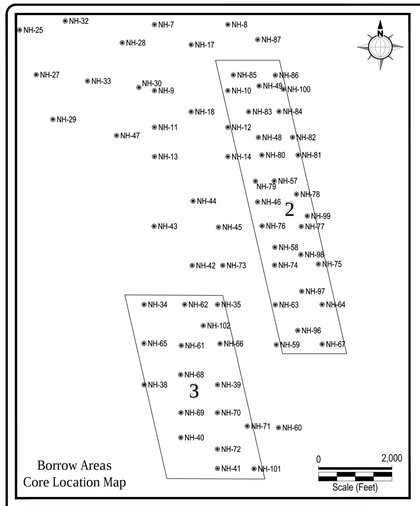

Borrow Areas
Core Location Map

CORE LOG — Coastal Science & Engineering — Sheet 01 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 804390.815 E: 3024997.588 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-01
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -60.0 ft
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 50 ft. Note: True depth determined from bathymetry
13. DATE HOLE: Started 6/23/2005 Completed 6/23/2005
14. ELEVATION OF TOP HOLE: -53.1 ft
15. TOTAL CORE RECOVERY FOR BORING: 7.7
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS-CS clean tan with minor shell clast heavy min and trace of pebbles to 6ft fairly uniform	100%	S1	M_{21} = .349 mm
	1		surf clam - 8 cm			
	2					
	3					
	4					
	5		lt greyish tan w/slight mottling			
	6					
	7		mixed CS & crushed shell, clean greyish tan			
			FS, clean with minor shell tannish lt grey		S2	M_{22} = .296 mm
	8					
	9					
	10					

7.7 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 10 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 797190.815 E: 3020997.588 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-10
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -53.8 ft
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 44 ft. Note: True depth determined from bathymetry
13. DATE HOLE: Started 07/18/05 Completed 07/18/05
14. ELEVATION OF TOP HOLE: -45.0 ft
15. TOTAL CORE RECOVERY FOR BORING: 8.8 ft
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		6 cm CLAM	100%	S1	M_{21} = .469 mm
	1		CS, GRANULES W/MINOR PEA GRAVEL AND SHELL FRAGMENTS CLEAN, TAN			
	2					
	3					
	4					
	5					
	6		MS W/CONCENTRATION OF CS @ 4.8-5.0 FT 5.8-6.6 FT, 7.0-7.1 FT CLEAN, MOTTLED TAN & MED GREY		NS	
	7					
	8					
	9					
	10					

8.8 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 12 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 799190.815 E: 3020997.588 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-12
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -52.1 ft
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 40 ft. Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/18/05 Completed 7/18/05
14. ELEVATION OF TOP HOLE: -42.8 ft
15. TOTAL CORE RECOVERY FOR BORING: 9.3 ft
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		VCS, mixed CS, granules and minor pea gravel and minor shell fragments tan, clean	100%	S1	M_{21} = .559 mm
	1		Shell clast			
	2					
	3					
	4		Graded MS to granules w/conc pea gravel, shells @ 4.0'-4.4', 5.0'-5.2', 5.6'-5.8'			
	5		Oyster shell clast		S2	M_{22} = .516 mm
	6					
	7		Shell clasts			
	8		FS, MS w/minor shell fragments and vcs concentration @ 7.2'-7.7 ft tan, clean w/mottling @ 6.2-8.2 ft		S3	M_{23} = .417 mm
	9					
	10					

9.3 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 14 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 795390.815 E: 3020997.588 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-14
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -52.5
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 44 Note: True depth determined from bathymetry
13. DATE HOLE: Started 5/23/05 Completed 5/23/05
14. ELEVATION OF TOP HOLE: -43.4
15. TOTAL CORE RECOVERY FOR BORING: 9.1
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		CS grading to granular cs @ 5 ft clean, tan w/minor shell	100%	S1	M_{21} = .526 mm
	1					UPPER 2 FT EXCELLENT
	2					
	3		3 cm black shell clast			SLIGHTLY FINER AT 2.0-3.3 FT
	4					
	5					BECOMING GRANULAR AT ~4.0 FT
	6					
	7		MS, tan clean grading to ~6.6 ft (cs)		S2	M_{22} = .333 mm
	8		4 cm black clay clast			SAMPLE EXCLUDES CLAY CLAST
	9		MS w/some mottling heavy mineral concentration @ 8.4 ft			
	10					

