.025475757 | 0.395256978 |
| 0.25 | 9.609 | 6.355 | 3.254 | 29.071 | 0.049818577 | 0.445075555 |
| 0.50 | 9.405 | 5.354 | 4.051 | 33.122 | 0.062020607 | 0.507096162 |
| 0.75 | 9.731 | 4.294 | 5.437 | 38.559 | 0.083240198 | 0.590336360 |
| 1.00 | 10.091 | 4.178 | 5.913 | 44.472 | 0.090527734 | 0.680864094 |
| 1.25 | 9.963 | 4.417 | 5.546 | 50.018 | 0.084908982 | 0.765773076 |
| 1.50 | 7.564 | 4.292 | 3.272 | 53.290 | 0.050094156 | 0.815867232 |
| 1.75 | 8.524 | 4.702 | 3.822 | 57.112 | 0.058514629 | 0.874381861 |
| 2.00 | 5.973 | 3.469 | 2.504 | 59.616 | 0.038336115 | 0.912717975 |
| 2.25 | 4.169 | 2.237 | 1.932 | 61.548 | 0.029578823 | 0.942296799 |
| 2.50 | 2.523 | 1.052 | 1.471 | 63.019 | 0.022520936 | 0.964817735 |
| 2.75 | 1.180 | 0.414 | 0.766 | 63.785 | 0.011727422 | 0.976545157 |
| 3.00 | 0.646 | 0.201 | 0.445 | 64.230 | 0.006812928 | 0.983358084 |
| 3.25 | 0.466 | 0.169 | 0.297 | 64.527 | 0.004547055 | 0.987905140 |
| 3.50 | 0.450 | 0.247 | 0.203 | 64.730 | 0.003107920 | 0.991013059 |
| 3.75 | 0.458 | 0.287 | 0.171 | 64.901 | 0.002618001 | 0.993631061 |
| 4.00 | 0.396 | 0.260 | 0.136 | 65.037 | 0.002082153 | 0.995713214 |
| PAN | 0.637 | 0.357 | 0.280 | 65.317 | 0.004286786 | 1.0 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| TOTAL WT. |  |  |  |  |  |  |
| CO3 WT |  |  |  |  |  |  |
| $\%$ CARBONATE |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

CARBONATE GRAIN SIZE DISTRIBUTION VB10: 4.0-6.0 ft


## CARBONATE GRAIN SIZE DISTRIBUTION

CORE VB 10:18.0-20.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CO3 WT. | CUM CO3 WT. | $\begin{gathered} \hline \text { CO3 WT } \\ \% \end{gathered}$ | CUM CO3 WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| <-2.00 | 0.530 | 0.000 | 0.530 | 0.530 | 0.026175425 | 0.026175425 |
| -1.75 | 0.150 | 0.000 | 0.150 | 0.680 | 0.007408139 | 0.033583564 |
| -1.50 | 0.472 | 0.000 | 0.472 | 1.152 | 0.023310944 | 0.056894508 |
| -1.25 | 0.695 | 0.000 | 0.695 | 1.847 | 0.034324378 | 0.091218886 |
| -1.00 | 0.536 | 0.000 | 0.536 | 2.383 | 0.026471750 | 0.117690636 |
| -0.75 | 0.707 | 0.000 | 0.707 | 3.090 | 0.034917029 | 0.152607665 |
| -0.50 | 1.097 | 0.016 | 1.081 | 4.171 | 0.053387989 | 0.205995654 |
| -0.25 | 1.673 | 0.136 | 1.537 | 5.708 | 0.075908732 | 0.281904386 |
| 0.00 | 1.811 | 0.350 | 1.461 | 7.169 | 0.072155275 | 0.354059660 |
| 0.25 | 2.300 | 0.701 | 1.599 | 8.768 | 0.078970763 | 0.433030423 |
| 0.50 | 2.472 | 1.491 | 0.981 | 9.749 | 0.048449230 | 0.481479652 |
| 0.75 | 3.905 | 3.067 | 0.838 | 10.587 | 0.041386804 | 0.522866456 |
| 1.00 | 7.501 | 6.478 | 1.023 | 11.610 | 0.050523508 | 0.573389964 |
| 1.25 | 13.557 | 11.886 | 1.671 | 13.281 | 0.082526669 | 0.655916634 |
| 1.50 | 15.536 | 13.573 | 1.963 | 15.244 | 0.096947847 | 0.752864480 |
| 1.75 | 22.843 | 21.146 | 1.697 | 16.941 | 0.083810747 | 0.836675227 |
| 2.00 | 16.867 | 15.879 | 0.988 | 17.929 | 0.048794943 | 0.885470170 |
| 2.25 | 10.826 | 10.207 | 0.619 | 18.548 | 0.030570921 | 0.916041090 |
| 2.50 | 5.446 | 4.966 | 0.480 | 19.028 | 0.023706045 | 0.939747136 |
| 2.75 | 2.723 | 2.378 | 0.345 | 19.373 | 0.017038720 | 0.956785855 |
| 3.00 | 1.573 | 1.392 | 0.181 | 19.554 | 0.008939154 | 0.965725010 |
| 3.25 | 0.806 | 0.591 | 0.215 | 19.769 | 0.010618333 | 0.976343343 |
| 3.50 | 0.364 | 0.353 | 0.011 | 19.780 | 0.000543264 | 0.976886606 |
| 3.75 | 0.246 | 0.147 | 0.099 | 19.879 | 0.004889372 | 0.981775978 |
| 4.00 | 0.325 | 0.175 | 0.150 | 20.029 | 0.007408139 | 0.989184117 |
| PAN | 0.563 | 0.344 | 0.219 | 20.248 | 0.010815883 | 1.0 |

TOTAL WT.
CO3 WT
\% CARBONATE
115.524 grams
20.248 grams


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 1: 1.0-2.0 ft

| $\begin{aligned} & \mathrm{PHI} \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \hline \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 4.275 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 1.066 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 1.245 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.800 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 2.013 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 2.410 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 2.965 | 0.007 | 0.007 | 0.000097542 | 0.000097542 |
| -0.25 | 3.223 | 0.046 | 0.053 | 0.000640990 | 0.000738532 |
| 0.00 | 3.143 | 0.262 | 0.315 | 0.003650856 | 0.004389387 |
| 0.25 | 4.268 | 0.985 | 1.300 | 0.013725545 | 0.018114932 |
| 0.50 | 5.068 | 1.956 | 3.256 | 0.027256006 | 0.045370938 |
| 0.75 | 7.005 | 3.314 | 6.570 | 0.046179143 | 0.091550081 |
| 1.00 | 10.508 | 5.713 | 12.283 | 0.079608160 | 0.171158241 |
| 1.25 | 13.499 | 7.297 | 19.580 | 0.101680508 | 0.272838749 |
| 1.50 | 11.952 | 7.400 | 26.980 | 0.103115768 | 0.375954518 |
| 1.75 | 17.866 | 12.732 | 39.712 | 0.177414860 | 0.553369377 |
| 2.00 | 17.575 | 13.927 | 53.639 | 0.194066663 | 0.747436040 |
| 2.25 | 14.051 | 11.539 | 65.178 | 0.160790926 | 0.908226966 |
| 2.50 | 6.054 | 4.796 | 69.974 | 0.066830166 | 0.975057132 |
| 2.75 | 1.259 | 0.947 | 70.921 | 0.013196031 | 0.988253163 |
| 3.00 | 0.396 | 0.318 | 71.239 | 0.004431191 | 0.992684354 |
| 3.25 | 0.179 | 0.141 | 71.380 | 0.001964773 | 0.994649128 |
| 3.50 | 0.133 | 0.122 | 71.502 | 0.001700017 | 0.996349144 |
| 3.75 | 0.102 | 0.089 | 71.591 | 0.001240176 | 0.997589321 |
| 4.00 | 0.071 | 0.066 | 71.657 | 0.000919681 | 0.998509002 |
| PAN | 0.067 | 0.107 | 71.764 | 0.001490998 | 1.0 |
| TOTAL WT. |  |  | 132.193 | grams |  |
| DIGESTED WT. |  |  | 71.764 | grams |  |
| \% SILICA |  |  | 54.287 |  |  |



