






VIBRACORE LOG						
PROJECT: LIDO KEY SAND SEARCH BORROW AREA 1 CORE NO: LKVC - 5						
COORDINATES: N = 1075235 E = 279391	DATE: JAN. 26, 1995 START TIME: 0844 END TIME: 0847	WATER DEPTH: 32.0 Ft. NGVD DRILLER: EXMAR CLIENT REP: M. D. ANDREWS				
CORE DIAMETER: 2.5" LENGTH OF BARREL: 12.0' PENETRATION DEPTH: 6.6' LENGTH RECOVERED: 6.6' LENGTH RETAINED : 6.6'	ELEV. 32.0'	DEPTH 0.0	LEGEND	DESCRIPTION	SAMP NO.	REMARKS
SUPPORT VESSEL: EXMAR II POSITIONING: DGPS MOTOROLA LGT 1000 / USCG BEACON <u>WEATHER:</u> <u>WIND:</u> DIR: NW SPEED: 5 Kt <u>WAVES:</u> DIR: NW HEIGHT: 1 Ft. <u>CURRENT:</u> DIR: SOUTH SPEED: LIGHT ANALYSIS BY: MDA <u>ANALYSIS METHOD:</u> VISUAL LOGGING MECHANICAL SIEVE <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> <div style="text-align: center;"> SAND  </div> <div style="text-align: center;"> SHELLS  </div> </div> <div style="display: flex; justify-content: space-around; font-size: 0.8em;"> <div style="text-align: center;"> ROCK FRAG.  </div> <div style="text-align: center;"> SHELL HASH  </div> </div> <div style="text-align: center; font-size: 0.8em;"> ROCK  </div>	33.6'	1.6	~	GRAY (NS), FINE / MEDIUM GRAINED SAND WITH CALCAREOUS SHELL HASH	1 1.0' 33.0'	1.36 Phi 0.39 mm 2.3 % SILT (SP)
	35.9'	2.5	~	GRAY (NS), FINE / MEDIUM GRAINED SAND WITH CALCAREOUS SHELL HASH	2 2.5' 34.5'	1.91 Phi 0.27 mm 2.4 % SILT (SP)
	35.9'	3.9	~		3 4.0' 35.5'	1.78 Phi 0.29 mm 3.1 % SILT (SP)
	38.6'	5.0	~	LIGHT GREENISH GRAY (10Y 8/1) FINE / MEDIUM GRAINED SAND	4 5.5' 37.5'	2.68 Phi 0.16 mm 11.8 % SILT (SP - SM)
	38.6'	6.6	X X X X X	ROCK		
	38.6'	7.5				
	38.6'	10.0				
	38.6'					
	38.6'					
	38.6'					

NOTE: MEAN WAS CALCULATED USING MOMENT METHOD
 NOTE: COORDINATE SYSTEM - FLORIDA STATE PLANE NAD 1927
 NOTE: CORE WEIGHTED COMPOSITE 0.24 mm

COASTAL PLANNING & ENGINEERING, INC

GRADATION ANALYSIS REPORT
LIDO KEY VIBRACORE JAN. 1995
TESTED BY: MDA ON: 02-27-95

SAMPLE NO.: LKVC-5 S#1
SAMPLE ELEV. (FT. NGVD): -33.0
SAMPLE DEPTH (FT.): -1.0
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 71.86
SAMPLE WEIGHT AFTER WASH (GRAMS): 70.30

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.41	.57	99.43
7	-1.5	2.800	.78	1.09	98.91
10	-1.0	2.000	1.53	2.13	97.87
14	-0.5	1.400	3.34	4.65	95.35
18	0.0	1.000	6.42	8.93	91.07
25	0.5	.710	13.83	19.25	80.75
35	1.0	.500	27.11	37.73	62.27
45	1.5	.355	37.36	51.99	48.01
60	2.0	.250	48.10	66.94	33.06
80	2.5	.180	60.93	84.79	15.21
120	3.0	.125	68.91	95.89	4.11
170	3.5	.090	70.11	97.56	2.44
200	3.75	.075	70.20	97.69	2.31
230	4.0	.063	70.99	98.79	1.21
PAN			71.77	99.87	.13

PHI(5): -.46 PHI(16): .34 PHI(25): .66
PHI(50): 1.43 PHI(75): 2.23 PHI(84): 2.48
PHI(95): 2.96

SIEVE LOSS(g): .09 SILT/CLAY: 2.31%
SKEWNESS: -.360 KURTOSIS: .892

GRAPHIC METHOD
MEAN (PHI): 1.35 SORTING: 1.07
MEAN (mm): .39 MEDIAN (mm): .37
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD
MEAN (PHI): 1.36 SORTING: 1.07
MEAN (mm): .39

