






VIBRACORE LOG							
PROJECT: LIDO KEY SAND SEARCH BORROW AREA 4    CORE NO: LKVC - 14							
COORINATES: N = 1086276 E = 272300	DATE: JAN. 27, 1995 START TIME: 1216 END TIME: 1224	WATER DEPTH: 34.0 Ft. NGVD DRILLER: EXMAR CLIENT REP: M. D. ANDREWS					
CORE DIAMETER: 2.5"  LENGTH OF BARREL: 12.0'  PENETRATION DEPTH: 10.3'  LENGTH RECOVERED: 7.3'  LENGTH RETAINED : 7.3'	ELEV.	DEPTH	LEGEND	DESCRIPTION	SAMP NO.	REMARKS	
	34.0'	0.0					
			~	GRAY (N6), FINE / MEDIUM GRAINED SAND WITH	1	0.90 Phi	
			~	CALCAROUS SHELL HASH	1.0'	0.54 mm	
			~		35.0	2.4 % SILT (SP)	
SUPPORT VESSEL: EXMAR II	36.0'	2.0	~				
POSITIONING: DGPS MOTOROLA LGT 1000 / USCG BEACON		2.5		LIGHT GREENISH GRAY (10Y 7/1) FINE / MEDIUM GRAINED SAND		2.54 Phi	
WEATHER:  WIND: DIR: VAR. SPEED: LIGHT  WAVES: DIR: VAR HEIGHT: 0 - 1 Ft.  CURRENT: DIR: SOUTH SPEED: LIGHT			A	MOLLUSK SHELLS	2	0.17 mm	
			@	1 - 2 cm ROCK FRAGMENTS	3.0'	7.8 % SILT (SP - SM)	
			A	MOLLUSK SHELLS	37.0		
		5.0		LIGHT GREENISH GRAY (10Y 7/1) FINE / MEDIUM GRAINED SAND	3	2.82 Phi	
			@		5.0'	0.14 mm	
			@		39.0	26.5% SILT (SS)	
	39.7'	5.7'		LIGHT GREENISH GRAY (10Y 7/1) FINE / MEDIUM GRAINED SAND WITH			
			@	1 - 2 cm ROCK FRAGMENTS			
ANALYSIS BY: MDA			@				
ANALYSIS METHOD: VISUAL LOGGING MECHANICAL SIEVE	41.3'	7.3'					
		7.5					
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>SAND</p> </div> <div style="text-align: center;">  <p>SHELLS</p> </div> </div> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>ROCK FRAG.</p> </div> <div style="text-align: center;">  <p>SHELL HASH</p> </div> </div> <div style="text-align: center;">  <p>ROCK</p> </div>			NOT RECOVERED				
			10.0				
		44.3'	10.3'				
				X X X	ROCK		

NOTE: MEAN WAS CALCULATED USING MOMENT METHOD  
 NOTE: COORDINATE SYSTEM - FLORIDA STATE PLANE NAD 1927  
 NOTE: CORE WEIGHTED COMPOSITE 0.25 mm

**COASTAL PLANNING & ENGINEERING, INC**

GRADATION ANALYSIS REPORT  
LIDO KEY VIBRACORE JAN. 1995  
TESTED BY: MDA ON: 03-02-95

SAMPLE NO.: LKVC-14 S1  
SAMPLE ELEV. (FT. NGVD): -35.0  
SAMPLE DEPTH (FT.): -1.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP

DRY SAMPLE WEIGHT (GRAMS): 62.83  
SAMPLE WEIGHT AFTER WASH (GRAMS): 61.37

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	.36	.57	99.43
7	-1.5	2.800	1.05	1.67	98.33
10	-1.0	2.000	2.20	3.50	96.50
14	-0.5	1.400	4.94	7.86	92.14
18	0.0	1.000	9.49	15.10	84.90
25	0.5	.710	19.71	31.37	68.63
35	1.0	.500	35.30	56.18	43.82
45	1.5	.355	45.95	73.13	26.87
60	2.0	.250	54.65	86.98	13.02
80	2.5	.180	58.19	92.61	7.39
120	3.0	.125	60.72	96.64	3.36
170	3.5	.090	61.27	97.52	2.48
200	3.75	.075	61.32	97.60	2.40
230	4.0	.063	62.06	98.77	1.23
PAN			62.79	99.94	.06

PHI(5): -.83	PHI(16): .03	PHI(25): .30
PHI(50): .88	PHI(75): 1.57	PHI(84): 1.89
PHI(95): 2.80		

SIEVE LOSS(g): .04	SILT/CLAY: 2.40%
SKEWNESS: .217	KURTOSIS: 1.176

GRAPHIC METHOD

MEAN (PHI): .95	SORTING: .93
MEAN (mm): .52	MEDIAN (mm): .55

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): .90	SORTING: 1.02
MEAN (mm): .54	