9.1 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 34 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 791358.950 E: 3024715.089 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-34
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -58.3
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 48 Note: True depth determined from bathymetry
13. DATE HOLE: Started 6/22/2005 Completed 6/22/2005
14. ELEVATION OF TOP HOLE: -48.4
15. TOTAL CORE RECOVERY FOR BORING: 8.9
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		Mixed CS, pea gravel & shells, clean, tan	100%	S1	M_{21} = .575 mm
	1		Shell clasts			
	2					Graded CS to MS between 1.6' - 3.0'
	3					
	4					
	5		MS, fairly uniform w/trace shell greyish tan w/mottling throughout			
	6				S2	M_{22} = .303 mm
	7					
	8					
	9					
	10					

8.9 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 35 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 791358.950 E: 3020715.089 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-35
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -59.2
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 42 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/08/2005 Completed 7/08/2005
14. ELEVATION OF TOP HOLE: -44.3
15. TOTAL CORE RECOVERY FOR BORING: 5.9
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		Graded MS to granules w/minor pea gravel at base, clean, tan	100%	S1	M_{21} = .464 mm
	1		Trace shells 1 cm shell			
	2		MS, mottled, lt grey & tan grading to CS, tan, uniform @ 4.4' to bottom			
	3				S2	M_{22} = .364 mm
	4					
	5					
	6					
	7					
	8					
	9					
	10					

5.9 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 37 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 789171.710 E: 3024715.089 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-38
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -56.6
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 45 Note: True depth determined from bathymetry
13. DATE HOLE: Started 6/21/2005 Completed 6/21/2005
14. ELEVATION OF TOP HOLE: -50.7
15. TOTAL CORE RECOVERY FOR BORING: 5.9
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS - CS w/minor shell frags & pebbles relatively uniform, clean, tan	100%	S1	M_{21} = .424 mm
	1					
	2		No mottling			
	3					
	4		Minor pebbles & shell conc. @ 3.3'-4.0'			
	5					
	6		10 cm oyster clast			
	7					
	8					
	9					
	10					

5.9 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 38 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 789171.710 E: 3020715.089 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-39
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -50.7
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 41 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/08/2005 Completed 7/08/2005
14. ELEVATION OF TOP HOLE: -42.4
15. TOTAL CORE RECOVERY FOR BORING: 8.3
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		CS, clean, tan w/minor crushed shells minor pea gravel	100%	S1	M_{21} = .471 mm
	1		Grading to granules, VCS @ 1.9'-2.4'			
	2					
	3		CS, clean, tan w/minor crushed shell grading to VCS, granules @ 4.2'-4.6'			
	4					
	5					
	6		MS, CS, clean tan W/mottling lt gray< minor shells		S2	M_{22} = .422 mm
	7		Shell clast			
	8		Shell concentration			
	9					
	10					

8.3 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 39 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 787731.267 E: 3020715.089 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-40
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -58.9
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 45 Note: True depth determined from bathymetry
13. DATE HOLE: Started 6/21/2005 Completed 6/21/2005
14. ELEVATION OF TOP HOLE: -50.0
15. TOTAL CORE RECOVERY FOR BORING: 8.9
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		CS, w/scattered pea gravel at top fining to MS @ ~6.0', scattered shell clasts clean, tan throughout	100%	S1	M_{21} = .426 mm
	1					
	2					
	3					
	4					4.0'
	5					
	6					
	7		Mottling @ 6.7'		S2	M_{22} = .359 mm
	8		Shell fragment 4 cm shell clast			
	9					
	10					

8.9 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 40 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 786889.815 E: 3020715.089 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-41
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -61.5
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 52 Note: True depth determined from bathymetry
13. DATE HOLE: Started 6/22/2005 Completed 6/22/2005
14. ELEVATION OF TOP HOLE: -52.4
15. TOTAL CORE RECOVERY FOR BORING: 9.1
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS, clean tan with trace shell uniform	100%	S1	M_{21} = .329 mm
	1					
	2					
	3					
	4		Shell fragment		S2	M_{22} = .298 mm
	5		MS, clean tan			
	6					
	7					
	8					
	9					
	10					

