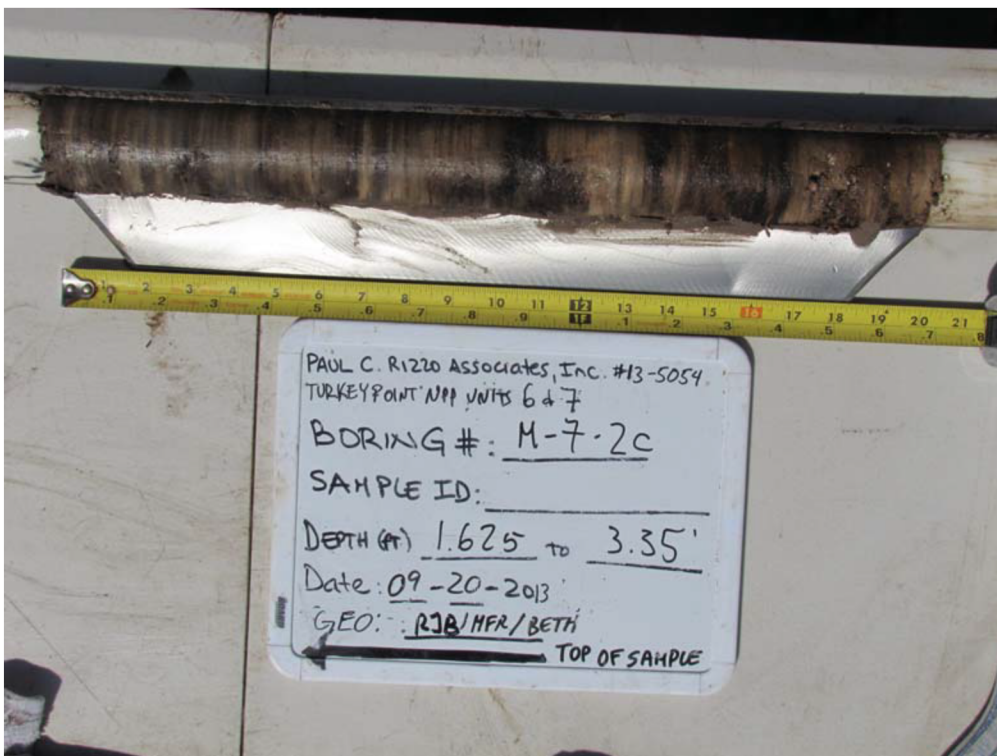
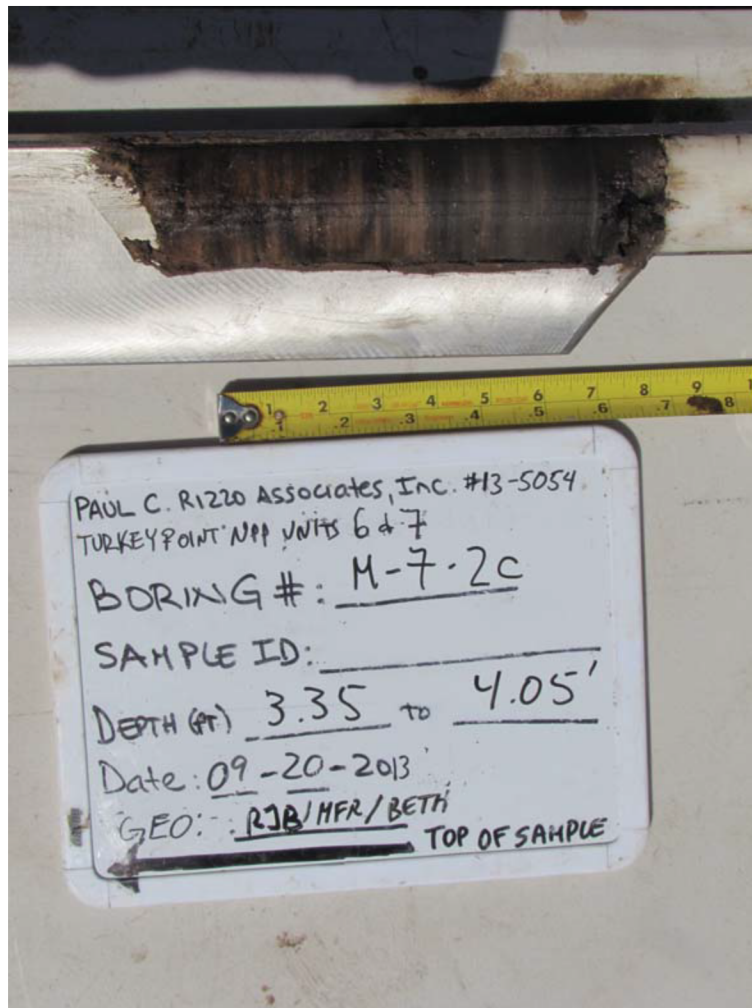