POST DIGESTION GRAIN SIZE DISTRIBUTION CHART
CORE VB 1: 3.0-4.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. \% } \end{gathered}$ | $\begin{gathered} \hline \text { CUM DIG } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.913 | 0.042 | 0.042 | 0.000448096 | 0.000448096 |
| -1.75 | 0.826 | 0.000 | 0.042 | 0.000000000 | 0.000448096 |
| -1.50 | 1.227 | 0.000 | 0.042 | 0.000000000 | 0.000448096 |
| -1.25 | 1.371 | 0.044 | 0.086 | 0.000469433 | 0.000917529 |
| -1.00 | 1.904 | 0.010 | 0.096 | 0.000106689 | 0.001024218 |
| -0.75 | 2.100 | 0.046 | 0.142 | 0.000490771 | 0.001514990 |
| -0.50 | 2.765 | 0.036 | 0.178 | 0.000384082 | 0.001899072 |
| -0.25 | 3.486 | 0.115 | 0.293 | 0.001226928 | 0.003126000 |
| 0.00 | 3.689 | 0.450 | 0.743 | 0.004801024 | 0.007927024 |
| 0.25 | 5.481 | 1.552 | 2.295 | 0.016558199 | 0.024485224 |
| 0.50 | 7.070 | 3.182 | 5.477 | 0.033948576 | 0.058433799 |
| 0.75 | 9.470 | 4.728 | 10.205 | 0.050442761 | 0.108876560 |
| 1.00 | 13.591 | 7.714 | 17.919 | 0.082300224 | 0.191176784 |
| 1.25 | 16.351 | 9.570 | 27.489 | 0.102101782 | 0.293278566 |
| 1.50 | 14.008 | 8.673 | 36.162 | 0.092531740 | 0.385810306 |
| 1.75 | 20.849 | 15.238 | 51.400 | 0.162573349 | 0.548383655 |
| 2.00 | 21.338 | 17.423 | 68.823 | 0.185884989 | 0.734268644 |
| 2.25 | 18.145 | 15.504 | 84.327 | 0.165411288 | 0.899679932 |
| 2.50 | 8.169 | 6.900 | 91.227 | 0.073615705 | 0.973295636 |
| 2.75 | 1.741 | 1.423 | 92.650 | 0.015181905 | 0.988477542 |
| 3.00 | 0.450 | 0.398 | 93.048 | 0.004246239 | 0.992723781 |
| 3.25 | 0.172 | 0.163 | 93.211 | 0.001739038 | 0.994462819 |
| 3.50 | 0.132 | 0.145 | 93.356 | 0.001546997 | 0.996009815 |
| 3.75 | 0.114 | 0.132 | 93.488 | 0.001408300 | 0.997418116 |
| 4.00 | 0.081 | 0.098 | 93.586 | 0.001045556 | 0.998463672 |
| PAN | 0.059 | 0.144 | 93.730 | 0.001536328 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | 157.502 | grams grams |  |
|  |  |  | 93.730 |  |  |
|  |  |  | 59.511 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 1: $3.0-4.0 \mathrm{ft}$


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

| CORE VB 1: | $\mathbf{5 . 0}-\mathbf{6 . 0} \mathbf{f t}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| SIZE | WT. | WT. | WT. | WT. \% | WT. \% |
|  |  |  |  |  |  |
| $<-2.00$ | 2.338 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.995 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 1.391 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.167 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 1.660 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 2.092 | 0.000 | 0.000 | 0.000000000 | 0.0000000000 |
| -0.50 | 2.713 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 3.083 | 0.099 | 0.099 | 0.001395742 | 0.001395742 |
| 0.00 | 3.403 | 0.449 | 0.548 | 0.006330185 | 0.007725927 |
| 0.25 | 5.366 | 1.503 | 2.051 | 0.021189906 | 0.028915833 |
| 0.50 | 6.685 | 2.989 | 5.040 | 0.042140138 | 0.071055971 |
| 0.75 | 8.647 | 4.412 | 9.452 | 0.062202171 | 0.133258142 |
| 1.00 | 12.131 | 6.797 | 16.249 | 0.095826872 | 0.229085013 |
| 1.25 | 13.647 | 7.661 | 23.910 | 0.108007895 | 0.337092909 |
| 1.50 | 10.981 | 7.275 | 31.185 | 0.102565910 | 0.439658819 |
| 1.75 | 15.245 | 10.911 | 42.096 | 0.153827717 | 0.593486536 |
| 2.00 | 15.030 | 12.091 | 54.187 | 0.170463838 | 0.763950374 |
| 2.25 | 12.855 | 10.480 | 64.667 | 0.147751304 | 0.911701678 |
| 2.50 | $: 5.690$ | 4.459 | 69.126 | 0.062864796 | 0.974566474 |
| 2.75 | 1.228 | 0.851 | 69.977 | 0.011997744 | 0.986564218 |
| 3.00 | 0.390 | 0.279 | 70.256 | 0.003933456 | 0.990497674 |
| 3.25 | 0.178 | 0.129 | 70.385 | 0.001818694 | 0.992316368 |
| 3.50 | 0.181 | 0.142 | 70.527 | 0.002001974 | 0.994318342 |
| 3.75 | 0.171 | 0.167 | 70.694 | 0.002354434 | 0.996672776 |
| 4.00 | 0.128 | 0.105 | 70.799 | 0.001480333 | 0.998153109 |
| PAN | 0.102 | 0.131 | 70.930 | 0.001846891 |  |
|  |  |  |  |  | 1.0 |


|  |  |  |
| :--- | :--- | :--- |
| TOTAL WT. | 127.497 | grams |
| DIGESTED WT. | 70.930 | grams |
| \% SILICA | 55.633 |  |




POST DIGESTED GRAIN SIZE DISTRIBUTION VB 1: 7.0-8.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 1: 9.0-10.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \text { DIGESTED } \\ \text { WT. \% } \end{gathered}$ | $\begin{aligned} & \hline \text { CUM DIG } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 1.676 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.205 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.667 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.587 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.757 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 1.261 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.547 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 2.171 | 0.062 | 0.062 | 0.000784552 | 0.000784552 |
| 0.00 | 2.389 | 0.196 | 0.258 | 0.002480196 | 0.003264748 |
| 0.25 | 3.604 | 0.872 | 1.130 | 0.011034343 | 0.014299091 |
| 0.50 | 4.693 | 2.022 | 3.152 | 0.025586516 | 0.039885607 |
| 0.75 | 6.670 | 3.387 | 6.539 | 0.042859312 | 0.082744919 |
| 1.00 | 10.267 | 5.739 | 12.278 | 0.072621669 | 0.155366588 |
| 1.25 | 12.833 | 7.101 | 19.379 | 0.089856503 | 0.245223091 |
| 1.50 | 10.876 | 7.052 | 26.431 | 0.089236454 | 0.334459545 |
| 1.75 | 16.807 | 11.822 | 38.253 | 0.149596335 | 0.484055880 |
| 2.00 | 18.602 | 14.737 | 52.990 | 0.186482930 | 0.670538810 |
| 2.25 | 18.498 | 15.240 | 68.230 | 0.192847923 | 0.863386733 |
| 2.50 | $\checkmark 10.193$ | 8.011 | 76.241 | 0.101371700 | 0.964758434 |
| 2.75 | 2.522 | 1.741 | 77.982 | 0.022030724 | 0.986789158 |
| 3.00 | 0.712 | 0.439 | 78.421 | 0.005555134 | 0.992344292 |
| 3.25 | 0.270 | 0.159 | 78.580 | 0.002011996 | 0.994356288 |
| 3.50 | 0.190 | 0.109 | 78.689 | 0.001379293 | 0.995735581 |
| 3.75 | 0.159 | 0.121 | 78.810 | 0.001531142 | 0.997266722 |
| 4.00 | 0.127 | 0.097 | 78.907 | 0.001227444 | 0.998494166 |
| PAN | 0.122 | 0.119 | 79.026 | 0.001505834 | 1.0 |
| TOTAL WT. |  |  | 128.405 | grams |  |
| DIGESTED WT. |  |  | 79.026 | grams |  |
| \% SILICA |  |  | 61.544 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 1: 9.0 -10.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 1: 11.0-12.0 ft

| PHI | TOTAL | DIGESTED | CUM DIG |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WIGESTED | CUM DIG |  |
|  |  |  |  | WT. $\%$ | . WT. $\%$ |
| $<-2.00$ | 1.206 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.377 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.368 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.598 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.601 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.926 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.145 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 1.373 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| 0.00 | 1.440 | 0.078 | 0.078 | 0.001375055 | 0.001375055 |
| 0.25 | 2.169 | 0.246 | 0.324 | 0.004336712 | 0.005711767 |
| 0.50 | 2.594 | 0.734 | 1.058 | 0.012939621 | 0.018651388 |
| 0.75 | 3.491 | 1.282 | 2.340 | 0.022600264 | 0.041251653 |
| 1.00 | 5.538 | 2.589 | 4.929 | 0.045641252 | 0.086892904 |
| 1.25 | 7.563 | 3.998 | 8.927 | 0.070480388 | 0.157373292 |
| 1.50 | 8.227 | 4.973 | 13.900 | 0.087668576 | 0.245041869 |
| 1.75 | 13.611 | 9.582 | 23.482 | 0.168920229 | 0.413962098 |
| 2.00 | 15.378 | 12.152 | 35.634 | 0.214226532 | 0.628188629 |
| 2.25 | 14.271 | 11.682 | 47.316 | 0.205940943 | 0.834129572 |
| 2.50 | 8.350 | 6.512 | 53.828 | 0.114799471 | 0.948929044 |
| 2.75 | 2.522 | 1.705 | 55.533 | 0.030057294 | 0.978986338 |
| 3.00 | 0.809 | 0.489 | 56.022 | 0.008620538 | 0.987606875 |
| 3.25 | 0.342 | 0.166 | 56.188 | 0.002926399 | 0.990533275 |
| 3.50 | 0.248 | 0.156 | 56.344 | 0.002750110 | 0.993283385 |
| 3.75 | 0.262 | 0.168 | 56.512 | 0.002961657 | 0.996245042 |
| 4.00 | 0.199 | 0.123 | 56.635 | 0.002168356 | 0.998413398 |
| PAN | 0.152 | 0.090 | 56.725 | 0.001586602 |  |
|  |  |  |  |  | 1.0 |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 1: 11.0-12.0 ft