9.1 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 45 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 794156.514 E: 3027806.935 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-46
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -62.6
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 33 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/06/2005 Completed 7/06/2005
14. ELEVATION OF TOP HOLE: -34.6
15. TOTAL CORE RECOVERY FOR BORING: 8.0
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0			100%	S1	M_{21} = .441 mm
	1					
	2		MS - CS, clean, tan w/conc of VCS, minor pea gravel @ 0.6'-1.0', 1.9'-2.1' minor shell frags			
	3					
	4					
	5					
	6				S2	M_{22} = .509 mm
	7		CS, clean, tan w/conc of VCS & pea gravel @4.1'-5.1', 5.6'-5.8', 6.1'-6.2' & 7.2'-7.3'			
	8					
	9					
	10					

8.0 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 47 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 799913.777 E: 3027830.366 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-48
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -52.8
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 42 Note: True depth determined from bathymetry
13. DATE HOLE: Started 6/24/2005 Completed 6/24/2005
14. ELEVATION OF TOP HOLE: -45.0
15. TOTAL CORE RECOVERY FOR BORING: 7.8
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS, CS granules with minor shell clasts and shell fragments, tan , clean to 6.7'	100%	S1	M_{21} = .434 mm
	1		Clam 4 cm fragment			
	2					
	3					
	4		CS - granule conc's @ 3.8' - 4.8', clean, tan			
	5		Oyster 4 cm Coarser		S2	M_{22} = .530 mm
	6					
	7		MS, clean, tan & grey mottled with minor shell		NS	
	8					
	9					
	10					

7.8 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 48 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 797319.588 E: 3027849.110 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-49
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -55.1
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 45 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/18/2005 Completed 7/18/2005
14. ELEVATION OF TOP HOLE: -47.1
15. TOTAL CORE RECOVERY FOR BORING: 8.0
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS - CS w/conc of granules, minor shell frags @ surface, 1.0'-1.1', 2.4'-2.8' clean, tan	100%	S1	M_{21} = .493 mm
	1					
	2					
	3		MS w/trace shell frags, uniform clean, tan			
	4					
	5		MS - CS & local conc of granules crushed shell @ 3.9'-4.2', 5.2'-5.7', & 6.3'-6.8'		S2	M_{22} = .388 mm
	6					
	7					
	8					
	9					
	10					

8.0 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 57 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 792918.503 E: 3028280.223 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-58
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -52.7
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 42 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/08/2005 Completed 7/08/2005
14. ELEVATION OF TOP HOLE: -44.9
15. TOTAL CORE RECOVERY FOR BORING: 7.8
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		Graded MS to granules w/minor pea gravel @ 3.4'-4.4' clean, tan, minor shell frags	100%	S1	M_{21} = .456 mm
	1		5 cm clam shell			
	2					
	3					
	4					
	5					
	6		MS - CS mottled grey and tan, clean trace shells			
	7		Shell clasts - greyish black - reduced zone		S2	M_{22} = .351 mm
	8					
	9					
	10					

7.8 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 58 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 790263.659 E: 3028318.699 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-59
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -45.8
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 49 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/09/2005 Completed 7/09/2005
14. ELEVATION OF TOP HOLE: -36.8
15. TOTAL CORE RECOVERY FOR BORING: 9.0
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS - CS w/minor granules, pea gravel & trace crushed shell, clean, tan	100%	S1	M_{21} = .448 mm
	1					
	2		Ms grading to cs, clean, tan, uniform to 3.4'			
	3		conc of granules, pea gravel @ 3.4'-3.8'			
	4		ms, cs, clean, tan below 3.6'		S2	M_{22} = .373 mm
	5					
	6					
	7		Cs w/conc of granules, pea gravel & minor shell frags, tan, clean			
	8		4 cm clast			
	9		Conc of heavy minerals & silt minor mottling lt grey w/fs conc.		S3	M_{23} = .428 mm
	10					