DATA FILE NAME: LKVC14S1.TAB



GRADATION ANALYSIS REPORT  
LIDO KEY VIBRACORE JAN. 1995  
TESTED BY: MDA ON: 03-02-95

SAMPLE NO.: LKVC-14 S2  
SAMPLE ELEV. (FT. NGVD): -37.0  
SAMPLE DEPTH (FT.): -3.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SP-SM

DRY SAMPLE WEIGHT (GRAMS): 59.63  
SAMPLE WEIGHT AFTER WASH (GRAMS): 55.50

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	.29	.49	99.51
7	-1.5	2.800	.43	.72	99.28
10	-1.0	2.000	.80	1.34	98.66
14	-0.5	1.400	1.26	2.11	97.89
18	0.0	1.000	1.85	3.10	96.90
25	0.5	.710	3.35	5.62	94.38
35	1.0	.500	5.94	9.96	90.04
45	1.5	.355	8.27	13.87	86.13
60	2.0	.250	12.00	20.12	79.88
80	2.5	.180	16.73	28.06	71.94
120	3.0	.125	35.40	59.37	40.63
170	3.5	.090	52.02	87.24	12.76
200	3.75	.075	55.00	92.24	7.76
230	4.0	.063	57.43	96.32	3.68
PAN			59.56	99.88	.12

PHI(5): .38 PHI(16): 1.67 PHI(25): 2.31  
PHI(50): 2.85 PHI(75): 3.28 PHI(84): 3.44  
PHI(95): 3.92

SIEVE LOSS(g): .07  
SKEWNESS: -1.404

SILT/CLAY: 7.76%  
KURTOSIS: 1.492

GRAPHIC METHOD

MEAN (PHI): 2.45

MEAN (mm): .18

NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.54

MEAN (mm): .17

SORTING: 1.06

DATA FILE NAME: LKVC14S2.TAB

GRADATION ANALYSIS REPORT  
LIDO KEY VIBRACORE JAN. 1995  
TESTED BY: MDA ON: 03-02-95

SAMPLE NO.: LKVC-14 S3  
SAMPLE ELEV. (FT. NGVD): -39.0  
SAMPLE DEPTH (FT.): -5.0  
SAMPLE TYPE: CORE SAMPLE

USCS DESCRIPTION: SS

DRY SAMPLE WEIGHT (GRAMS): 72.65  
SAMPLE WEIGHT AFTER WASH (GRAMS): 54.32

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	1.25	1.72	98.28
7	-1.5	2.800	1.93	2.66	97.34
10	-1.0	2.000	2.44	3.36	96.64
14	-0.5	1.400	2.98	4.10	95.90
18	0.0	1.000	3.60	4.96	95.04
25	0.5	.710	4.42	6.08	93.92
35	1.0	.500	5.50	7.57	92.43
45	1.5	.355	6.37	8.77	91.23
60	2.0	.250	7.68	10.57	89.43
80	2.5	.180	10.68	14.70	85.30
120	3.0	.125	24.64	33.92	66.08
170	3.5	.090	46.18	63.57	36.43
200	3.75	.075	53.38	73.48	26.52
230	4.0	.063	63.33	87.18	12.82
PAN			72.57	99.89	.11

PHI(5): .02 PHI(16): 2.53 PHI(25): 2.77  
PHI(50): 3.27 PHI(75): 3.78 PHI(84): 3.94  
PHI(95): 4.14

SIEVE LOSS(g): .08 SILT/CLAY: 26.52%  
SKEWNESS: -2.380 KURTOSIS: 1.673

GRAPHIC METHOD

MEAN (PHI): 2.78 SORTING: .70  
MEAN (mm): .15 MEDIAN (mm): .10  
NOTE: MEAN WAS CALCULATED USING 5 POINT METHOD

MOMENT METHOD

MEAN (PHI): 2.82 SORTING: 1.29  
MEAN (mm): .14

DATA FILE NAME: LKVC14S3.TAB



GRAIN SIZE IN PHI UNITS

PERCENT FINER BY WEIGHT

PERCENT COARSER BY WEIGHT

GRAIN SIZE IN MILLIMETERS

WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	SAND			SILT	CLAY
		COARSE	MED.	FINE		

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
LKVC-14 S10	-35.0	-1.0	SP	0.52	0.55	0.93

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
LKVC-14 S10	-35.0	-1.0	SP	0.52	0.55	0.93

