



NCDOT GEOTECHNICAL ENGINEERING UNIT
FIELD BORELOG (ENGLISH)

PROJECT NUMBER	32635.1.3	ID	B-2500	CO	Dare	GEO	Bradley/Plummer	GROUND WATER	0 HOUR	24 HOUR
SITE DESC	Bridge No. 11 (Bonner Bridge) on NC 12 over Oregon Inlet							Depth to WATER	N/A	N/A
BORING NUMBER	B-56	STA		OFFSET	FT	ALIGNMENT		Depth to BTM		
ELEVATION		FT	TOTAL DEPTH	195.0	FT	NORTH		DATE		
DRILL MACHINE	CME-550x	DRILL EQMT NUMBER		DRILL METHOD	H Casing 1 3/8" T. cone			HAMMER TYPE	Auto	
START DATE	5/22/11	COMP DATE	5/24/11	SURFACE WTR DEPTH	6.2	FT	DEPTH TO ROCK	N/A	FT	DRILLER
J. White, M. Mosley										

DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT				SAMPLE NO. & INTERVAL	MOI	ORIGIN	SOIL & ROCK DESCRIPTION
	0.5 ft	0.5 ft	0.5 ft	0	25	50	75				SOIL or ROCK NAME (w/ color, density/consistency, texture, plasticity, organics, other)
15								SS 137/18-33	SAT	UNDERSTANDING COASTAL PLAIN DEPOSIT	tan silty fine to coarse SAND (A-2-U)
5											
7.8								Ref SS 137	SAT		Gray silty fine T. coarse SAND (A-2-U)
10											
12.8								SS 128/128-143	SAT		Gray silty coarse T. fine SAND (A-2-U)
15											
17.8								Ref SS 138	SAT		Gray silty fine SAND (A-2-U)
20											
22.1								SS 139/221-236	W		fine Green Gray SANDY clay (A-6)
25											
27.6								Ref SS 139	W		Gray fine SANDY clay (A-6)
30											
32.6								SS 140/32.6-34.1	W		Green Gray silty clay (A-7.5)
35											
37.6								Ref SS 140	W		Green Gray silty clay (A-7.5)

NOTES 1) Advanced H casing T. 62.5 feet (75.4 Total used)
2) Advanced 3 1/8" T. cone T. 193.5 feet
3) Ocean water used as drilling fluid
4) Approx drilling fluid density

DECK TO DATUM DISTANCE _____ FT
DRILLING FLUID PROPERTIES _____
FINAL CASING DEPTH _____ FT

SIGNATURE _____ DATE _____
NOTES _____
RED LINE _____

Some loss of drilling fluid observed
30 min



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SHEET 2 OF 5

PROJECT NUMBER	32635.13	ID	B-2500	CO	Dare	GEO	Bradley/Plummer	GROUND WATER	0 HOUR	24 HOUR
SITE DESC	Bridge No. 11 (Bonner Bridge) on NC 12 over Oregon Inlet							Depth to WATER		
BORING NUMBER	13.56	STA		OFFSET	FT	ALIGNMENT	EAST	Depth to BTM		
ELEVATION		FT	TOTAL DEPTH	195.0	FT			DATE		
DRILL MACHINE	CME-550X	DRILL EQMT NUMBER		DRILL METHOD	11 C-55-51 378° Tilted			HAMMER TYPE	Auto	
START DATE	5/22/11	COMP DATE	5/24/11	SURFACE WTR DEPTH	6.2	FT	DEPTH TO ROCK	N/A	FT	DRILLER
DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT			SAMPLE NO. & INTERVAL	MOI	ORIGIN	SOIL & ROCK DESCRIPTION
	0.5 ft	0.5 ft	0.5 ft	0	25	50	75	100		SOIL or ROCK NAME (w/ color, density/consistency, texture, plasticity, organics, other)
42.6										SS-141 / 42.6-44.1 W Gray silty clay (A-7.5)
5										
47.5										Ref SS141 W Gray silty clay (A-7.5)
10										
52.4										
15										
57.5										SS142/52.4-53.9 SAT Gray silty fine to coarse SAND w/ Trace shell fragments
20										
62.5										Ref SS142 SAT Gray silty fine to coarse SAND w/ Trace shell fragments
25										
67.5										SS143/62.5-64.0 SAT Green Gray clayey fine SAND w/ Trace shell fragments (A-2.6)
30										
72.5										Ref SS143 SAT Green Gray clayey fine SAND w/ Trace shell fragments (A-2.6)
35										
77.6										SS144/72.5-74.0 SAT Green Gray silty fine SAND (A-2.4)
										Ref SS144 SAT Green Gray silty fine SAND (A-2.4)
NOTES										
SIGNATURE _____ DATE _____										
NOTES										
DECK TO DATUM DISTANCE _____ FT										
DRILLING FLUID PROPERTIES										
FINAL CASING DEPTH _____ FT										



