

TEST BORING LOG

**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
SEA GIRT, MONMOUTH COUNTY, NEW JERSEY (FPA NO. 06G029A)**

BORING NO.: B-1
SHEET 1 OF 1

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
	S-1 0-2'	4 - 12 - 11 - 6		S-1 Brown cmf SAND, some ⁺ mf Gravel, trace Silt.
	S-2 2-4'	6 - 5 - 3 - 3		S-2 Brown c ⁺ mf SAND, some ⁺ f Gravel, trace Silt.
--- 5' ---	S-3 4-6'	1 - 1 - 1 - 1		S-3 Dark Grey Clayey SILT , trace f Sand. (with fibers)
	S-4 6-8'	2 - 3 - 4 - 8		S-4 Light Grey c ⁺ mf SAND, and f Gravel, trace Silt.
	S-5 8-10'	6 - 7 - 7 - 8		S-5 Brown cm ⁺ f SAND, trace Silt.
--- 10' ---	S-6 10-12'	5 - 8 - 9 - 10		S-6 Brown c ⁺ mf SAND, some ⁺ f Gravel, trace Silt.
--- 15' ---	S-7 15-17'	8 - 10 - 13 - 17		S-7 Light Grey mf ⁺ SAND, trace Silt.
--- 20' ---	S-8 20-22'	9 - 15 - 18 - 21		S-8 Same as S-7.
--- 25' ---	S-9 25-27'	3 - 4 - 5 - 6		S-9 <u>Grey Clayey SILT</u> , little ⁺ f Sand.
--- 30' ---				END OF BORING @ 27'
--- 35' ---				
--- 40' ---				

SOILS ENGINEER: J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

The information shown hereon indicates the subsurface conditions encountered at the specific boring location on the date(s) of drilling. Subsurface conditions are likely to vary across the project site. Interpretation of the subsurface data shall be at the discretion of the user.



TEST BORING LOG

**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
SEA GIRT, MONMOUTH COUNTY, NEW JERSEY (FPA NO. 06G029A)**

**BORING NO.: B-2
SHEET 1 OF 1**

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
	S-1 0-2'	3 - 6 - 4 - 4		S-1 Light Brown c ⁺ mf SAND, trace f Gravel, trace Silt.
	S-2 2-4'	3 - 2 - 2 - 2		S-2 Same as S-1.
	S-3 4-6'	1 - 1 - 1 - 1		S-3 Light Brown c ⁺ mf SAND, some ⁺ f Gravel, trace Silt.
	S-4 6-8'	1 - 1 - 1 - 1		S-4 Dark Grey Organic SILT. (with fibers)
	S-5 8-10'	1 - 1 - 3 - 6		S-5 Grey SILT & CLAY , trace ⁺ f Sand.
	S-6 10-12'	5 - 6 - 8 - 10		S-6 Light Brown c ⁺ mf SAND, and ⁻ f Gravel, trace Silt.
	S-7 15-17'	7 - 12 - 14 - 15		S-7 Light Brown mf ⁺ SAND, trace Silt.
	S-8 20-22'	6 - 4 - 5 - 8		S-8 Grey CLAY & SILT , trace ⁺ f Sand.
	S-9 25-27'	2 - 2 - 3 - 5		S-9 Grey mf ⁺ SAND, some Clayey Silt.
	S-10 30-32'	4 - 4 - 5 - 6		S-10 Same as S-9.
<hr/> END OF BORING @ 32'				

SOILS ENGINEER: : J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

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TEST BORING LOG

**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
SEA GIRT, MONMOUTH COUNTY, NEW JERSEY (FPA NO. 06G029A)**

**BORING NO.: B-3
SHEET 1 OF 1**

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary

HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

<u>DEPTH FEET</u>	<u>SAMPLE DEPTH</u>	<u>SPT BLOW COUNTS (PER 6")</u>	<u>STRATA</u>	<u>DESCRIPTION OF SOIL</u>
	S-1 0-2'	1 - 5 - 9 - 10		Top 4": Asphalt. S-1 Brown mf SAND , and ⁺ cmf Gravel.
	S-2 2-4'	5 - 3 - 3 - 3		S-2 Light Brown c ⁺ mf SAND , some ⁺ f Gravel, trace Silt.
--- 5' ---	S-3 4-6'	1 - 1 - 1 - 1		S-3 Light Grey c ⁺ mf SAND , and f Gravel, trace Silt.
	S-4 6-8'	2 - 2 - 2 - 2		S-4 Dark Grey Organic SILT , and mf Sand
	S-5 8-10'	5 - 7 - 9 - 10		S-5 Light Grey c ⁺ mf SAND , and f Gravel, trace Silt.
--- 10' ---	S-6 10-12'	8 - 9 - 10 - 10		S-6 Light Grey c ⁺ mf SAND , and mf ⁺ Gravel, trace Silt.
--- 15' ---	S-7 15-17'	7 - 10 - 15 - 13		S-7 Light Grey mf ⁺ SAND , trace Silt.
--- 20' ---	S-8 20-22'	4 - 5 - 5 - 5		S-8 Grey Clayey SILT , trace f Sand.
	UD1 23-25'	Push 24" Rec. 24"		UD-1 Same as S-8 .
--- 25' ---	S-9 25-27'	4 - 5 - 6 - 8		S-9 Grey CLAY & SILT , trace f Sand.
--- 30' ---				END OF BORING @ 27'
--- 35' ---				
--- 40' ---				