DATA FILE NAME: LKVC5-S1.TAB

GRADATION ANALYSIS REPORT
LIDO KEY VIBRACORE JAN. 1995
TESTED BY: MDA ON: 02-27-95

SAMPLE NO.: LKVC-5 S#2
SAMPLE ELEV. (FT. NGVD): -34.5
SAMPLE DEPTH (FT.): -2.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 69.43
SAMPLE WEIGHT AFTER WASH (GRAMS): 67.82

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.31	.45	99.55
7	-1.5	2.800	.56	.81	99.19
10	-1.0	2.000	.98	1.41	98.59
14	-0.5	1.400	1.87	2.69	97.31
18	0.0	1.000	3.35	4.83	95.17
25	0.5	.710	7.00	10.08	89.92
35	1.0	.500	14.36	20.68	79.32
45	1.5	.355	20.50	29.53	70.47
60	2.0	.250	28.55	41.12	58.88
80	2.5	.180	43.72	62.97	37.03
120	3.0	.125	63.34	91.23	8.77
170	3.5	.090	67.43	97.12	2.88
200	3.75	.075	67.74	97.57	2.43
230	4.0	.063	68.61	98.83	1.17
PAN			69.43	100.00	.00

PHI(5): .02 PHI(16): .78 PHI(25): 1.24
PHI(50): 2.20 PHI(75): 2.71 PHI(84): 2.87
PHI(95): 3.32

SIEVE LOSS(g): .00 SILT/CLAY: 2.43%
SKEWNESS: -1.070 KURTOSIS: .922

GRAPHIC METHOD

MEAN (PHI): 1.84 SORTING: 1.05
MEAN (mm): .28 MEDIAN (mm): .22
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.91 SORTING: 1.06
MEAN (mm): .27

DATA FILE NAME: LKVC5-S2.TAB

GRADATION ANALYSIS REPORT
LIDO KEY VIBRACORE JAN. 1995
TESTED BY: MDA ON: 02-27-95

SAMPLE NO.: LKVC-5 S#3
SAMPLE ELEV. (FT. NGVD): -35.5
SAMPLE DEPTH (FT.): -3.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 58.75
SAMPLE WEIGHT AFTER WASH (GRAMS): 57.08

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.17	.29	99.71
7	-1.5	2.800	.54	.92	99.08
10	-1.0	2.000	1.10	1.87	98.13
14	-0.5	1.400	2.97	5.06	94.94
18	0.0	1.000	3.59	6.11	93.89
25	0.5	.710	8.02	13.65	86.35
35	1.0	.500	15.66	26.66	73.34
45	1.5	.355	21.37	36.37	63.63
60	2.0	.250	27.69	47.13	52.87
80	2.5	.180	38.20	65.02	34.98
120	3.0	.125	52.40	89.19	10.81
170	3.5	.090	56.54	96.24	3.76
200	3.75	.075	56.93	96.90	3.10
230	4.0	.063	57.85	98.48	1.52
PAN			58.71	99.93	.07

PHI(5): -.51 PHI(16): .59 PHI(25): .94
PHI(50): 2.08 PHI(75): 2.71 PHI(84): 2.89
PHI(95): 3.41

SIEVE LOSS(g): .04 SILT/CLAY: 3.10%
SKEWNESS: -1.257 KURTOSIS: .908

GRAPHIC METHOD

MEAN (PHI): 1.69 SORTING: 1.15
MEAN (mm): .31 MEDIAN (mm): .24
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 1.78 SORTING: 1.16
MEAN (mm): .29

DATA FILE NAME: LKVC5-S3.TAB

GRADATION ANALYSIS REPORT
LIDO KEY VIBRACORE JAN. 1995
TESTED BY: MDA ON: 02-27-95

SAMPLE NO.: LKVC-5 S#4
SAMPLE ELEV. (FT. NGVD): -37.5
SAMPLE DEPTH (FT.): -5.5
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 66.02
SAMPLE WEIGHT AFTER WASH (GRAMS): 58.87

SIEVE SIZE	PHI SIZE	MESH SIZE (mm)	RETAINED (GRAMS)	RETAINED (%)	PASSED (%)
5/8	-4.0	16.000	.00	.00	100.00
5/16	-3.0	8.000	.00	.00	100.00
5	-2.0	4.000	.46	.70	99.30
7	-1.5	2.800	.88	1.33	98.67
10	-1.0	2.000	1.34	2.03	97.97
14	-0.5	1.400	1.90	2.88	97.12
18	0.0	1.000	2.59	3.92	96.08
25	0.5	.710	3.73	5.65	94.35
35	1.0	.500	5.12	7.76	92.24
45	1.5	.355	6.21	9.41	90.59
60	2.0	.250	8.53	12.92	87.08
80	2.5	.180	15.56	23.57	76.43
120	3.0	.125	33.69	51.03	48.97
170	3.5	.090	53.34	80.79	19.21
200	3.75	.075	58.25	88.23	11.77
230	4.0	.063	62.39	94.49	5.51
PAN			66.00	99.97	.03