GRAIN SIZE IN PHI UNITS

PERCENT FINER BY WEIGHT

PERCENT COARSER BY WEIGHT

GRAIN SIZE IN MILLIMETERS

WENTWORTH CLASSIFICATION

PEBBLE	GRAVEL	SAND			SILT	CLAY
		COARSE	MED.	FINE		

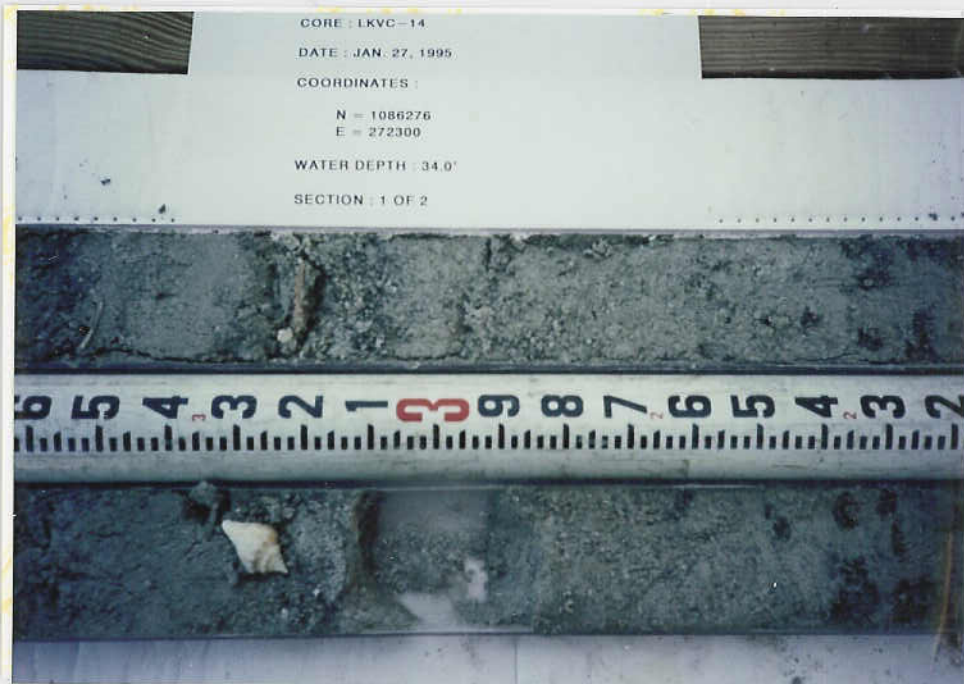
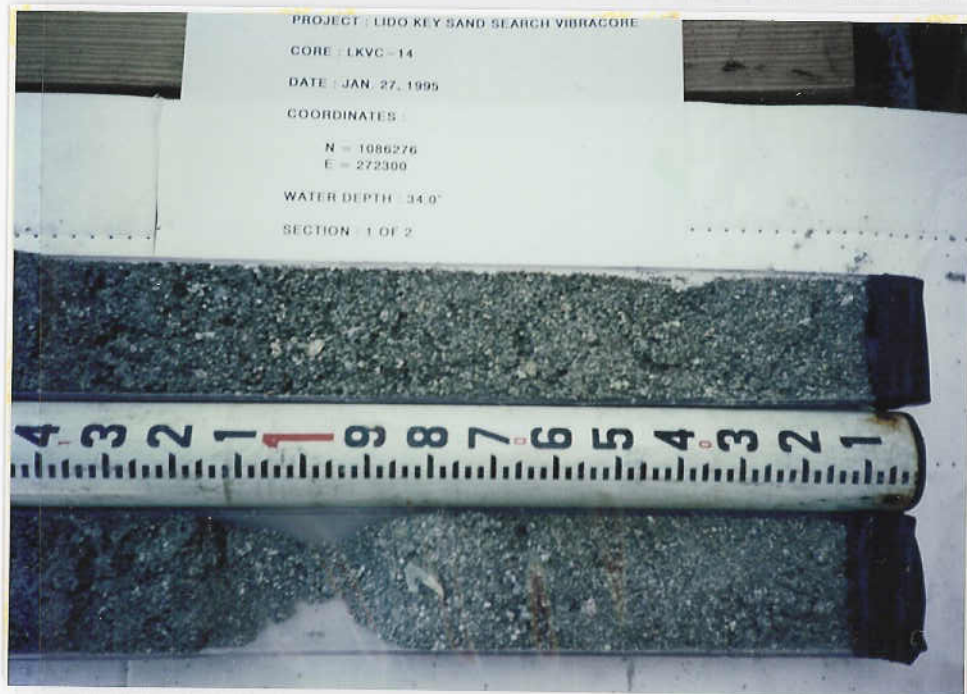
SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
LKVC-14 S2O	-37.0	-3.0	SP-SM	0.18	0.14	0.89

SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
LKVC-14 S2①	-37.0	-3.0	SP-SM	0.18	0.14	0.89