NCDOT GEOTECHNICAL ENGINEERING UNIT
FIELD BORELOG (ENGLISH)

SHEET 3 OF 5

PROJECT NUMBER 32635.1.3	ID B-2500	CO Dare	GEO Bradley/Plummer	GROUND WATER Depth to WATER	0 HOUR	24 HOUR
SITE DESC Bridge No. 11 (Bonner Bridge) on NC 12 over Oregon Inlet				Depth to BTM		
BORING NUMBER B-56	STA	OFFSET FT	ALIGNMENT EAST	DATE		
ELEVATION FT	TOTAL DEPTH 195.0 FT	NORTH		HAMMER TYPE Auto		
DRILL MACHINE CME-550X	DRILL EQMT NUMBER	DRILL METHOD MCARINU / 378" TELESCOPE B27	SURFACE WTR DEPTH 6.2 FT	DEPTH TO ROCK N/A FT	DRILLER M. MUSELOT	
START DATE 5/22/2011	COMP DATE 5/24/11					

DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT	SAMPLE NO. & INTERVAL	MOI	ORIGIN	SOIL & ROCK DESCRIPTION (w/ color, density/consistency, texture, plasticity, organics, other)
	0.5 ft	0.5 ft	0.5 ft					
82.6	8	6	10		SS 145/82.6 82.1	SAT		GRAY SILTY FINE SAND W/ TRAC SMALL FRAGMENTS (A-2-4)
87.6	3	3	4		SS 146/87.6 89.1	SAT		GRAY FINE SANDY SILT (A-4)
92.6	4	4	5		REF 146 92.1	SAT		GRAY FINE SANDY SILT W/ TRAC SHAL FRAGMENTS (A-4)
97.6	4	3	3		SS 147/97.6 99.1	SAT		GRAY FINE SANDY SILT (A-4)
102.6	1	2	2		REF 147	SAT		GRAY FINE SANDY SILT (A-4)
107.6	1	1	3		SS 148/107.6 109.1	SAT		GRAY SILTY CLAY (A-7-5)
112.3	1	1	1		REF 148	M		GRAY SILTY CLAY (A-7-5)
117.3	6	6	13		SS 149/117.3 119.9	SAT		GRAY SILTY FINE SAND (A-2-4)