PHI(5): .31 PHI(16): 2.14 PHI(25): 2.53
PHI(50): 2.98 PHI(75): 3.40 PHI(84): 3.61
PHI(95): 4.02

SIEVE LOSS(g): .02 SILT/CLAY: 11.77%
SKEWNESS: -1.630 KURTOSIS: 1.734

GRAPHIC METHOD

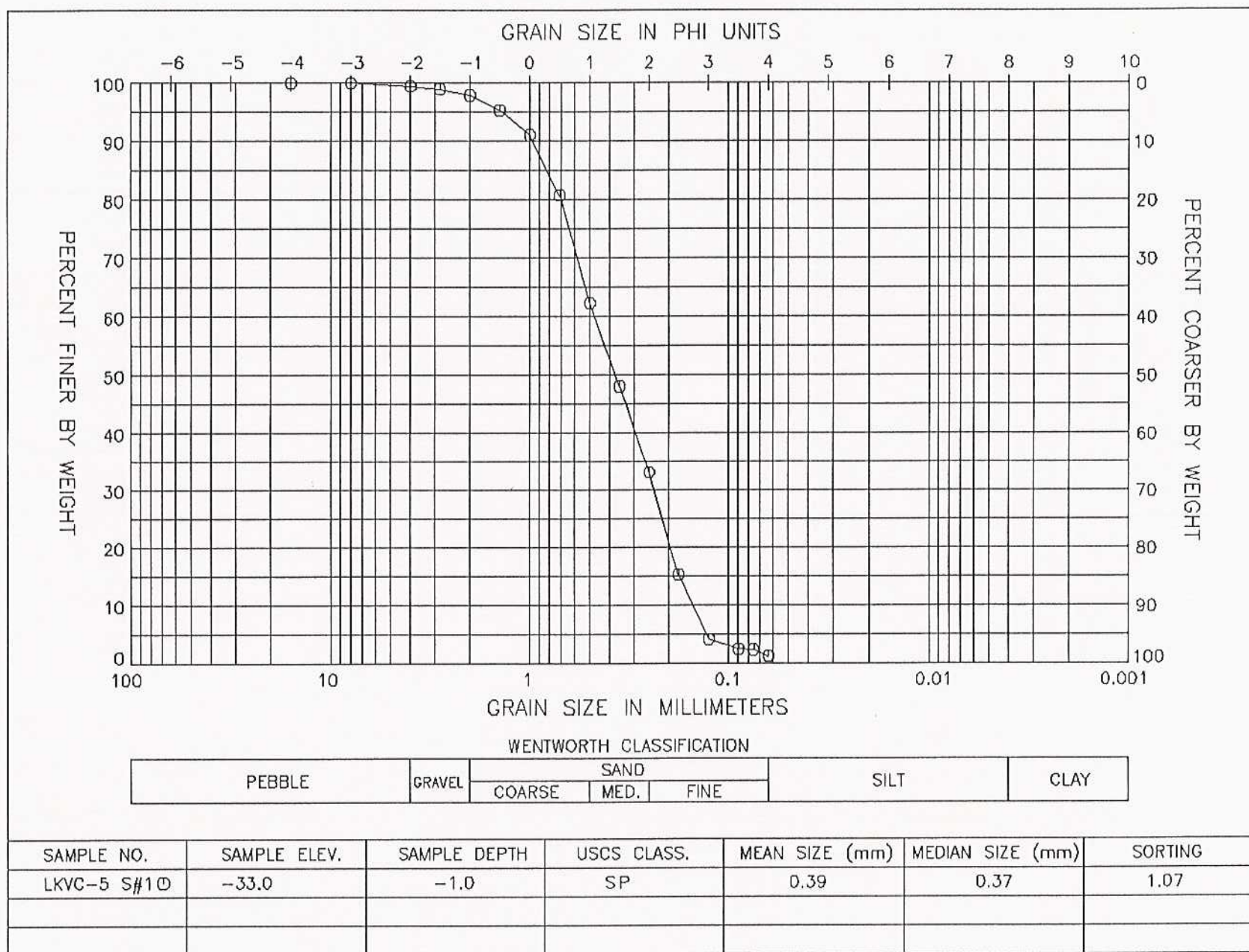
MEAN (PHI): 2.61 SORTING: .73
MEAN (mm): .16 MEDIAN (mm): .13
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