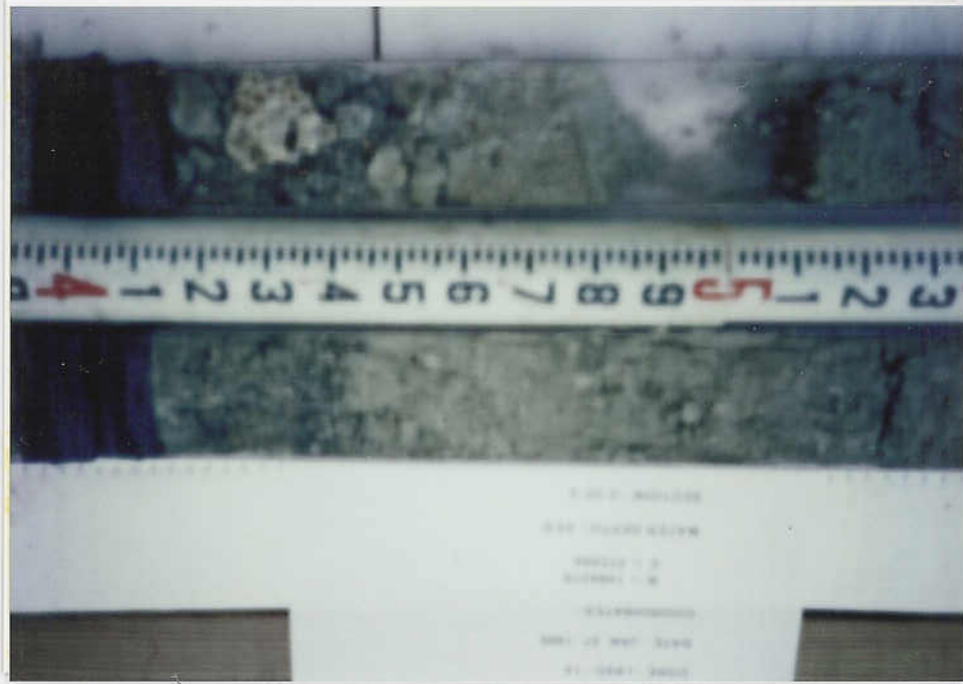
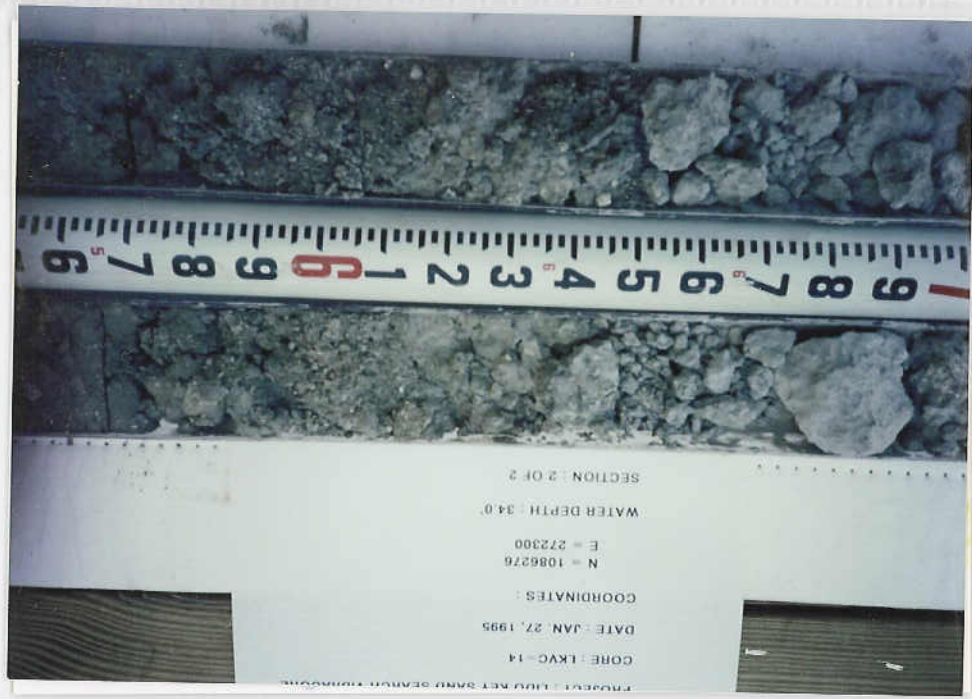
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SAMPLE NO.	SAMPLE ELEV.	SAMPLE DEPTH	USCS CLASS.	MEAN SIZE (mm)	MEDIAN SIZE (mm)	SORTING
LKVC-14 S3D	-39.0	-5.0	SS	0.15	0.10	0.70



LKVC-14





LKVC-14