M-7-2c, Depth: 0.0 to 1.625 ft.



M-7-2c, Depth: 1.625 to 3.350 ft.



M-7-2c, Depth: 3.350 to 4.050 ft.

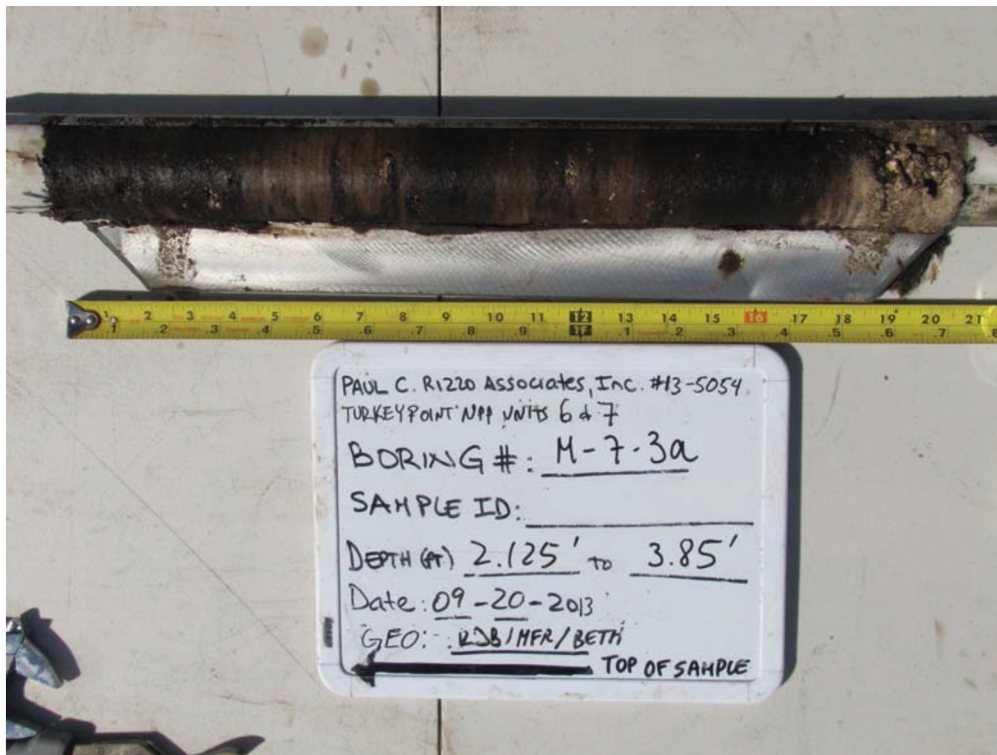




M-7-3a, Depth: 0.0 to 1.625 ft.