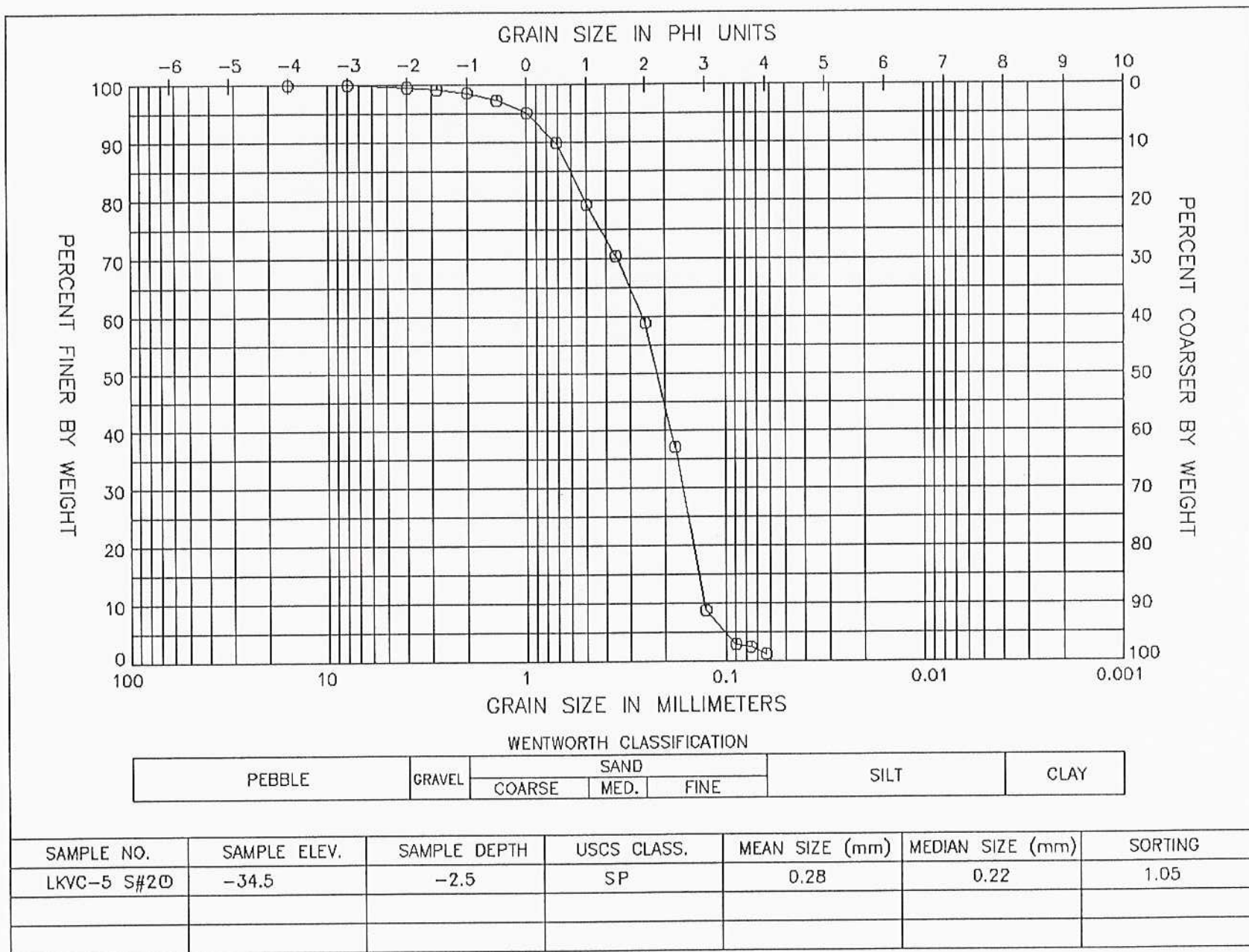
MEAN (PHI): 2.68 SORTING: 1.09
MEAN (mm): .16