Phi Size

| POST DIGESTION GRA <br> CORE VB 1: 13.0-14.0 ft |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| SIZE | WT. | WT. | WT. | WT. \% | WT. \% |
| <-2.00 | 0.934 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.391 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.483 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.613 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.655 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.821 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.266 | 0.011 | 0.011 | 0.000157296 | 0.000157296 |
| -0.25 | 1.656 | 0.044 | 0.055 | 0.000629183 | 0.000786478 |
| 0.00 | 2.027 | 0.231 | 0.286 | 0.003303209 | 0.004089687 |
| 0.25 | 3.222 | 0.857 | 1.143 | 0.012254762 | 0.016344449 |
| 0.50 | 4.162 | 1.813 | 2.956 | 0.025925184 | 0.042269633 |
| 0.75 | 5.931 | 3.113 | 6.069 | 0.044514671 | 0.086784305 |
| 1.00 | 8.937 | 5.027 | 11.096 | 0.071884116 | 0.158668421 |
| 1.25 | 11.150 | 6.510 | 17.606 | 0.093090431 | 0.251758851 |
| 1.50 | 10.047 | 6.556 | 24.162 | 0.093748213 | 0.345507064 |
| 1.75 | 15.635 | 11.269 | 35.431 | 0.161 .142252 | 0.506649316 |
| 2.00 | 17.090 | 13.760 | 49.191 | 0.196762569 | 0.703411886 |
| 2.25 | 15.065 | 12.502 | 61.693 | 0.178773666 | 0.882185552 |
| 2.50 | 7.133 | 5.426 | 67.119 | 0.077589659 | 0.959775210 |
| 2.75 | 1.889 | 1.221 | 68.340 | 0.017459818 | 0.977235028 |
| 3.00 | 0.739 | 0.465 | 68.805 | 0.006649316 | 0.983884345 |
| 3.25 | 0.422 | 0.253 | 69.058 | 0.003617800 | 0.987502145 |
| 3.50 | 0.382 | 0.275 | 69.333 | 0.003932391 | 0.991434536 |
| 3.75 | 0.356 | 0.262 | 69.595 | 0.003746497 | 0.995181033 |
| 4.00 | 0.237 | 0.164 | 69.759 | 0.002345135 | 0.997526168 |
| PAN | 0.227 | 0.173 | 69.932 | 0.002473832 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | $\begin{aligned} & 111.470 \\ & 69.932 \\ & 62.736 \end{aligned}$ | grams grams |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 1: 13.0-14.0 ft


Phil Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 1: 15.0-16.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | DIGESTED <br> WT. \% | $\begin{aligned} & \hline \text { CUM DIG } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.305 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.035 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.063 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.028 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.059 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.113 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 0.190 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.195 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| 0.00 | 0.252 | 0.006 | 0.006 | 0.000067673 | 0.000067673 |
| 0.25 | 0.402 | 0.048 | 0.054 | 0.000541382 | 0.000609055 |
| 0.50 | 0.674 | 0.184 | 0.238 | 0.002075297 | 0.002684352 |
| 0.75 | 1.097 | 0.446 | 0.684 | 0.005030340 | 0.007714692 |
| 1.00 | 2.283 | 1.069 | 1.753 | 0.012057026 | 0.019771717 |
| 1.25 | 4.002 | 2.098 | 3.851 | 0.023662900 | 0.043434617 |
| 1.50 | 5.680 | 3.185 | 7.036 | 0.035922943 | 0.079357560 |
| 1.75 | 14.446 | 10.246 | 17.282 | 0.115562473 | 0.194920033 |
| 2.00 | 25.300 | 20.347 | 37.629 | 0.229489522 | 0.424409555 |
| 2.25 | 34.279 | 28.704 | 66.333 | 0.323746363 | 0.748155918 |
| 2.50 | 21.329 | 16.758 | 83.091 | 0.189009948 | 0.937165866 |
| 2.75 | 5.467 | 3.863 | 86.954 | 0.043569962 | 0.980735828 |
| 3.00 | 1.496 | 0.919 | 87.873 | 0.010365207 | 0.991101035 |
| 3.25 | 0.518 | 0.270 | 88.143 | 0.003045273 | 0.994146308 |
| 3.50 | 0.346 | 0.211 | 88.354 | 0.002379825 | 0.996526133 |
| 3.75 | 0.267 | 0.151 | 88.505 | 0.001703097 | 0.998229230 |
| 4.00 | 0.154 | 0.078 | 88.583 | 0.000879746 | 0.999108976 |
| PAN | 0.161 | 0.079 | 88.662 | 0.000891024 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | $\begin{gathered} 119.141 \\ 88.662 \\ 74.418 \end{gathered}$ | grams grams |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 2: $0-2.0 \mathrm{ft}$

| PHI SIZE | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. \% } \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 1.030 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.134 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.228 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.204 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.334 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.266 | 0.004 | 0.004 | 0.000063959 | 0.000063959 |
| -0.50 | 0.209 | 0.016 | 0.020 | 0.000255836 | 0.000319795 |
| -0.25 | 0.265 | 0.010 | 0.030 | 0.000159898 | 0.000479693 |
| 0.00 | 0.223 | 0.023 | 0.053 | 0.000367765 | 0.000847458 |
| 0.25 | 0.350 | 0.034 | 0.087 | 0.000543652 | 0.001391110 |
| 0.50 | 0.384 | 0.077 | 0.164 | 0.001231212 | 0.002622322 |
| 0.75 | 0.676 | 0.251 | 0.415 | 0.004013431 | 0.006635753 |
| 1.00 | 1.587 | 0.883 | 1.298 | 0.014118964 | 0.020754717 |
| 1.25 | 2.926 | 1.792 | 3.090 | 0.028653662 | 0.049408379 |
| 1.50 | 3.987 | 2.357 | 5.447 | 0.037687880 | 0.087096258 |
| 1.75 | 8.489 | 6.334 | 11.781 | 0.101279181 | 0.188375440 |
| 2.00 | 12.241 | 9.503 | 21.284 | 0.151950752 | 0.340326191 |
| 2.25 | 16.029 | 12.249 | 33.533 | 0.195858650 | 0.536184842 |
| 2.50 | 13.500 | 9.242 | 42.775 | 0.147777422 | 0.683962264 |
| 2.75 | 7.508 | 4.700 | 47.475 | 0.075151903 | 0.759114167 |
| 3.00 | 5.996 | 4.423 | 51.898 | 0.070722737 | 0.829836904 |
| 3.25 | 4.163 | 3.234 | 55.132 | 0.051710905 | 0.881547809 |
| 3.50 | 2.805 | 2.477 | 57.609 | 0.039606652 | 0.921154461 |
| 3.75 | 2.369 | 2.063 | 59.672 | 0.032986888 | 0.954141350 |
| 4.00 | 1.822 | 1.566 | 61.238 | 0.025039974 | 0.979181324 |
| PAN | 1.593 | 1.302 | 62.540 | 0.020818676 | 1.0 |
| TOTAL WT. |  |  | 89.318 | grams grams |  |
| DIGESTED WT. |  |  | 62.540 |  |  |
| \% SILICA |  |  | 70.019 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 2: 0 - $\mathbf{2 . 0} \mathrm{ft}$


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 2: 2.0-4.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 4.975 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.623 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.544 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.401 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.299 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.383 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 0.273 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.262 | 0.006 | 0.006 | 0.000070751 | 0.000070751 |
| 0.00 | 0.307 | 0.014 | 0.020 | 0.000165085 | 0.000235835 |
| 0.25 | 0.344 | 0.051 | 0.071 | 0.000601380 | 0.000837215 |
| 0.50 | 0.397 | 0.105 | 0.176 | 0.001238135 | 0.002075349 |
| 0.75 | 0.571 | 0.280 | 0.456 | 0.003301692 | 0.005377041 |
| 1.00 | 1.151 | 0.733 | 1.189 | 0.008643358 | 0.014020400 |
| 1.25 | 1.696 | 1.203 | 2.392 | 0.014185484 | 0.028205884 |
| 1.50 | 1.703 | 1.200 | 3.592 | 0.014150109 | 0.042355993 |
| 1.75 | 2.631 | 1.843 | 5.435 | 0.021732209 | 0.064088202 |
| 2.00 | 2.390 | 1.782 | 7.217 | 0.021012912 | 0.085101114 |
| 2.25 | 2.608 | 1.716 | 8.933 | 0.020234656 | 0.105335770 |
| 2.50 | 2.779 | 1.503 | 10.436 | 0.017723012 | 0.123058782 |
| 2.75 | 3.499 | 1.914 | 12.350 | 0.022569424 | 0.145628206 |
| 3.00 | 8.832 | 6.568 | 18.918 | 0.077448264 | 0.223076470 |
| 3.25 | 21.071 | 16.882 | 35.800 | 0.199068451 | 0.422144921 |
| 3.50 | 25.931 | 22.596 | 58.396 | 0.266446554 | 0.688591475 |
| 3.75 | 15.174 | 13.518 | 71.914 | 0.159400979 | 0.847992453 |
| 4.00 | 8.655 | 7.651 | 79.565 | 0.090218737 | 0.938211190 |
| PAN | 7.097 | 5.240 | 84.805 | 0.061788810 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | 114.596 84.805 74.003 | grams grams |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 2: 6.0-8.0 ft