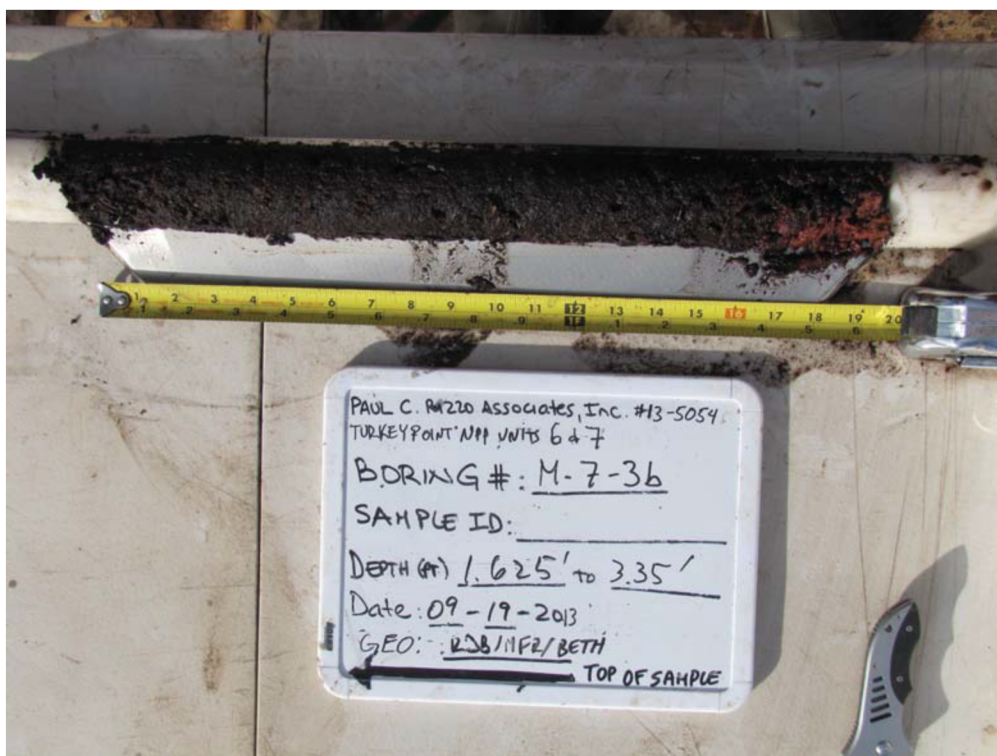
M-7-3a, Depth: 1.625 to 3.35 ft.



M-7-3a (Repeat), Depth: 2.125 to 3.850 ft.



M-7-3b, Depth: 0.0 to 1.625 ft.

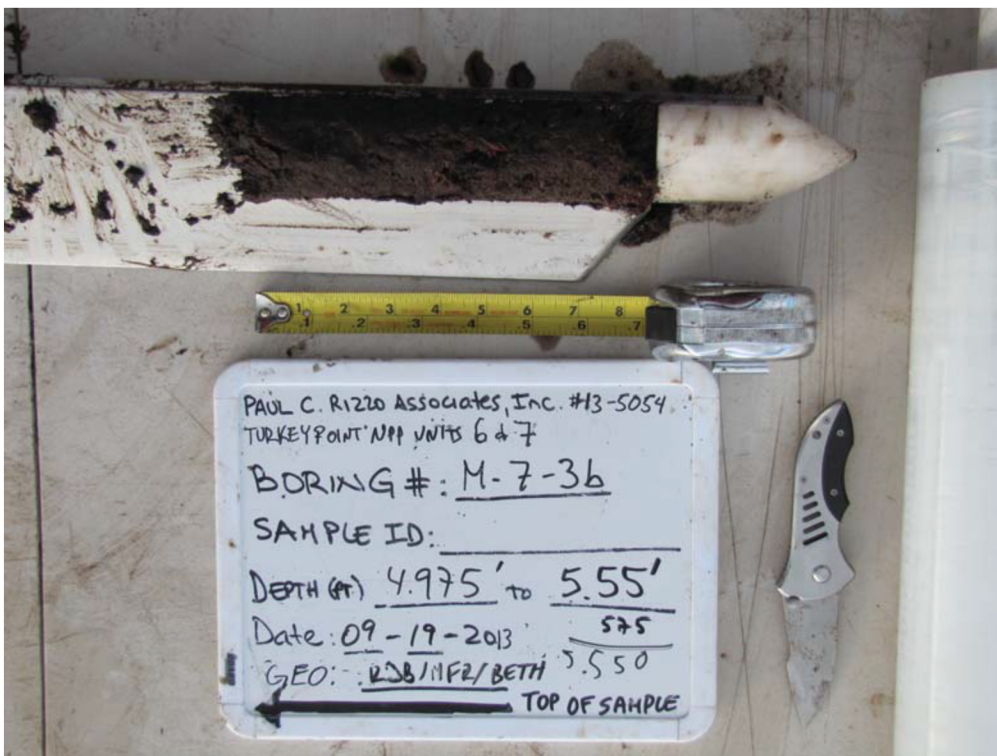


M-7-3b, Depth: 1.625 to 3.350 ft.





M-7-3b, Depth: 3.350 to 4.975 ft.