SOILS ENGINEER: J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

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TEST BORING LOG

**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
SEA GIRT, MONMOUTH COUNTY, NEW JERSEY (FPA NO. 06G029A)**

**BORING NO.: B-4
SHEET 1 OF 1**

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
--- 5' ---	S-1 0-2'	6 - 14 - 23 - 22		S-1 Brown cm ⁺ f GRAVEL, some ⁺ m ⁺ f Sand, trace Silt.
	S-2 2-4'	11 - 10 - 18 - 8		S-2 Light Brown c ⁺ mf SAND, little ⁺ f Gravel, trace Silt.
	S-3 4-6'	6 - 5 - 5 - 4		S-3 Light Brown c ⁺ mf SAND, and f Gravel, trace Silt.
	S-4 6-8'	1 - 2 - 2 - 3		S-4 Same as S-3.
	S-5 8-10'	1 - 2 - 2 - 3		S-5 Grey cm ⁺ f SAND, some ⁺ Silt & Clay, trace f Gravel.
--- 10' ---	S-6 10-12'	4 - 5 - 20 - 23		S-6 Grey c ⁺ mf SAND, and mf ⁺ Gravel.
	S-7 15-17'	4 - 6 - 6 - 5		S-7 Brown f SAND, trace Silt.
--- 20' ---	S-8 20-22'	4 - 6 - 6 - 5		S-8 Grey CLAY & SILT, little ⁺ f Sand.
--- 25' ---	S-9 25-27'	4 - 5 - 7 - 11		S-9 Grey CLAY & SILT, trace f Sand.
--- 30' ---				END OF BORING @ 27'
--- 35' ---				
--- 40' ---				

SOILS ENGINEER: J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

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TEST BORING LOG

**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
SEA GIRT, MONMOUTH COUNTY, NEW JERSEY (FPA NO. 06G029A)**

BORING NO.: B-5
SHEET 1 OF 1

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
--- 5' ---	S-1 0-2'	6 - 14 - 18 - 17		S-1 Brown cm ⁺ f GRAVEL, little ⁺ cm ⁺ f Sand, trace Silt.
	S-2 2-4'	2 - 9 - 8 - 7		S-2 Light Brown c ⁺ mf SAND, trace f Gravel, trace Silt.
	S-3 4-6'	5 - 4 - 3 - 2		S-3 Light Brown c ⁺ mf SAND, trace Silt.
	S-4 6-8'	1 - 2 - 2 - 2		S-4 Brown c ⁺ mf SAND, some ⁺ f Gravel, trace Silt.
	S-5 8-10'	1 - 2 - 2 - 2		S-5 Grey c ⁺ mf SAND, some ⁺ Silt & Clay.
--- 10' ---	S-6 10-12'	7 - 8 - 8 - 9		S-6 Brown c ⁺ mf SAND, and f Gravel, trace Silt.
	S-7 15-17'	7 - 11 - 17 - 19		S-7 Brown c ⁺ mf SAND, some f Gravel, trace Silt.
--- 20' ---	S-8 20-22'	2 - 2 - 2 - 5		S-8 Grey CLAY & SILT, trace f Sand.
--- 25' ---	S-9 25-27'	4 - 5 - 8 - 11		S-9 <u>Same as S-8.</u>
--- 30' ---				END OF BORING @ 27'
--- 35' ---				
--- 40' ---				

SOILS ENGINEER: J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

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**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
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BORING NO.: B-6
SHEET 1 OF 1