| $\begin{aligned} & \mathrm{PHI} \\ & \mathrm{PIZE} \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. \% } \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 2.794 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.590 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.263 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.423 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.583 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.505 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 0.482 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 0.499 | 0.006 | 0.006 | 0.000186800 | 0.000186800 |
| 0.00 | 0.457 | 0.024 | 0.030 | 0.000747198 | 0.000933998 |
| 0.25 | 0.621 | 0.047 | 0.077 | 0.001463263 | 0.002397260 |
| 0.50 | 0.709 | 0.117 | 0.194 | 0.003642590 | 0.006039851 |
| 0.75 | 1.203 | 0.363 | 0.557 | 0.011301370 | 0.017341220 |
| 1.00 | 2.754 | 1.314 | 1.871 | 0.040909091 | 0.058250311 |
| 1.25 | 5.598 | 3.293 | 5.164 | 0.102521793 | 0.160772105 |
| 1.50 | 7.002 | 4.915 | 10.079 | 0.153019925 | 0.313792030 |
| 1.75 | 11.034 | 7.414 | 17.493 | 0.230821918 | 0.544613948 |
| 2.00 | 8.372 | 5.627 | 23.120 | 0.175186800 | 0.719800747 |
| 2.25 | 4.899 | 3.001 | 26.121 | 0.093430884 | 0.813231631 |
| 2.50 | -1.924 | 0.935 | 27.056 | 0.029109589 | 0.842341220 |
| 2.75 | 0.693 | 0.359 | 27.415 | 0.011176837 | 0.853518057 |
| 2.00 3.00 | 0.646 | 0.424 | 27.839 | 0.013200498 | 0.866718555 |
| 3.25 | 0.890 | 0.637 | 28.476 | 0.019831880 | 0.886550436 |
| 3.50 3.50 | 1.194 | 1.043 | 29.519 | 0.032471980 | 0.919022416 |
| 3.75 | 1.388 | 1.152 | 30.671 | 0.035865504 | 0.954887920 |
| 4.00 | 0.965 | 0.760 | 31.431 | 0.023661270 | 0.978549191 |
| PAN | 0.964 | 0.689 | 32.120 | 0.021450809 | 1.0 |
| total wt. |  |  | 57.452 | grams <br> grams |  |
| DIGESTED WT. |  |  | 32.120 |  |  |
| \% SILICA |  |  | 55.908 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 2: 6.0-8.0 ft


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: $0-2.0 \mathrm{ft}$


POST DIGESTED GRAIN SIZE DISTRIBUTION VB 3: 0-2.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: 10.0 - 12.0 ft

| PHI SIZE | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | DIGESTED <br> WT. \% | $\begin{gathered} \hline \text { CUM DIG } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.454 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.474 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.234 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.605 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.767 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.891 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.117 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 1.274 | 0.029 | 0.029 | 0.000731049 | 0.000731049 |
| 0.00 | 1.448 | 0.046 | 0.075 | 0.001159596 | 0.001890645 |
| 0.25 | 2.881 | 0.213 | 0.288 | 0.005369432 | 0.007260077 |
| 0.50 | 2.649 | 0.419 | 0.707 | 0.010562404 | 0.017822481 |
| 0.75 | 3.332 | 0.813 | 1.520 | 0.020494593 | 0.038317074 |
| 1.00 | 4.439 | 1.490 | 3.010 | 0.037560816 | 0.075877890 |
| 1.25 | 5.090 | 2.259 | 5.269 | 0.056946230 | 0.132824120 |
| 1.50 | 5.495 | 3.063 | 8.332 | 0.077213945 | 0.210038065 |
| 1.75 | 8.786 | 5.867 | 14.199 | 0.147898863 | 0.357936928 |
| 2.00 | 9.321 | 6.590 | 20.789 | 0.166124682 | 0.524061610 |
| 2.25 | 10.302 | 7.525 | 28.314 | 0.189694724 | 0.713756334 |
| 2.50 | 8.262 | 5.436 | 33.750 | 0.137033956 | 0.850790290 |
| 2.75 | 3.543 | 1.753 | 35.503 | 0.044190678 | 0.894980968 |
| 3.00 | 1.445 | 0.637 | 36.140 | 0.016057879 | 0.911038846 |
| 3.25 | 0.808 | 0.385 | 36.525 | 0.009705311 | 0.920744158 |
| 3.50 | 1.063 | 0.732 | 37.257 | 0.018452696 | 0.939196854 |
| 3.75 | 1.775 | 1.384 | 38.641 | 0.034888704 | 0.974085558 |
| 4.00 | 1.350 | 0.364 | 39.005 | 0.009175931 | 0.983261489 |
| PAN | 0.919 | 0.664 | 39.669 | 0.016738511 | 1.0 |
| TOTAL WT. |  |  | 78.724 | grams |  |
| DIGESTED WT. |  |  | 39.669 | grams |  |
| \% SILICA |  |  | 50.390 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 3: 10.0-12.0 ft


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: $12.0-14.0 \mathrm{ft}$

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 1.719 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.610 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 1.371 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 2.094 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 2.298 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 2.942 | 0.015 | 0.015 | 0.000398565 | 0.000398565 |
| -0.50 | 3.743 | 0.027 | 0.042 | 0.000717417 | 0.001115982 |
| -0.25 | 4.440 | 0.076 | 0.118 | 0.002019397 | 0.003135379 |
| 0.00 | 3.797 | 0.139 | 0.257 | 0.003693371 | 0.006828750 |
| 0.25 | 4.640 | 0.269 | 0.526 | 0.007147602 | 0.013976352 |
| 0.50 | 4.146 | 0.484 | 1.010 | 0.012860369 | 0.026836721 |
| 0.75 | 4.567 | 0.902 | 1.912 | 0.023967052 | 0.050803773 |
| 1.00 | 6.251 | 1.999 | 3.911 | 0.053115451 | 0.103919224 |
| 1.25 | 8.517 | 3.758 | 7.669 | 0.099853859 | 0.203773084 |
| 1.50 | 9.550 | 6.177 | 13.846 | 0.164129135 | 0.367902219 |
| 1.75 | 15.328 | 10.509 | 24.355 | 0.279234755 | 0.647136974 |
| 2.00 | 10.228 | 7.238 | 31.593 | 0.192320978 | 0.839457951 |
| 2.25 | 5.135 | 3.593 | 35.186 | 0.095469643 | 0.934927594 |
| 2.50 | 2.151 | 1.379 | 36.565 | 0.036641424 | 0.971569018 |
| 2.75 | 0.826 | 0.482 | 37.047 | 0.012807227 | 0.984376246 |
| 3.00 | 0.392 | 0.250 | 37.297 | 0.006642753 | 0.991018998 |
| 3.25 | 0.124 | 0.107 | 37.404 | 0.002843098 | 0.993862096 |
| 3.50 | 0.077 | 0.079 | 37.483 | 0.002099110 | 0.995961206 |
| 3.75 | 0.051 | 0.065 | 37.548 | 0.001727116 | 0.997688322 |
| 4.00 | 0.046 | 0.045 | 37.593 | 0.001195695 | 0.998884018 |
| PAN | 0.074 | 0.042 | 37.635 | 0.001115982 | 1.0 |
| tOTAL WT. DIGESTED WT. \% SILICA |  |  | 95.117 37.635 39.567 | grams grams |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: $14.0-16.0 \mathrm{ft}$

| PHI SIZE | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.378 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.502 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.946 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.066 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 1.428 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 1.879 | 0.009 | 0.009 | 0.000213564 | 0.000213564 |
| -0.50 | 2.470 | 0.014 | 0.023 | 0.000332210 | 0.000545774 |
| -0.25 | 2.875 | 0.032 | 0.055 | 0.000759337 | 0.001305111 |
| 0.00 | 2.971 | 0.121 | 0.176 | 0.002871245 | 0.004176356 |
| 0.25 | 3.910 | 0.226 | 0.402 | 0.005362821 | 0.009539177 |
| 0.50 | 3.699 | 0.446 | 0.848 | 0.010583266 | 0.020122443 |
| 0.75 | 4.346 | 0.816 | 1.664 | 0.019363106 | 0.039485549 |
| 1.00 | 6.195 | 2.025 | 3.689 | 0.048051825 | 0.087537374 |
| 1.25 | 8.626 | 4.089 | 7.778 | 0.097029092 | 0.184566466 |
| 1.50 | 10.291 | 6.832 | 14.610 | 0.162118552 | 0.346685017 |
| 1.75 | 16.139 | 12.093 | 26.703 | 0.286958379 | 0.633643396 |
| 2.00 | 10.840 | 8.647 | 35.350 | 0.205187224 | 0.838830620 |
| 2.25 | 5.224 | 4.261 | 39.611 | 0.101110531 | 0.939941151 |
| 2.50 | - 1.905 | 1.393 | 41.004 | 0.033054910 | 0.972996061 |
| 2.75 | 0.795 | 0.521 | 41.525 | 0.012362963 | 0.985359024 |
| 3.00 | 0.399 | 0.274 | 41.799 | 0.006501827 | 0.991860851 |
| 3.25 | 0.122 | 0.109 | 41.908 | 0.002586493 | 0.994447345 |
| 3.50 | 0.071 | 0.075 | 41.983 | 0.001779697 | 0.996227042 |
| 3.75 | 0.052 | 0.058 | 42.041 | 0.001376299 | 0.997603341 |
| 4.00 | 0.047 | 0.044 | 42.085 | 0.001044089 | 0.998647430 |
| PAN | 0.070 | 0.057 | 42.142 | 0.001352570 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | $\begin{aligned} & 87.246 \\ & 42.142 \\ & 48.303 \end{aligned}$ | grams grams |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: $18.0-20.0 \mathrm{ft}$

| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. \% | WT. \% |
|  |  |  |  |  |  |
| $<-2.00$ | 0.166 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.235 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.207 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.695 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.585 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.786 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.120 | 0.013 | 0.013 | 0.000274273 | 0.000274273 |
| -0.25 | 0.950 | 0.026 | 0.039 | 0.000548546 | 0.000822820 |
| 0.00 | 1.031 | 0.039 | 0.078 | 0.000822820 | 0.001645639 |
| 0.25 | 1.179 | 0.076 | 0.154 | 0.001603443 | 0.003249082 |
| 0.50 | 1.152 | 0.151 | 0.305 | 0.003185788 | 0.006434871 |
| 0.75 | 1.216 | 0.222 | 0.527 | 0.004683742 | 0.011118613 |
| 1.00 | 1.717 | 0.431 | 0.958 | 0.009093211 | 0.020211823 |
| 1.25 | 2.340 | 0.936 | 1.894 | 0.019747669 | 0.039959492 |
| 1.50 | 2.947 | 1.772 | 3.666 | 0.037385544 | 0.077345036 |
| 1.75 | 7.611 | 5.072 | 8.738 | 0.107008735 | 0.184353770 |
| 2.00 | 9.721 | 7.463 | 16.201 | 0.157453901 | 0.341807671 |
| 2.25 | 12.374 | 9.785 | 25.986 | 0.206443310 | 0.548250981 |
| 2.50 | 12.713 | 9.865 | 35.851 | 0.208131145 | 0.756382126 |
| 2.75 | 8.624 | 6.084 | 41.935 | 0.128359846 | 0.884741972 |
| 3.00 | 5.174 | 3.437 | 45.372 | 0.072513608 | 0.957255580 |
| 3.25 | 1.906 | 1.244 | 46.616 | 0.026245833 | 0.983501414 |
| 3.50 | 0.697 | 0.505 | 47.121 | 0.010654458 | 0.994155872 |
| 3.75 | 0.218 | 0.163 | 47.284 | 0.003438964 | 0.997594835 |
| 4.00 | 0.095 | 0.057 | 47.341 | 0.001202582 | 0.998797418 |
| PAN | 0.092 | 0.057 | 47.398 | 0.001202582 |  |


| TOTAL WT. | 75.551 | grams |
| :--- | :--- | :--- |
| DIGESTED WT. | 47.398 | grams |
| \% SILICA | 62.736 |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART



POST DIGESTED GRAIN SIZE DISTRIBUTION VB 3: 2.0-4.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: $4.0-6.0 \mathrm{ft}$

| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. |  | WT. | WT. $\%$ |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 3: 4.0-6.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 3: 6.0-8.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM DIG } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 3.246 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 1.129 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 1.339 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.194 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 1.375 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 1.158 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.223 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.25 | 1.067 | 0.009 | 0.009 | 0.000247566 | 0.000247566 |
| 0.00 | 0.955 | 0.018 | 0.027 | 0.000495131 | 0.000742697 |
| 0.25 | 1.056 | 0.069 | 0.096 | 0.001898003 | 0.002640700 |
| 0.50 | 0.987 | 0.133 | 0.229 | 0.003658469 | 0.006299169 |
| 0.75 | 1.109 | 0.280 | 0.509 | 0.007702041 | 0.014001210 |
| 1.00 | 1.579 | 0.626 | 1.135 | 0.017219563 | 0.031220774 |
| 1.25 | 2.241 | 1.343 | 2.478 | 0.036942290 | 0.068163063 |
| 1.50 | 2.720 | 1.967 | 4.445 | 0.054106838 | 0.122269902 |
| 1.75 | 5.448 | 4.227 | 8.672 | 0.116273312 | 0.238543214 |
| 2.00 | 6.602 | 5.413 | 14.085 | 0.148896958 | 0.387440172 |
| 2.25 | 8.477 | 6.781 | 20.866 | 0.186526930 | 0.573967101 |
| 2.50 | 8.659 | 6.331 | 27.197 | 0.174148649 | 0.748115751 |
| 2.75 | 6.565 | 4.211 | 31.408 | 0.115833196 | 0.863948946 |
| 3.00 | 3.538 | 2.024 | 33.432 | 0.055674754 | 0.919623700 |
| 3.25 | 1.141 | 0.632 | 34.064 | 0.017384607 | 0.937008307 |
| 3.50 | 0.871 | 0.719 | 34.783 | 0.019777741 | 0.956786048 |
| 3.75 | 1.057 | 0.911 | 35.694 | 0.025059141 | 0.981845189 |
| 4.00 | 0.515 | 0.422 | 36.116 | 0.011608076 | 0.993453265 |
| PAN | 0.333 | 0.238 | 36.354 | 0.006546735 | 1.0 |
| TOTAL WT. |  |  | 65.584 | grams grams |  |
| DIGESTED WT. |  |  | 36.354 |  |  |
| \% SILICA |  |  | 55.431 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 3: 6.0-8.0 ft


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART





POST DIGESTED GRAIN SIZE DISTRIBUTION VB 4 : 2.0-4.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 0-2.0 ft


POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: $0-2.0 \mathrm{ft}$


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 2.0-4.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 3.779 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.444 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.715 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.409 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.893 | 0.011 | 0.011 | 0.000648547 | 0.000648547 |
| -0.75 | 0.974 | 0.026 | 0.037 | 0.001532928 | 0.002181475 |
| -0.50 | 1.373 | 0.036 | 0.073 | 0.002122516 | 0.004303992 |
| -0.25 | 2.455 | 0.119 | 0.192 | 0.007016096 | 0.011320087 |
| 0.00 | 3.666 | 0.287 | 0.479 | 0.016921172 | 0.028241259 |
| 0.25 | 7.403 | 0.596 | 1.075 | 0.035139438 | 0.063380697 |
| 0.50 | 10.402 | 0.765 | 1.840 | 0.045103473 | 0.108484170 |
| 0.75 | 14.423 | 1.049 | 2.889 | 0.061847768 | 0.170331938 |
| 1.00 | 18.125 | 1.949 | 4.838 | 0.114910677 | 0.285242615 |
| 1.25 | 16.384 | 2.984 | 7.822 | 0.175933023 | 0.461175638 |
| 1.50 | 28.607 | 2.614 | 10.436 | 0.154118271 | 0.615293910 |
| 1.75 | 0.962 | 2.571 | 13.007 | 0.151583043 | 0.766876953 |
| 2.00 | 1.400 | 1.623 | 14.630 | 0.095690113 | 0.862567066 |
| 2.25 | 1.375 | 1.194 | 15.824 | 0.070396793 | 0.932963858 |
| 2.50 | 0.796 | 0.527 | 16.351 | 0.031071281 | 0.964035139 |
| 2.75 | 0.459 | 0.198 | 16.549 | 0.011673840 | 0.975708979 |
| 3.00 | 0.272 | 0.108 | 16.657 | 0.006367549 | 0.982076529 |
| 3.25 | 0.120 | 0.058 | 16.715 | 0.003419610 | 0.985496138 |
| 3.50 | 0.067 | 0.055 | 16.770 | 0.003242733 | 0.988738872 |
| 3.75 | 0.066 | 0.057 | 16.827 | 0.003360651 | 0.992099522 |
| 4.00 | 0.054 | 0.053 | 16.880 | 0.003124816 | 0.995224338 |
| PAN | 0.023 | 0.081 | 16.961 | 0.004775662 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | 115.646 16.961 14.666 | grams grams |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: 2.0-4.0 ft


Cum Digested Wt. \%

Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 4.0-6.0 ft

| PHI | TOTAL | DIGESTED |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | CUM DIG <br> WT. | DIGESTED <br> WT. $\%$ | CUM DIG <br> WT. $\%$ |  |
| $<-2.00$ | 2.126 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.244 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.554 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.345 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.484 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.543 | 0.003 | 0.003 | 0.000178763 | 0.000178763 |
| -0.50 | 1.058 | 0.000 | 0.003 | 0.000000000 | 0.000178763 |
| -0.25 | 1.609 | 0.031 | 0.034 | 0.001847217 | 0.002025980 |
| 0.00 | 2.221 | 0.081 | 0.115 | 0.004826600 | 0.006852580 |
| 0.25 | 4.191 | 0.159 | 0.274 | 0.009474437 | 0.016327017 |
| 0.50 | 6.305 | 0.135 | 0.409 | 0.008044333 | 0.024371350 |
| 0.75 | 8.905 | 0.312 | 0.721 | 0.018591348 | 0.042962698 |
| 1.00 | 13.054 | 1.067 | 1.788 | 0.063580026 | 0.106542724 |
| 1.25 | 14.608 | 3.031 | 4.819 | 0.180610178 | 0.287152902 |
| 1.50 | 10.843 | 3.168 | 7.987 | 0.188773686 | 0.475926588 |
| 1.75 | 10.629 | 3.321 | 11.308 | 0.197890597 | 0.673817185 |
| 2.00 | 7.786 | 2.451 | 13.759 | 0.146049339 | 0.819866524 |
| 2.25 | 6.125 | 1.853 | 15.612 | 0.110415922 | 0.930282445 |
| 2.50 | 3.101 | 0.633 | 16.245 | 0.037718985 | 0.968001430 |
| 2.75 | 1.133 | 0.143 | 16.388 | 0.008521034 | 0.976522465 |
| 3.00 | 0.519 | 0.098 | 16.486 | 0.005839590 | 0.982362055 |
| 3.25 | 0.228 | 0.057 | 16.543 | 0.003396496 | 0.985758551 |
| 3.50 | 0.144 | 0.050 | 16.593 | 0.002979383 | 0.988737934 |
| 3.75 | 0.124 | 0.051 | 16.644 | 0.003038970 | 0.991776904 |
| 4.00 | 0.103 | 0.047 | 16.691 | 0.002800620 | 0.994577524 |
| PAN | 0.220 | 0.091 | 16.782 | 0.005422476 |  |
|  |  |  |  |  | 1.0 |