9.0 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 60 of 60

1. PROJECT # / NAME: 2145-02 NAGS HEAD OFFSHORE CORING
2. LOCALITY: OFFSHORE NAGS HEAD BORROW AREA (USACE S-1)
3. COORDINATES: N: 790240.933 E: 3025728.027 GRID DATUM: SPCS NAD '83 (feet) NC 3200
4. HOLE NO. (As shown on Drawing Title and file number): NH-61
5. FIELD TEAM INITIALS: PAM / III / BMF / DSD
6. DIRECTION OF HOLE: Vertical
7. THICKNESS OF BURDEN: -
8. TOTAL DEPTH OF HOLE: -53.9
9. SIZE AND TYPE OF BARREL: 3 in. Aluminum
10. DATUM FOR ELEVATION SHOWN: NGVD '29
11. DESIGNATION OF CORING DEVICE: Coastal Science & Engineering
12. OPERATIONAL NOTES: Water Depth (ft): 46 Note: True depth determined from bathymetry
13. DATE HOLE: Started 7/19/2005 Completed 7/19/2005
14. ELEVATION OF TOP HOLE: -47.6
15. TOTAL CORE RECOVERY FOR BORING: 8.3
16. SIGNATURE OF GEOLOGIST: TWK # NC 1752

Elevation	Depth	Lithology	Classification Of Materials (Description)	Core Recovery	Sample #	Remarks
	0		MS - CS w/conc of granules, pea gravel & shell frags (minor) at 5.4'-5.8', 2.1'-2.6', 3.6'-4.0' clean, tan	100%	S1	M_{21} = .428 mm
	1					
	2					
	3		5 cm shell clast			
	4					
	5		MS - CS w/conc of granules, & trace shell frags@ 4.9'-5.3', clean, tan		S2	M_{22} = .369 mm
	6		Mottling grey black @ 4.1'-5.1'			
	7					
	8					
	9					
	10					

6.3 ft Bottom

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 791358.950 Easting: 3025819.700 Grid Datum: NAD '83
HOLE NUMBER: NH-62
DATE: 2004-Aug-21
BORE ANGLE: 90.00°
TOP ELEVATION: -54.50 ft. NGVD '29
DEVICE DESIGNATION: Coastal Science & Engineering
BURDEN THICKNESS: 6.6 ft.
BOTTOM ELEVATION: -61.10 ft. NGVD '29
BARREL SIZE/TYPE: 3 in. Aluminum
CORE RECOVERY: 6.6 ft. (100.0%)
WATER DEPTH: (operational note only)
GEOLOGIST: TWK - NC #1752
FIELD TEAM: PAM, JD, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
1		0.0 to 4.2 ft: Coarse Sand - clean, tan, shell and shell frags mixed throughout	S1	S1: 0.0 ft. to 3.5 ft.
2		3.0 ft: Shell Cluster		
3				
4		4.2 to 6.6 ft: Coarse Sand - lt gray, some mottling around 5.5, occasional shell frags	S2	S2: 3.5 ft. to 6.6 ft.
5				
6				
7				
8				
9				
10				

NO.	REVISION	BY	DATE

CSE
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CLIENT:
TOWN OF NAGS HEAD
5401 SOUTH CROATAN HWY
NAGS HEAD NC 27959

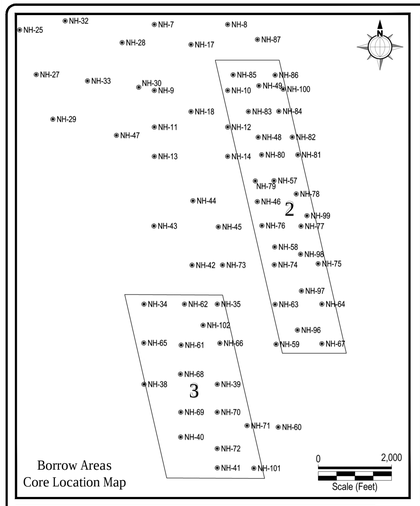
PROJECT:
TOWN OF NAGS HEAD
BEACH NOURISHMENT PROJECT