DATA FILE NAME: LKVC5-S4.TAB

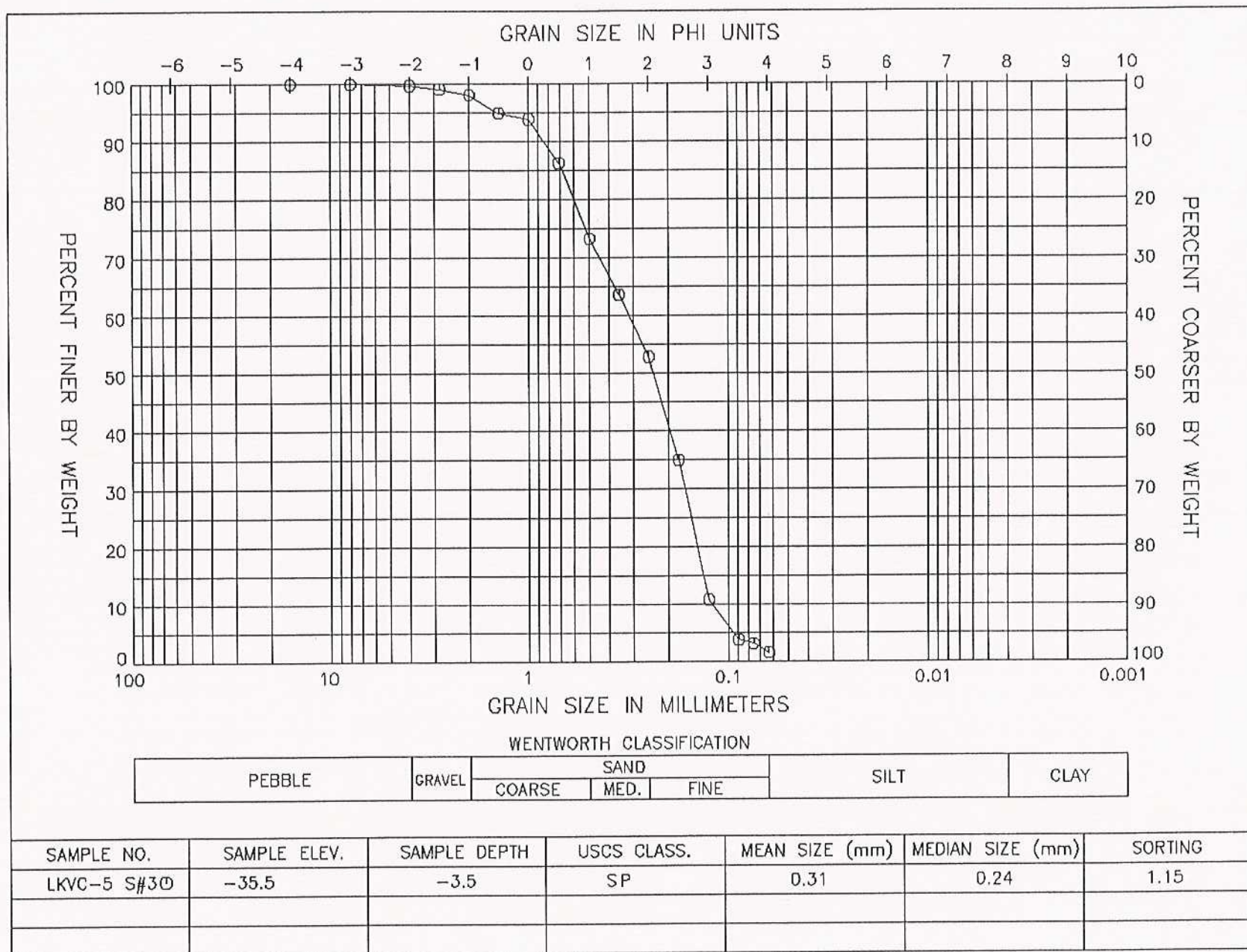
GRAIN SIZE DISTRIBUTION CURVE