TOTAL WT.
DIGESTED WT.
\% SILICA
97.202 grams
16.782 grams
17.265

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: $4.0-6.0 \mathrm{ft}$


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 6.0-8.0 ft

| $\begin{aligned} & \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. \% } \end{gathered}$ | $\begin{gathered} \hline \text { CUM DIG } \\ \text { WT. \% } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 3.424 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.441 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.445 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.635 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.512 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.564 | 0.002 | 0.002 | 0.000152614 | 0.000152614 |
| -0.50 | 0.943 | 0.000 | 0.002 | 0.000000000 | 0.000152614 |
| -0.25 | 1.680 | 0.021 | 0.023 | 0.001602442 | 0.001755055 |
| 0.00 | 2.227 | 0.026 | 0.049 | 0.001983976 | 0.003739031 |
| 0.25 | 4.423 | 0.082 | 0.131 | 0.006257154 | 0.009996185 |
| 0.50 | 6.251 | 0.118 | 0.249 | 0.009004197 | 0.019000382 |
| 0.75 | 8.786 | 0.230 | 0.479 | 0.017550553 | 0.036550935 |
| 1.00 | 11.972 | 0.790 | 1.269 | 0.060282335 | 0.096833270 |
| 1.25 | 12.307 | 2.117 | 3.386 | 0.161541396 | 0.258374666 |
| 1.50 | 8.691 | 2.237 | 5.623 | 0.170698207 | 0.429072873 |
| 1.75 | 9.796 | 2.369 | 7.992 | 0.180770698 | 0.609843571 |
| 2.00 | 8.066 | 1.950 | 9.942 | 0.148798169 | 0.758641740 |
| 2.25 | 7.057 | 1.788 | 11.730 | 0.136436475 | 0.895078214 |
| 2.50 | * 4.159 | 0.680 | 12.410 | 0.051888592 | 0.946966807 |
| 2.75 | 1.808 | 0.175 | 12.585 | 0.013353682 | 0.960320488 |
| 3.00 | 0.944 | 0.126 | 12.711 | 0.009614651 | 0.969935139 |
| 3.25 | 0.439 | 0.082 | 12.793 | 0.006257154 | 0.976192293 |
| 3.50 | 0.315 | 0.078 | 12.871 | 0.005951927 | 0.982144220 |
| 3.75 | 0.239 | 0.067 | 12.938 | 0.005112552 | 0.987256772 |
| 4.00 | 0.223 | 0.070 | 13.008 | 0.005341473 | 0.992598245 |
| PAN | 0.282 | 0.097 | 13.105 | 0.007401755 | 1.0 |
| TOTAL WT. |  |  | 96.629 | grams |  |
| DIGESTED WT. |  |  | 13.105 | grams |  |
| \% SILICA |  |  | 13.562 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: 6.0-8.0 ft


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 8.0-10.0 ft

| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. |  |  |  |  |
| WT. |  |  |  |  |  |
| WT. |  |  |  |  |  |
| -2.00 | 0.225 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.303 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.323 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.414 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.459 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.729 | 0.009 | 0.009 | 0.000530567 | 0.000530567 |
| -0.50 | 1.113 | 0.032 | 0.041 | 0.001886459 | 0.002417025 |
| -0.25 | 1.832 | 0.058 | 0.099 | 0.003419207 | 0.005836232 |
| 0.00 | 2.506 | 0.132 | 0.231 | 0.007781642 | 0.013617874 |
| 0.25 | 4.617 | 0.327 | 0.558 | 0.019277250 | 0.032895125 |
| 0.50 | 5.804 | 0.394 | 0.952 | 0.023227024 | 0.056122148 |
| 0.75 | 7.615 | 0.638 | 1.590 | 0.037611272 | 0.093733420 |
| 1.00 | 10.144 | 1.157 | 2.747 | 0.068207275 | 0.161940694 |
| 1.25 | 11.435 | 1.993 | 4.740 | 0.117491010 | 0.279431704 |
| 1.50 | 10.052 | 2.801 | 7.541 | 0.165124094 | 0.444555798 |
| 1.75 | 12.291 | 3.692 | 11.233 | 0.217650180 | 0.662205978 |
| 2.00 | 8.951 | 2.541 | 13.774 | 0.149796616 | 0.812002594 |
| 2.25 | 6.816 | 1.514 | 15.288 | 0.089253080 | 0.901255674 |
| 2.50 | 4.583 | 0.615 | 15.903 | 0.036255379 | 0.937511053 |
| 2.75 | 2.447 | 0.221 | 16.124 | 0.013028356 | 0.950539409 |
| 3.00 | 1.294 | 0.180 | 16.304 | 0.010611331 | 0.961150740 |
| 3.25 | 0.565 | 0.103 | 16.407 | 0.006072039 | 0.967222779 |
| 3.50 | 0.384 | 0.099 | 16.506 | 0.005836232 | 0.973059011 |
| 3.75 | 0.398 | 0.118 | 16.624 | 0.006956317 | 0.980015327 |
| 4.00 | 0.426 | 0.150 | 16.774 | 0.008842775 | 0.988858103 |
| PAN | 0.688 | 0.189 | 16.963 | 0.011141897 | 1.0 |

TOTAL WT.
DIGESTED WT.
\% SILICA
96.414 grams
16.963 grams
17.594

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: 8.0 - 10.0 ft


Cum Digested Wt. \%

Phi Size


POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: $10.0 \mathbf{- 1 2 . 0} \mathrm{ft}$


Phi Size

## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 12.0-14.0 ft

| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SIZE | WT. | WT. | WT. | WT. \% | WT. \% |
| $<-2.00$ | 9.292 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 2.403 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 2.887 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 3.913 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 4.969 | 0.017 | 0.017 | 0.000764182 | 0.000764182 |
| -0.75 | 4.609 | 0.021 | 0.038 | 0.000943990 | 0.001708172 |
| -0.50 | 4.961 | 0.144 | 0.182 | 0.006473074 | 0.008181246 |
| -0.25 | 5.687 | 0.442 | 0.624 | 0.019868740 | 0.028049987 |
| 0.00 | 6.855 | 1.060 | 1.684 | 0.047649016 | 0.075699002 |
| 0.25 | 10.233 | 1.930 | 3.614 | 0.086757170 | 0.162456172 |
| 0.50 | 10.869 | 2.025 | 5.639 | 0.091027600 | 0.253483772 |
| 0.75 | 11.221 | 1.925 | 7.564 | 0.086532410 | 0.340016183 |
| 1.00 | 11.243 | 2.337 | 9.901 | 0.105052594 | 0.445068776 |
| 1.25 | 9.638 | 2.719 | 12.620 | 0.122224220 | 0.567292996 |
| 1.50 | 6.859 | 2.609 | 15.229 | 0.117279511 | 0.684572507 |
| 1.75 | 6.973 | 3.067 | 18.296 | 0.137867482 | 0.822439989 |
| 2.00 | 3.993 | 1.740 | 20.036 | 0.078216309 | 0.900656298 |
| 2.25 | 2.515 | 0.909 | 20.945 | 0.040861278 | 0.941517576 |
| 2.50 | 1.675 | 0.435 | 21.380 | 0.019554077 | 0.961071653 |
| 2.75 | 0.745 | 0.181 | 21.561 | 0.008136294 | 0.969207947 |
| 3.00 | 0.356 | 0.111 | 21.672 | 0.004989661 | 0.974197609 |
| 3.25 | 0.163 | 0.065 | 21.737 | 0.002921874 | 0.977119482 |
| 3.50 | 0.188 | 0.120 | 21.857 | 0.005394228 | 0.982513710 |
| 3.75 | 0.178 | 0.127 | 21.984 | 0.005708891 | 0.988222602 |
| 4.00 | 0.227 | 0.110 | 22.094 | 0.004944709 | 0.993167311 |
| PAN | 0.374 | 0.152 | 22.246 | 0.006832689 |  |
|  |  |  |  |  | 1.0 |

TOTAL WT.
DIGESTED WT.
\% SILICA

| 123.026 | grams |
| :--- | :--- |
| 22.246 | grams |
| 18.082 |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: 12.0 -14.0 ft