DRAWING TITLE:
GEOTECHNICAL DATA
CORE LOGS 01 - 62

Preliminary Drawing Not For Construction

SCALE:	AS SHOWN
DATE:	Jan 2011
DRAWN BY:	JJH
APPROVED BY:	TWK/HLK
PROJECT #:	2203-CD

SHEET NO: 16
OF: 21



Borrow Areas
Core Location Map

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 791352.409 Easting: 3028291.921 Grid Datum: NAD '83
HOLE NUMBER: NH-63
DATE: 2006-Aug-21 | TOP ELEVATION: -40.40 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -49.90 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.5 ft.
CORE RECOVERY: 9.5 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, BF, JG

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 8.2 ft: Coarse Sand - dark tan, uniform with shell fragments throughout 0.5 ft: Shell Cluster - shell fragments	S1	S1: 0.0 ft. to 4.5 ft.
		2.4 ft: Shell Cluster - stopping layer of shell frags from 2.3 to 2.5		
		4.0 ft: Shell Cluster - shell fragments		
			S2	S2: 4.5 ft. to 9.5 ft.
		8.2 to 9.5 ft: Coarse Sand - lt gray, uniform		

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 791359.412 Easting: 3029567.534 Grid Datum: NAD '83
HOLE NUMBER: NH-64
DATE: 2007-Aug-21 | TOP ELEVATION: -38.50 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -48.00 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.5 ft.
CORE RECOVERY: 9.5 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 9.5 ft: Coarse Sand - lt gray, uniform with shell hash occasionally throughout		
		3.5 ft: Shell Cluster - shell hash and pea gravel		
		5.3 ft: Mud Kissed - cobbell		
		8.4 ft: Shell Clam - shell fragment	S1	
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 790292.128 Easting: 3026785.121 Grid Datum: NAD '83
HOLE NUMBER: NH-66
DATE: | TOP ELEVATION: -44.40 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -54.20 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.8 ft.
CORE RECOVERY: 9.8 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 7.9 ft: Coarse Sand - tan, clean w/ small shell hash	S1	S1: 0.0 ft. to 5.2 ft.
		0.9 to 9.8 ft: Coarse Sand - lt brown, uniform sample very light settling in some places		
				S1: 5.0 ft. to 9.5 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 792277.724 Easting: 3029566.965 Grid Datum: NAD '83
HOLE NUMBER: NH-67
DATE: 2006-Aug-21 | TOP ELEVATION: -55.10 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -64.30 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.2 ft.
CORE RECOVERY: 9.2 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 7.9 ft: Coarse Sand - dark tan, lt. shell hash mixed throughout	S1	S1: 0.0 ft. to 4.5 ft.
		7.9 to 9.2 ft: Medium Sand / Coarse Sand mix - dark tan, lt. shell hash mixed throughout, 2 dark patches of organic muddy sand	S2	S2: 4.5 ft. to 9.2 ft.

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 793710.895 Easting: 3028710.895 Grid Datum: NAD '83
HOLE NUMBER: NH-68
DATE: 2006-Aug-21 | TOP ELEVATION: -45.60 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -54.20 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 8.6 ft.
CORE RECOVERY: 8.6 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, BF, JG

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 8.6 ft: Coarse Sand - tan, uniform with pockets of shell and pea gravel occasionally mixed throughout.	S1	S1: 0.0 ft. to 4.5 ft.
		3.3 ft: Shell Cluster - shell hash + pea gravel		
		5.2 ft: Shell Cluster - shell hash + pea gravel		
			S2	S2: 4.5 ft. to 8.6 ft.

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 788410.786 Easting: 3025718.103 Grid Datum: NAD '83
HOLE NUMBER: NH-69
DATE: 2006-Aug-21 | TOP ELEVATION: -49.10 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -58.50 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.4 ft.
CORE RECOVERY: 9.4 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 9.4 ft: Coarse Sand - dark tan, occasional shell hash, some mottling around 7.2	S1	S1: 0.0 ft. to 4.5 ft.
		1.5 ft: Shell Clam - shell		
		3.9 ft: Shell Cluster - shell hash		
		4.3 ft: Shell Cluster - small hash		
				S2: 4.5 ft. to 9.5 ft.
		7.2 ft: Med Flecks - patch of sand mixed with organic shell	S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 788410.786 Easting: 3026712.648 Grid Datum: NAD '83
HOLE NUMBER: NH-70
DATE: 2006-Aug-21 | TOP ELEVATION: -50.30 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -59.80 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.5 ft.
CORE RECOVERY: 9.5 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, BF, JG