LIDO KEY VIBRACORE JAN. 1995



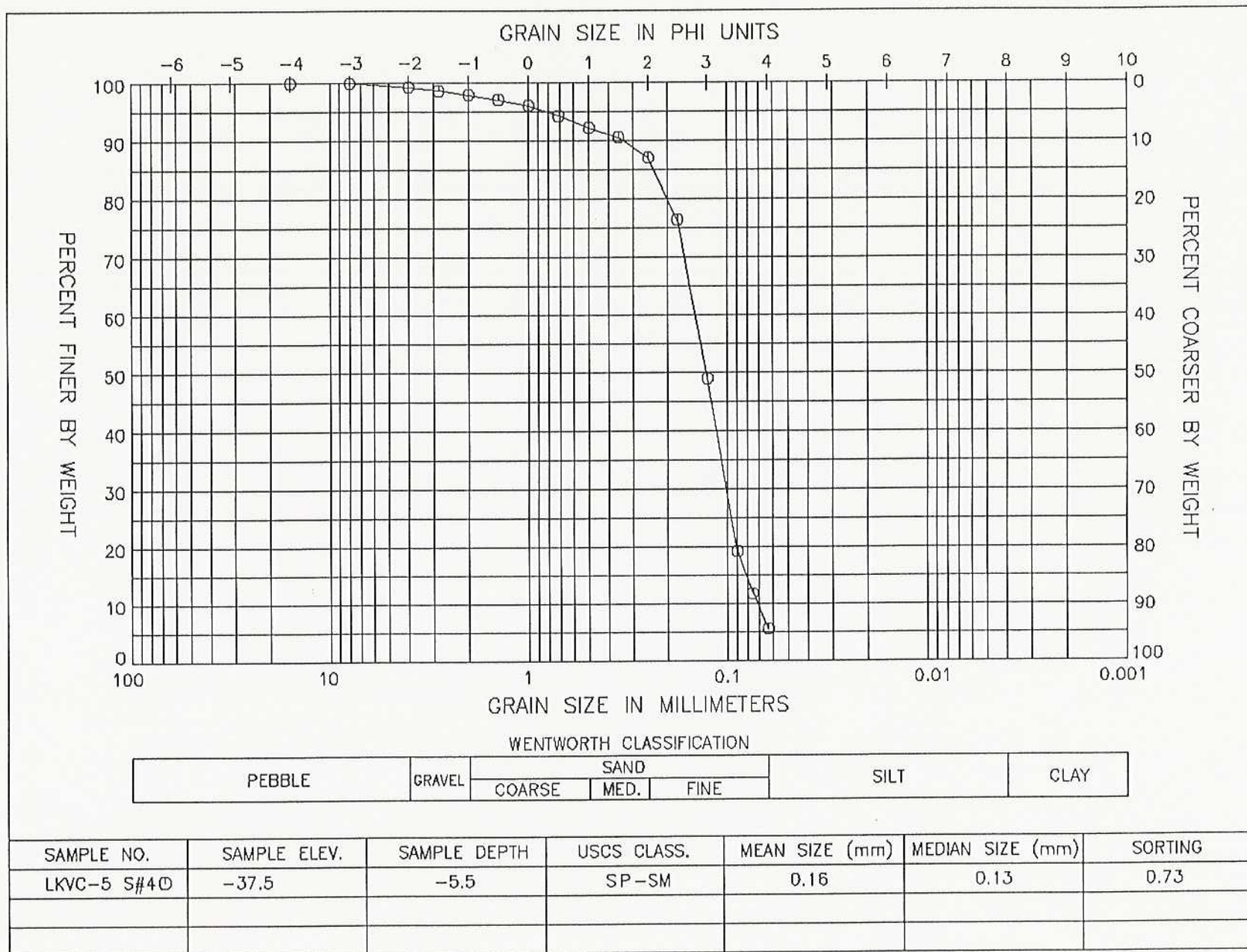
GRAIN SIZE DISTRIBUTION CURVE