NOTES

DECK TO DATUM DISTANCE _____ FT

DRILLING FLUID PROPERTIES _____

FINAL CASING DEPTH _____ FT

SIGNATURE _____ DATE _____

NOTES

RED LINE



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SHEET 4 OF 5

PROJECT NUMBER 32635.1.3	ID B-2500	CO Dare	GEO Bradley/Plummer	GROUND WATER 0 HOUR	24 HOUR
SITE DESC Bridge No. 11 (Bonner Bridge) on NC 12 over Oregon Inlet				Depth to WATER	
BORING NUMBER B-56	STA	OFFSET FT	ALIGNMENT EAST	Depth to BTTM	
ELEVATION FT	TOTAL DEPTH 195.0 FT	NORTH		DATE	
DRILL MACHINE CME-550X	DRILL EQMT NUMBER	DRILL METHOD H CASING, 1 3/4" TRI-CONE BIT	HAMMER TYPE Auto		
START DATE 5/28/2011	COMP DATE 5/24/11	SURFACE WTR DEPTH 6.2 FT	DEPTH TO ROCK N/A FT	DRILLER M. ROSELY	
DEPTH (ft)	BLOW COUNT 0.5 ft 0.5 ft 0.5 ft			SOIL & ROCK DESCRIPTION	
	BLOWS PER FOOT 25 50 75 100			SOIL or ROCK NAME (fill color, density/consistency, texture, plasticity, organics, other)	
122.3	9	9	17	REF 149 SAT	GRAY SILTY FINE SAND (A-2-4)
126.7	16	18	30	SS 150/126.7-128.2 SAT	GRAY SILTY FINE SAND w/ TRACER SHELL FRAGMENTS (A-2-4)
131.7	20	22	26	SS 151/131.7-133.2 SAT	GRAY SILTY FINE GR (OMAGS) SAND (A-2-4)
136.7	18	20	28	REF SS 151 SAT	GRAY SILTY FINE TO COARSE SAND (A-2-4)
142.4	4	4	5	SS 152/142.4-143.9	Gray silty clay (A-7.5)
147.4	1	3	3	Ref SS 152	Gray silty clay (A-7.5)
152.4	1	5	6	SS 153/152.4-153.9	Gray silty clay (A-7.5)
157.6	1	1	5	Ref SS 153	Gray silty clay (A-7.5)

NOTES

DECK TO DATUM DISTANCE FT

DRILLING FLUID PROPERTIES

FINAL CASING DEPTH FT

SIGNATURE

DATE

NOTES

RED LINE



NCDOT GEOTECHNICAL ENGINEERING UNIT
FIELD BORELOG (ENGLISH)

SHEET 5 OF 5

PROJECT NUMBER 32635.1.3	ID B-2500	CO Dare	GEO Bradley/Plummer	GROUND WATER	0 HOUR	24 HOUR
SITE DESC Bridge No. 11 (Bonner Bridge) on NC 12 over Oregon Inlet				Depth to WATER		
BORING NUMBER B. 56	STA TOTAL DEPTH 195.0 FT	OFFSET FT	ALIGNMENT EAST	Depth to BTM		
ELEVATION	FT	NORTH	EAST	DATE		
DRILL MACHINE cmc-5524	DRILL EQMT NUMBER	DRILL METHOD H.C. 5.5 / 3 7/8" T.C. core	HAMMER TYPE Auto			
START DATE 5/22/11	COMP DATE 5/24/11	SURFACE WTR DEPTH 6.2 FT	DEPTH TO ROCK N/A FT			
DEPTH (ft)	BLOW COUNT 0.5 ft 0.5 ft 0.5 ft	BLOWS PER FOOT 0 25 50 75 100	SAMPLE NO. & INTERVAL	MOI	ORIGIN	SOIL & ROCK DESCRIPTION (w/ color, density/consistency, texture, plasticity, organics, other)
162.7	W.H. 4 4		55.154/162.7-164.2	M		Gray silty clay (A-7.5)
5			Ref 55.154	M		Gray silty clay (A-7.5)
167.7	W.H. 3 4					
10						
172.8	1 5 7		55.155/172.8-	M		Gray silty clay (A-7.5)
15						
178.0	6 9 10		Ref 55.155-155	M		Gray silty clay (A-7.5)
20						
183.0	6 6 7		55.156/183.0-184.5			Gray silty coarse to fine SAND w/ trace shell fragments (A-2.4)
25						
188.5	5 4 5		55.157/188.5-190.0	SAT		Gray silty coarse to fine SAND w/ trace shell fragments (A-2.4)
30						
193.5	12 20 37		Ref 55.157	SAT		Gray silty coarse to fine SAND w/ trace shell fragments (A-2.4)
35						
						Boring Terminated at Elevation 195.0 in Gray silty coarse to fine SAND w/ trace shell fragments (A-2.4)
NOTES				SIGNATURE _____ DATE _____		
DECK TO DATUM DISTANCE _____ FT				NOTES		
DRILLING FLUID PROPERTIES				RED LINE		
FINAL CASING DEPTH _____ FT						