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 14.0-16.0 ft

| $\begin{aligned} & \mathrm{PHI} \\ & \mathrm{SIZE} \end{aligned}$ | TOTAL WT. | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 0.772 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.908 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 1.208 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.975 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 2.212 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 2.384 | 0.015 | 0.015 | 0.000624584 | 0.000624584 |
| -0.50 | 3.272 | 0.036 | 0.051 | 0.001499001 | 0.002123584 |
| -0.25 | 4.222 | 0.308 | 0.359 | 0.012824783 | 0.014948368 |
| 0.00 | 4.736 | 0.585 | 0.944 | 0.024358761 | 0.039307129 |
| 0.25 | 7.575 | 0.963 | 1.907 | 0.040098268 | 0.079405396 |
| 0.50 | 8.244 | 1.018 | 2.925 | 0.042388408 | 0.121793804 |
| 0.75 | 8.944 | 1.014 | 3.939 | 0.042221852 | 0.164015656 |
| 1.00 | 10.127 | 1.487 | 5.426 | 0.061917055 | 0.225932712 |
| 1.25 | 10.877 | 2.772 | 8.198 | 0.115423051 | 0.341355763 |
| 1.50 | 9.456 | 4.116 | 12.314 | 0.171385743 | 0.512741506 |
| 1.75 | 11.357 | 4.790 | 17.104 | 0.199450366 | 0.712191872 |
| 2.00 | 7.165 | 2.615 | 19.719 | 0.108885743 | 0.821077615 |
| 2.25 | 5.654 | 1.437 | 21.156 | 0.059835110 | 0.880912725 |
| 2.50 | 4.575 | 0.903 | 22.059 | 0.037599933 | 0.918512658 |
| 2.75 | 2.276 | 0.433 | 22.492 | 0.018029647 | 0.936542305 |
| 3.00 | 0.937 | 0.236 | 22.728 | 0.009826782 | 0.946369087 |
| 3.25 | 0.462 | 0.169 | 22.897 | 0.007036975 | 0.953406063 |
| 3.50 | 0.621 | 0.366 | 23.263 | 0.015239840 | 0.968645903 |
| 3.75 | 0.649 | 0.393 | 23.656 | 0.016364091 | 0.985009993 |
| 4.00 | 0.387 | 0.183 | 23.839 | 0.007619920 | 0.992629913 |
| PAN | 0.446 | 0.177 | 24.016 | 0.007370087 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | $\begin{gathered} 111.441 \\ 24.016 \\ 21.550 \end{gathered}$ | grams grams |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 16.0-18.0 ft

| $\begin{aligned} & \hline \text { PHI } \\ & \text { SIZE } \end{aligned}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | DIGESTED WT. \% | $\begin{aligned} & \hline \text { CUM DIG } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 5.133 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 1.356 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 1.321 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.617 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 2.561 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 2.394 | 0.013 | 0.013 | 0.000589944 | 0.000589944 |
| -0.50 | 2.516 | 0.076 | 0.089 | 0.003448902 | 0.004038846 |
| -0.25 | 3.227 | 0.304 | 0.393 | 0.013795607 | 0.017834453 |
| 0.00 | 5.021 | 0.985 | 1.378 | 0.044699583 | 0.062534035 |
| 0.25 | 9.496 | 1.930 | 3.308 | 0.087583954 | 0.150117989 |
| 0.50 | 10.210 | 1.879 | 5.187 | 0.085269559 | 0.235387548 |
| 0.75 | 10.067 | 1.703 | 6.890 | 0.077282628 | 0.312670176 |
| 1.00 | 9.951 | 1.984 | 8.874 | 0.090034489 | 0.402704665 |
| 1.25 | 9.178 | 2.812 | 11.686 | 0.127609366 | 0.530314032 |
| 1.50 | 6.989 | 3.118 | 14.804 | 0.141495734 | 0.671809766 |
| 1.75 | 6.847 | 3.248 | 18.052 | 0.147395172 | 0.819204937 |
| 2.00 | 3.688 | 1.722 | 19.774 | 0.078144854 | 0.897349791 |
| 2.25 | 2.267 | 0.805 | 20.579 | 0.036531131 | 0.933880922 |
| 2.50 | - 1.528 | 0.383 | 20.962 | 0.017380650 | 0.951261572 |
| 2.75 | 0.766 | 0.173 | 21.135 | 0.007850790 | 0.959112362 |
| 3.00 | 0.399 | 0.121 | 21.256 | 0.005491015 | 0.964603376 |
| 3.25 | 0.193 | 0.091 | 21.347 | 0.004129606 | 0.968732982 |
| 3.50 | 0.314 | 0.176 | 21.523 | 0.007986930 | 0.976719913 |
| 3.75 | 0.335 | 0.219 | 21.742 | 0.009938283 | 0.986658196 |
| 4.00 | 0.244 | 0.128 | 21.870 | 0.005808677 | 0.992466872 |
| PAN | 0.310 | 0.166 | 22.036 | 0.007533128 | 1.0 |
| TOTAL WT. |  |  | 97.928 | grams |  |
| DIGESTED WT. |  |  | 22.036 | grams |  |
| \% SILICA |  |  | 22.502 |  |  |



## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 9: 18.0-20.0 ft

| $\begin{gathered} \text { PHI } \\ \text { SIZE } \end{gathered}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | DIGESTED WT. $\%$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 4.823 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.732 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.961 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 1.246 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 1.745 | 0.009 | 0.009 | 0.000397948 | 0.000397948 |
| -0.75 | 1.664 | 0.008 | 0.017 | 0.000353732 | 0.000751680 |
| -0.50 | 2.758 | 0.042 | 0.059 | 0.001857092 | 0.002608773 |
| -0.25 | 5.689 | 0.403 | 0.462 | 0.017819243 | 0.020428016 |
| 0.00 | 6.759 | 0.512 | 0.974 | 0.022638840 | 0.043066855 |
| 0.25 | 7.805 | 0.606 | 1.580 | 0.026795189 | 0.069862045 |
| 0.50 | 7.058 | 0.603 | 2.183 | 0.026662540 | 0.096524584 |
| 0.75 | 7.295 | 0.820 | 3.003 | 0.036257517 | 0.132782101 |
| 1.00 | 8.381 | 1.422 | 4.425 | 0.062875840 | 0.195657941 |
| 1.25 | 9.452 | 2.395 | 6.820 | 0.105898479 | 0.301556420 |
| 1.50 | 9.298 | 3.393 | 10.213 | 0.150026530 | 0.451582950 |
| 1.75 | 11.905 | 5.709 | 15.922 | 0.252431907 | 0.704014857 |
| 2.00 | 8.072 | 3.682 | 19.604 | 0.162805094 | 0.866819950 |
| 2.25 | 4.810 | 1.681 | 21.285 | 0.074327909 | 0.941147860 |
| 2.50 | 2.484 | 0.568 | 21.853 | 0.025114963 | 0.966262823 |
| 2.75 | 1.035 | 0.165 | 22.018 | 0.007295720 | 0.973558543 |
| 3.00 | 0.442 | 0.080 | 22.098 | 0.003537319 | 0.977095861 |
| 3.25 | 0.239 | 0.063 | 22.161 | 0.002785638 | 0.979881500 |
| 3.50 | 0.262 | 0.117 | 22.278 | 0.005173329 | 0.985054828 |
| 3.75 | 0.234 | 0.091 | 22.369 | 0.004023700 | 0.989078528 |
| 4.00 | 0.192 | 0.088 | 22.457 | 0.003891051 | 0.992969579 |
| PAN | 0.302 | 0.159 | 22.616 | 0.007030421 | 1.0 |
| TOTAL WT. <br> DIGESTED WT. \% SILICA |  |  | 105.643 22.616 <br> 21.408 | grams grams |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 9: 18.0-20.0 ft


Phi Size

| POST DIGESTION GRAIN SIZE DISTRIBUTION CHART |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CORE VB 10: 0 - 2.0 ft |  |  |  |  |  |
| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| SIZE | WT. | WT. | WT. | WT. \% | WT. \% |
| $<-2.00$ | 0.802 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.387 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.490 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.442 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.631 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.762 | 0.016 | 0.016 | 0.000256492 | 0.000256492 |
| -0.50 | 1.662 | 0.565 | 0.581 | 0.009057390 | 0.009313883 |
| -0.25 | 5.406 | 4.172 | 4.753 | 0.066880410 | 0.076194293 |
| 0.00 | 12.177 | 10.436 | 15.189 | 0.167297211 | 0.243491504 |
| 0.25 | 18.815 | 14.625 | 29.814 | 0.234450144 | 0.477941648 |
| 0.50 | 13.775 | 9.058 | 38.872 | 0.145206797 | 0.623148445 |
| 0.75 | 11.235 | 5.871 | 44.743 | 0.094116704 | 0.717265149 |
| 1.00 | 9.525 | 4.719 | 49.462 | 0.075649247 | 0.792914396 |
| 1.25 | 7.772 | 4.049 | 53.511 | 0.064908625 | 0.857823020 |
| 1.50 | 5.062 | 2.960 | 56.471 | 0.047451106 | 0.905274126 |
| 1.75 | 4.295 | 2.516 | 58.987 | 0.040333440 | 0.945607567 |
| 2.00 | 2.177 | 1.378 | 60.365 | 0.022090414 | 0.967697980 |
| 2.25 | 1.260 | 0.836 | 61.201 | 0.013401731 | 0.981099711 |
| 2.50 | 0.596 | 0.404 | 61.605 | 0.006476435 | 0.987576146 |
| 2.75 | 0.272 | 0.144 | 61.749 | 0.002308432 | 0.989884578 |
| 3.00 | 0.163 | 0.063 | 61.812 | 0.001009939 | 0.990894517 |
| 3.25 | 0.102 | 0.064 | 61.876 | 0.001025970 | 0.991920487 |
| 3.50 | 0.101 | 0.110 | 61.986 | 0.001763386 | 0.993683873 |
| 3.75 | 0.094 | 0.106 | 62.092 | 0.001699263 | 0.995383136 |
| 4.00 | 0.085 | 0.112 | 62.204 | 0.001795447 | 0.997178583 |
| PAN | 0.132 | 0.176 | 62.380 | 0.002821417 | 1.0 |
| TOTAL WT. |  |  | 98.220 | grams |  |
| DIGESTED WT. |  |  | 62.380 | grams |  |
| \% SILICA |  |  | 63.510 |  |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 10: 0-2.0 ft