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
--- 5' ---	S-1 0-2'	2 - 3 - 12 - 18		S-1 Brown cmf GRAVEL , some cm ⁺ f Sand, trace Silt.
	S-2 2-4'	17 - 9 - 9 - 7		S-2 Light Brown c ⁺ mf SAND , trace f Gravel, trace Silt.
	S-3 4-6'	5 - 3 - 4 - 3		S-3 Light Brown c ⁺ mf SAND , and f Gravel, trace Silt.
	S-4 6-8'	1 - 1 - 1 - 1		S-4 Same as S-3 .
	S-5 8-10'	1 - 1 - 1 - 1		S-5 Grey and Light Brown c ⁺ mf SAND , and f Gravel, trace Silt.
---10'---	S-6 10-12'	1 - 1 - 1 - 1		S-6 Light Brown c ⁺ mf SAND , and f Gravel.
	S-7 15-17'	2 - 2 - 2 - 2		S-7 Grey SILT & CLAY , trace f Gravel.
---20'---	S-8 20-22'	6 - 7 - 6 - 6		S-8 Grey Clayey SILT , trace f Sand.
---25'---	S-9 25-27'	3 - 4 - 6 - 7		S-9 <u>Grey CLAY & SILT, trace f Sand.</u>
---30'---				END OF BORING @ 27'
---35'---				
---40'---				

SOILS ENGINEER: J. TIERNY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

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**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
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**BORING NO.: B-7
SHEET 1 OF 1**

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
	S-1 0-2'	3 - 10 - 12 - 12		S-1 Light Brown c ⁺ mf SAND, and cm ⁺ f Gravel, trace Silt.
	S-2 2-4'	6 - 6 - 5 - 6		S-2 Light Brown cm ⁺ f SAND, trace Clayey Silt.
--- 5' ---	S-3 4-6'	3 - 1 - 2 - 1		S-3 Light Grey c ⁺ mf SAND, trace f Gravel, trace Clayey Silt.
	S-4 6-8'	2 - 1 - 1 - 1		S-4 Light Grey Clayey SILT .
	S-5 8-10'	1 - 1 - 1 - 4		S-5 Light Grey c ⁺ mf SAND, little Clayey Silt.
--- 10' ---	S-6 10-12'	4 - 5 - 6 - 6		S-6 Light Grey c ⁺ mf SAND, trace Silt.
--- 15' ---	S-7 15-17'	4 - 8 - 10 - 13		S-7 Light Brown c ⁺ m SAND, and ⁺ f Gravel, trace Silt.
--- 20' ---	S-8 20-22'	4 - 5 - 4 - 7		S-8 Grey Clayey SILT , trace f Sand.
--- 25' ---	S-9 25-27'	8 - 10 - 15 - 17		S-9 <u>Grey Clayey SILT, trace f Sand.</u>
--- 30' ---				END OF BORING @ 27'
--- 35' ---				
--- 40' ---				

SOILS ENGINEER: J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

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**BULKHEAD REPLACEMENT AT NATIONAL GUARD TRAINING CENTER
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**BORING NO.: B-8
SHEET 1 OF 1**

DATE STARTED: 4/7/06
DATE FINISHED: 4/7/06

DEPTH OF WATER: 4'
LOCATION: See Plan

GROUND ELEVATION: +5'±
GROUND WATER ELEV.: +1'±

DRILLING TECHNIQUE: Mud Rotary
HAMMER TYPE: 140 lb. Automatic Trip Hammer, 30 Inch Drop

DEPTH FEET	SAMPLE DEPTH	SPT BLOW COUNTS (PER 6")	STRATA	DESCRIPTION OF SOIL
	S-1 0-2'	3 - 6 - 8 - 8		S-1 Light Brown c ⁺ mf SAND, some ⁺ f Gravel, trace Silt.
	S-2 2-4'	4 - 3 - 2 - 4		S-2 Same as S-1.
--- 5' ---	S-3 4-6'	1 - 1 - 1 - 2		S-3 Dark Grey mf SAND, little ⁺ Clayey Silt, trace ⁻ f Gravel.
	S-4 6-8'	1 - 1 - 2 - 7		S-4 Brown c ⁺ mf SAND, and f Gravel, trace Silt.
	S-5 8-10'	7 - 8 - 10 - 12		S-5 Light Grey c ⁺ mf SAND, and f Gravel, trace Silt.
--- 10' ---	S-6 10-12'	10 - 11 - 14 - 16		S-6 Same as S-5.
--- 15' ---	S-7 15-17'	4 - 5 - 9 - 12		S-7 Light Grey cm ⁺ f SAND, little f Gravel, trace Silt.
--- 20' ---	S-8 20-22'	5 - 8 - 11 - 14		S-8 Light Grey mf ⁺ SAND, trace Silt.
--- 25' ---	S-9 25-27'	4 - 4 - 7 - 8		S-9 <u>Grey SILT & CLAY</u> , trace f Sand.
--- 30' ---				END OF BORING @ 27'
--- 35' ---				
--- 40' ---				

SOILS ENGINEER: J. TIERNEY, P.E.
DRILLING INSPECTOR: A. LARUSSO

CONTRACTOR: CRAIG TEST BORING
DRILLER: G. MCANENY

The information shown hereon indicates the subsurface conditions encountered at the specific boring location on the date(s) of drilling. Subsurface conditions are likely to vary across the project site. Interpretation of the subsurface data shall be at the discretion of the user.