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 7.0 ft: Coarse Sand - dark, tan, uniform, w/shell frags throughout	S1	S1: 0.0 ft. to 5.0 ft.
		5.4 ft: Shell Clam - shell		
		6.0 ft: Shell Cluster		
		7.0 to 9.5 ft: Coarse Sand - gray w/some mottling, lt shell hash mixed throughout		S2: 5.0 ft. to 9.5 ft.
		8.9 ft: Shell Clam - shell	S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 788043.461 Easting: 3026727.022 Grid Datum: NAD '83
HOLE NUMBER: NH-71
DATE: 2006-Aug-21 | TOP ELEVATION: -49.00 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -55.10 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 6.1 ft.
CORE RECOVERY: 6.1 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, BF, JG

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 6.1 ft: Coarse Sand - lt gray, uniform with shell hash mixed throughout	S1	S1: 0.0 ft. to 3.0 ft.
		4.0 ft: Small Oyster - small shell		
		5.5 ft: Small Oyster - small shell		S2: 3.0 ft. to 6.1 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 787416.849 Easting: 3026712.648 Grid Datum: NAD '83
HOLE NUMBER: NH-72
DATE: 2006-Aug-22 | TOP ELEVATION: -49.80 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -58.40 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 8.6 ft.
CORE RECOVERY: 8.6 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 8.6 ft: Coarse Sand - dark tan to lt brown, uniform with occasional shell fragment	S1	S1: 0.0 ft. to 4.0 ft.
		1.0 ft: Small Clam - shell		
		4.4 ft: Shell Cluster - shell hash		
				S2: 4.0 ft. to 8.6 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 792432.634 Easting: 3028270.153 Grid Datum: NAD '83
HOLE NUMBER: NH-74
DATE: 2006-Aug-22 | TOP ELEVATION: -42.80 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -51.80 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.0 ft.
CORE RECOVERY: 9 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 9.0 ft: Coarse Sand - dark tan, uniform, shell hash occasionally mixed throughout	S1	S1: 0.0 ft. to 4.5 ft.
		7.0 ft: Shell Cluster - thin layer of shell hash		
				S2: 4.5 ft. to 9.0 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 792461.444 Easting: 3028466.491 Grid Datum: NAD '83
HOLE NUMBER: NH-75
DATE: 2006-Aug-22 | TOP ELEVATION: -38.60 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -46.80 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 8.2 ft.
CORE RECOVERY: 8.2 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, BF, JG

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		2.0 to 8.2 ft: Coarse Sand - clean, tan, uniform, shell and shell hash mixed throughout	S1	S1: 0.0 ft. to 4.0 ft.
		1.9 ft: Shell Clusters - shell hash		
		6.1 ft: Small Clam - shell		
				S2: 4.0 ft. to 8.2 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 793501.215 Easting: 3027931.640 Grid Datum: NAD '83
HOLE NUMBER: NH-76
DATE: 2006-Aug-22 | TOP ELEVATION: -50.20 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -57.60 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 7.4 ft.
CORE RECOVERY: 7.4 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		1.0 to 7.4 ft: Coarse Sand - lt gray, high concentration of shell and shell hash mixed throughout	S1	S1: 0.0 ft. to 4.0 ft.
		2.6 ft: Shell Cluster - heavy shell hash from 5.5 to 5.5		
		4.9 ft: Shell Cluster - shell hash		S2: 4.0 ft. to 7.4 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 793486.810 Easting: 3028998.254 Grid Datum: NAD '83
HOLE NUMBER: NH-77
DATE: 2006-Aug-22 | TOP ELEVATION: -48.50 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -55.20 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 6.7 ft.
CORE RECOVERY: 6.7 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		1.0 to 3.4 ft: Coarse Sand - clean tan, small shell, shell hash	S1	S1: 0.0 ft. to 3.2 ft.
		3.0 ft: Shell Cluster		
		3.4 to 4.8 ft: Coarse Sand - lt Brown color, some shell hash		S2: 3.2 ft. to 6.7 ft.
		4.8 to 6.7 ft: Coarse Sand - lt Brown, uniform	S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 794365.508 Easting: 3028868.531 Grid Datum: NAD '83
HOLE NUMBER: NH-78
DATE: 2006-Aug-22 | TOP ELEVATION: -49.90 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -59.20 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.3 ft.
CORE RECOVERY: 9.3 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		1.0 to 6.6 ft: Coarse Sand - lt gray, occasional shell hash mixed throughout	S1	S1: 0.0 ft. to 4.5 ft.
		2.9 ft: Shell Cluster - shell hash		
		4.3 ft: Shell Cluster - shell hash		S2: 4.5 ft. to 9.3 ft.
		6.6 to 9.3 ft: Medium Sand / Coarse Sand mix - gray, occasionll shell hash mixed throughout	S2	
		9.0 ft: Small Clam - small shell		