LIDO KEY VIBRACORE JAN. 1995

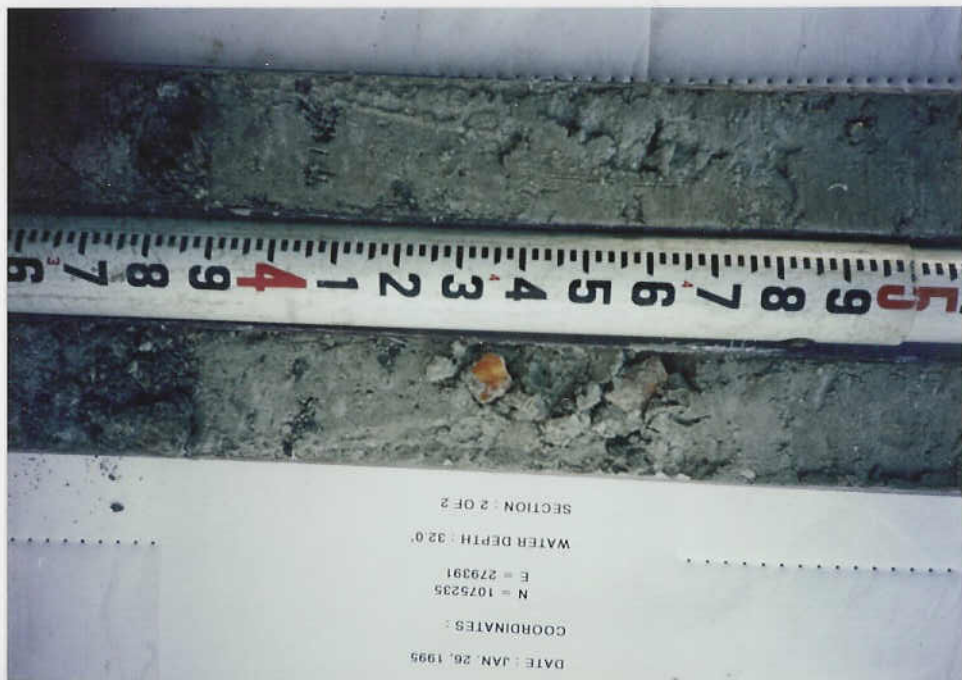
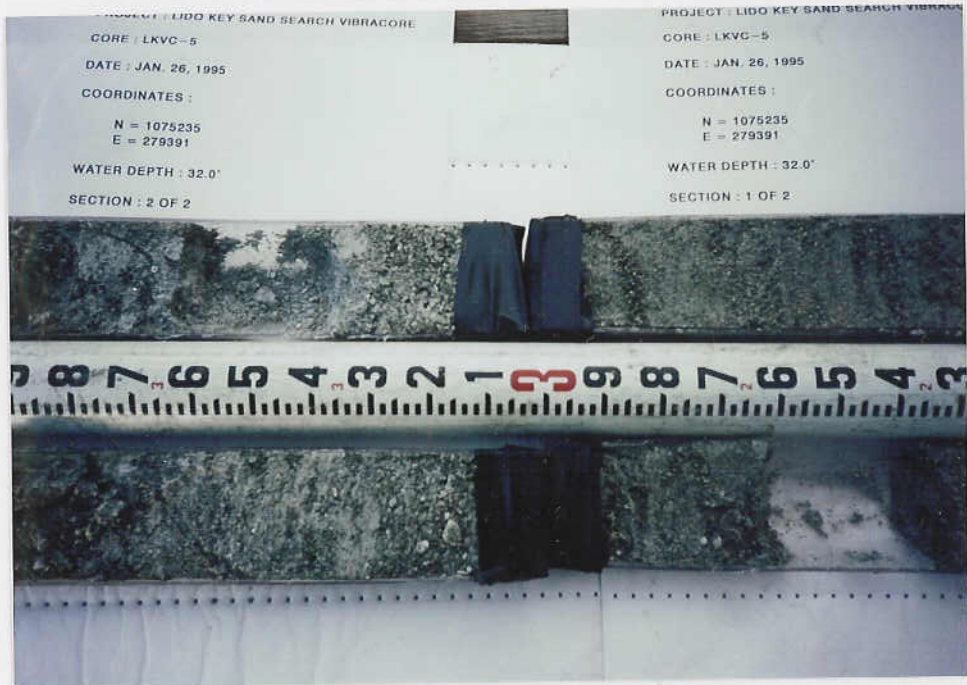