Phi Size

| POST DIGESTION GR <br> CORE VB 10: 2.0-4.0 ft |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PHI | TOTAL | DIGESTED | CUM DIG | DIGESTED | CUM DIG |
| SIZE | WT. | WT. | WT. | WT. \% | WT. \% |
| <-2.00 | 0.613 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.365 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.473 | 0.052 | 0.052 | 0.000808219 | 0.000808219 |
| -1.25 | 0.906 | 0.021 | 0.073 | 0.000326396 | 0.001134615 |
| -1.00 | 0.848 | 0.030 | 0.103 | 0.000466280 | 0.001600895 |
| -0.75 | 1.024 | 0.009 | 0.112 | 0.000139884 | 0.001740779 |
| -0.50 | 1.328 | 0.190 | 0.302 | 0.002953108 | 0.004693887 |
| -0.25 | 2.786 | 1.328 | 1.630 | 0.020640669 | 0.025334556 |
| 0.00 | 6.053 | 4.500 | 6.130 | 0.069942026 | 0.095276582 |
| 0.25 | 12.495 | 8.311 | 14.441 | 0.129175150 | 0.224451732 |
| 0.50 | 14.274 | 7.882 | 22.323 | 0.122507344 | 0.346959076 |
| 0.75 | 15.171 | 6.608 | 28.931 | 0.102705979 | 0.449665055 |
| 1.00 | 15.450 | 6.449 | 35.380 | 0.100234694 | 0.549899750 |
| 1.25 | 14.759 | 6.619 | 41.999 | 0.102876949 | 0.652776698 |
| 1.50 | 10.956 | 5.553 | 47.552 | 0.086308460 | 0.739085158 |
| 1.75 | 11.949 | 6.238 | 53.790 | 0.096955190 | 0.836040349 |
| 2.00 | 8.231 | 4.461 | 58.251 | 0.069335862 | 0.905376210 |
| 2.25 | 5.558 | 2.846 | 61.097 | 0.044234446 | 0.949610656 |
| 2.50 | 2.794 | 1.149 | 62.246 | 0.017858531 | 0.967469187 |
| 2.75 | 1.125 | 0.399 | 62.645 | 0.006201526 | 0.973670713 |
| 3.00 | 0.555 | 0.222 | 62.867 | 0.003450473 | 0.977121186 |
| 3.25 | 0.452 | 0.195 | 63.062 | 0.003030821 | 0.980152007 |
| 3.50 | 0.517 | 0.340 | 63.402 | 0.005284509 | 0.985436516 |
| 3.75 | 0.450 | 0.315 | 63.717 | 0.004895942 | 0.990332458 |
| 4.00 | 0.329 | 0.249 | 63.966 | 0.003870125 | 0.994202583 |
| PAN | 0.431 | 0.373 | 64.339 | 0.005797417 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | $\begin{aligned} & 129.892 \\ & 64.339 \\ & 49.533 \end{aligned}$ | grams <br> grams |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 10: 2.0-4.0 ft


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 10 : 4.0-6.0 ft

| $\begin{gathered} \mathrm{PHI} \\ \mathrm{SIZE} \end{gathered}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { WT. } \end{aligned}$ | DIGESTED WT. | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. \% } \end{gathered}$ | CUM DIG WT. \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| <-2.00 | 7.646 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 2.979 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 2.853 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 2.440 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 2.489 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 2.171 | 0.019 | 0.019 | 0.000394879 | 0.000394879 |
| -0.50 | 2.165 | 0.197 | 0.216 | 0.004094272 | 0.004489151 |
| -0.25 | 3.146 | 1.520 | 1.736 | 0.031590323 | 0.036079475 |
| 0.00 | 5.759 | 4.095 | 5.831 | 0.085106825 | 0.121186300 |
| 0.25 | 9.609 | 6.355 | 12.186 | 0.132076648 | 0.253262948 |
| 0.50 | 9.405 | 5.354 | 17.540 | 0.111272758 | 0.364535705 |
| 0.75 | 9.731 | 4.294 | 21.834 | 0.089242664 | 0.453778369 |
| 1.00 | 10.091 | 4.178 | 26.012 | 0.086831823 | 0.540610192 |
| 1.25 | 9.963 | 4.417 | 30.429 | 0.091798986 | 0.632409178 |
| 1.50 | 7.564 | 4.292 | 34.721 | 0.089201097 | 0.721610275 |
| 1.75 | 8.524 | 4.702 | 39.423 | 0.097722171 | 0.819332447 |
| 2.00 | 5.973 | 3.469 | 42.892 | 0.072096600 | 0.891429046 |
| 2.25 | 4.169 | 2.237 | 45.129 | 0.046491811 | 0.937920858 |
| 2.50 | 2.523 | 1.052 | 46.181 | 0.021863829 | 0.959784687 |
| 2.75 | 1.180 | 0.414 | 46.595 | 0.008604207 | 0.968388894 |
| 3.00 | 0.646 | 0.201 | 46.796 | 0.004177405 | 0.972566298 |
| 3.25 | 0.466 | 0.169 | 46.965 | 0.003512345 | 0.976078643 |
| 3.50 | 0.450 | 0.247 | 47.212 | 0.005133428 | 0.981212071 |
| 3.75 | 0.458 | 0.287 | 47.499 | 0.005964752 | 0.987176823 |
| 4.00 | 0.396 | 0.260 | 47.759 | 0.005403608 | 0.992580431 |
| PȦN | 0.637 | 0.357 | 48.116 | 0.007419569 | 1.0 |
| TOTAL WT. DIGESTED WT. \% SILICA |  |  | $\begin{gathered} 113.433 \\ 48.116 \\ 42.418 \end{gathered}$ | grams grams |  |

POST DIGESTED GRAIN SIZE DISTRIBUTION VB 10: 4.0-6.0 ft


## POST DIGESTION GRAIN SIZE DISTRIBUTION CHART

CORE VB 10: 18.0-20.0 ft

| $\begin{aligned} & \hline \mathrm{PHI} \\ & \mathrm{SIZE} \end{aligned}$ | TOTAL WT. | $\begin{gathered} \text { DIGESTED } \\ \text { WT. } \end{gathered}$ | CUM DIG WT. | $\begin{gathered} \hline \text { DIGESTED } \\ \text { WT. } \% \end{gathered}$ | $\begin{aligned} & \hline \text { CUM DIG } \\ & \text { WT. \% } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $<-2.00$ | 0.530 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.75 | 0.150 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.50 | 0.472 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.25 | 0.695 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -1.00 | 0.536 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.75 | 0.707 | 0.000 | 0.000 | 0.000000000 | 0.000000000 |
| -0.50 | 1.097 | 0.016 | 0.016 | 0.000167933 | 0.000167933 |
| -0.25 | 1.673 | 0.136 | 0.152 | 0.001427432 | 0.001595365 |
| 0.00 | 1.811 | 0.350 | 0.502 | 0.003673538 | 0.005268903 |
| 0.25 | 2.300 | 0.701 | 1.203 | 0.007357572 | 0.012626475 |
| 0.50 | 2.472 | 1.491 | 2.694 | 0.015649272 | 0.028275746 |
| 0.75 | 3.905 | 3.067 | 5.761 | 0.032190688 | 0.060466434 |
| 1.00 | 7.501 | 6.478 | 12.239 | 0.067991939 | 0.128458374 |
| 1.25 | 13.557 | 11.886 | 24.125 | 0.124753348 | 0.253211722 |
| 1.50 | 15.536 | 13.573 | 37.698 | 0.142459801 | 0.395671523 |
| 1.75 | 22.843 | 21.146 | 58.844 | 0.221944666 | 0.617616189 |
| 2.00 | 16.867 | 15.879 | 74.723 | 0.166663168 | 0.784279357 |
| 2.25 | 10.826 | 10.207 | 84.930 | 0.107130862 | 0.891410219 |
| 2.50 | 5.446 | 4.966 | 89.896 | 0.052122255 | 0.943532474 |
| 2.75 | 2.723 | 2.378 | 92.274 | 0.024959066 | 0.968491540 |
| 3.00 | 1.573 | 1.392 | 93.666 | 0.014610185 | 0.983101726 |
| 3.25 | 0.806 | 0.591 | 94.257 | 0.006203031 | 0.989304757 |
| 3.50 | 0.364 | 0.353 | 94.610 | 0.003705025 | 0.993009782 |
| 3.75 | 0.246 | 0.147 | 94.757 | 0.001542886 | 0.994552668 |
| 4.00 | 0.325 | 0.175 | 94.932 | 0.001836769 | 0.996389437 |
| PAN | 0.563 | 0.344 | 95.276 | 0.003610563 | 1.0 |
| TOTAL WT. |  |  | 115.524 | grams |  |
| DIGESTED WT. |  |  | 95.276 | grams |  |
| \% SILICA |  |  | 82.473 |  |  |