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 794720.782 Easting: 3027731.394 Grid Datum: NAD '83
HOLE NUMBER: NH-79
DATE: 2006-Aug-22 | TOP ELEVATION: -38.20 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -47.30 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 9.1 ft.
CORE RECOVERY: 9.1 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		1.0 to 9.1 ft: Coarse Sand - dark tan, uniform, small shell hash occasionally mixed throughout	S1	S1: 0.0 ft. to 4.0 ft.
				S2: 4.0 ft. to 9.1 ft.
			S2	

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 795433.824 Easting: 3027924.358 Grid Datum: NAD '83
HOLE NUMBER: NH-80
DATE: 2006-Aug-22 | TOP ELEVATION: -41.80 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -50.10 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 8.3 ft.
CORE RECOVERY: 8.3 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, JG, BF

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		1.0 to 7.5 ft: Coarse Sand - lt gray, shell and heavy shell hash mixed throughout	S1	S1: 0.0 ft. to 4.0 ft.
		1.0 ft: Small Clam - shell		
		2.1 ft: Shell Cluster - shell and shell hash		
		4.3 ft: Shell Cluster - shell hash		S2: 4.0 ft. to 8.3 ft.
		5.0 ft: Small Clam - small shell		
			S2	
		7.0 to 8.3 ft: Coarse Sand - tray, shell hash mixed throughout		

CORE LOG — Coastal Science & Engineering — Sheet 1 of 1

PROJECT: 2203 - Nags Head Nourishment
LOCALITY:
COORDINATES: Northing: 795433.824 Easting: 3028911.696 Grid Datum: NAD '83
HOLE NUMBER: NH-81
DATE: 2006-Aug-22 | TOP ELEVATION: -44.10 ft. NGVD '29 | DEVICE DESIGNATION: Coastal Science & Engineering
BORE ANGLE: 90.00° | BOTTOM ELEVATION: -52.30 ft. NGVD '29 | BARREL SIZE/TYPE: 3 in. Aluminum
BURDEN THICKNESS: 8.2 ft.
CORE RECOVERY: 8.2 ft. (100.0%) | WATER DEPTH: (operational note only) | GEOLOGIST: FIELD TEAM: TWK - NC #1752 PAM, BF, JG

Depth	Lithology	Classification Of Materials (Description)	Sample #	Remarks
0		1.0 to 8.2 ft: Coarse Sand - dark tan, uniform with occasional shell and shell hash mixed throughout	S1	S1: 0.0 ft. to 4.0 ft.
		2.7 ft: Shell Cluster - small pocket of shell hash		
				S2: 4.0 ft. to 8.2 ft.
		5.9 ft: Small Clam - small shell	S2	

NO.	REVISION	BY	DATE

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Columbia South Carolina 29202
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CLIENT:
TOWN OF NAGS HEAD
5401 SOUTH CROATAN HWY
NAGS HEAD NC 27959

PROJECT:
TOWN OF NAGS HEAD
BEACH NOURISHMENT PROJECT

DRAWING TITLE:
GEOTECHNICAL DATA
CORE LOGS 63 - 81

Preliminary Drawing Not For Construction

SCALE: AS SHOWN
DATE: Jan 2011
DRAWN BY: JJH
APPROVED BY: TWK/HLK
PROJECT #: 2203-CD
SHEET NO: 17
OF: 21