GRAIN SIZE DISTRIBUTION CURVE
LIDO KEY VIBRACORE JAN. 1995

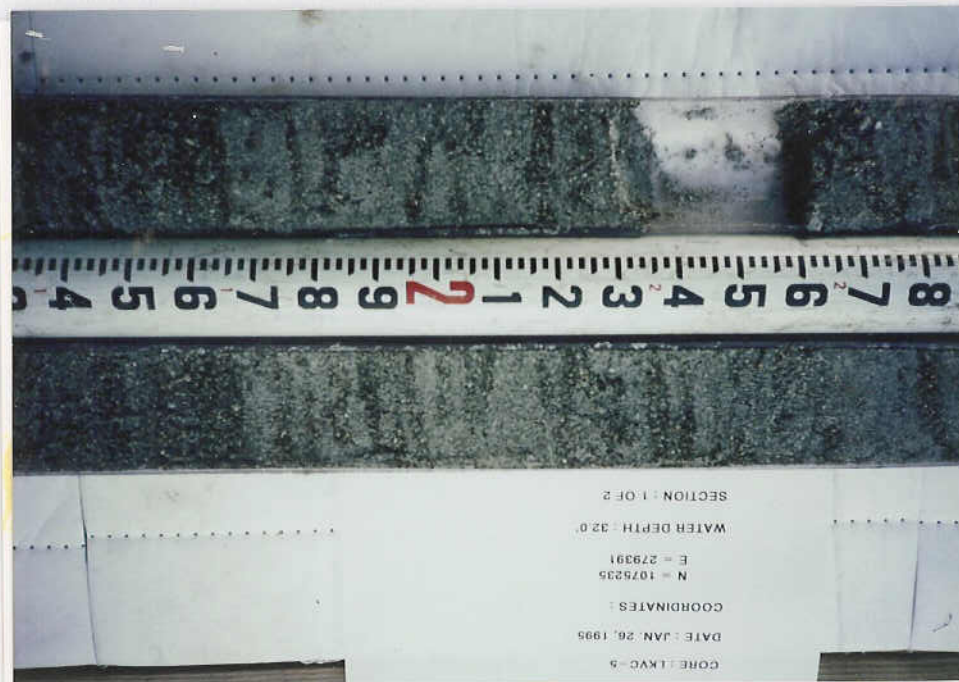
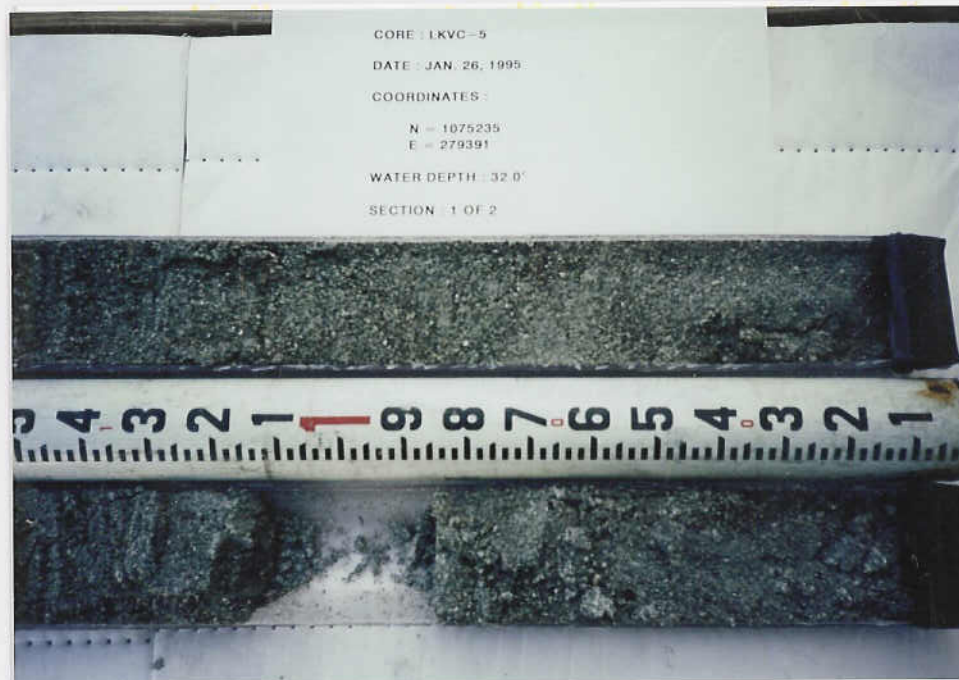


GRAIN SIZE DISTRIBUTION CURVE
LIDO KEY VIBRACORE JAN. 1995





LKVC-5



DATE : JAN. 26, 1995

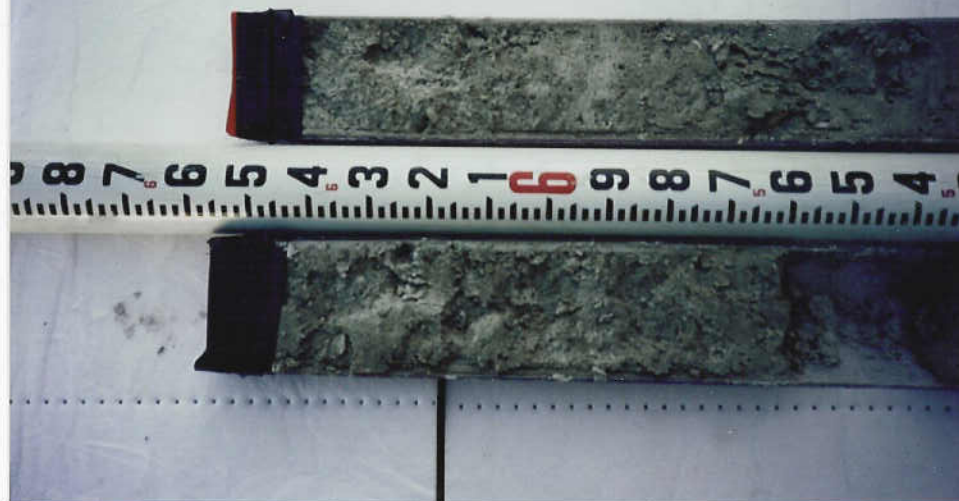
COORDINATES :

N = 1075235

E = 279391

WATER DEPTH : 32.0'

SECTION : 2 OF 2



CORE : LKVC-5

DATE : JAN. 26, 1995

COORDINATES :

N = 1075235

E = 279391

WATER DEPTH : 32.0'

SECTION : 2 OF 2