M-7-3b, Depth: 4.975 to 5.550 ft.

**APPENDIX 3**

**LABORATORY TEST RESULTS**



December 16, 2013

Project No. 2013-465-01,02,03

Mr. Onur Tastan, PhD, P.E.  
Project Director  
Paul C. Rizzo & Associates, Inc.  
Penn Center East  
500 Penn Center Blvd., Suite 100  
Pittsburgh, PA 15235

**Transmittal**  
**Laboratory Test Results**  
**Turkey Point Nuclear Power Plant Units 6&7**  
**Project Number #13-5054**

Please find attached the requested laboratory test results as requested in the Executed Agreement for Laboratory Services dated October 29, 2013 for the Turkey Point Nuclear Power Plant located near Homestead, Florida.

The tests were outlined on the Project Verification Form that was transmitted to your firm prior to the testing. The testing was performed in general accordance with the methods listed on the enclosed data sheets. The test results are believed to be representative of the samples that were submitted for testing and are indicative only of the specimens which were evaluated. We have no direct knowledge of the origin of the samples and imply no position with regard to the nature of the test results, i.e. pass/fail and no claims as to the suitability of the material for its intended use.

The test data and all associated project information provided shall be held in strict confidence and disclosed to other parties only with authorization by our Client. The test data submitted herein is considered integral with this report and is not to be reproduced except in whole and only with the authorization of the Client and Geotechnics. The remaining sample materials for this project will be retained for a minimum of 90 days as directed by the Geotechnics' Quality Program.

We are pleased to provide these testing services. Should you have any questions or if we may be of further assistance, please contact our office.

Respectively submitted,  
**Geotechnics, Inc.**

Randy O'Rourke  
President

David R. Backstrom  
Laboratory Director

***We understand that you have a choice in your laboratory services  
and we thank you for choosing Geotechnics.***

544 Braddock Avenue, East Pittsburgh, PA 15112 412-823-7600

DCN: Data Transmittal Letter Date: 1/28/05 Rev.: 1



**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	001
Boring No.	M-7-2b
Depth(ft)	1.075-1.475
<b>Sample No.</b>	ST-1
Tare Number	15+16
Wt. Tare & WS (g)	50.78
Wt. Tare & DS (g)	49.25
Wt. Tare (g)	37.90
Wt. Water (g)	1.53
Wt. DS (g)	11.35
<b>Moisture Content</b>	<b>13.5%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	42.93
Wt. Volatiles (g)	6.32
Wt. Ash (g)	5.03
<b>Ash Content</b>	<b>44.3%</b>
<b>Organic Matter</b>	<b>55.7%</b>

*Tested By* PC      *Date* 11/21/13      *Checked By* KC      *Date* 11/25/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	1.075-1.475
Project No.	2013-465-002	Sample No.	ST-1
Lab ID #	2013-465-002-001		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	002
Boring No.	M-7-2c
Depth(ft)	1.100-1.600
<b>Sample No.</b>	ST-1
Tare Number	M+14
Wt. Tare & WS (g)	60.51
Wt. Tare & DS (g)	56.83
Wt. Tare (g)	36.25
Wt. Water (g)	3.68
Wt. DS (g)	20.58
<b>Moisture Content</b>	<b>17.9%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	55.00
Wt. Volatiles (g)	1.83
Wt. Ash (g)	18.75
<b>Ash Content</b>	<b>91.1%</b>
<b>Organic Matter</b>	<b>8.9%</b>

*Tested By* DB    *Date* 12/5/13    *Checked By* KC    *Date* 12/9/13



**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2c
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	1.100-1.600
Project No.	2013-465-002	Sample No.	ST-1
Lab ID #	2013-465-002-002		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1394	5/15/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	003
Boring No.	M-6-1a
Depth(ft)	2.600-3.350
<b>Sample No.</b>	MP-1
Tare Number	M+I
Wt. Tare & WS (g)	64.42
Wt. Tare & DS (g)	46.83
Wt. Tare (g)	36.71
Wt. Water (g)	17.59
Wt. DS (g)	10.12
<b>Moisture Content</b>	<b>173.8%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	45.54
Wt. Volatiles (g)	1.29
Wt. Ash (g)	8.83
<b>Ash Content</b>	<b>87.3%</b>
<b>Organic Matter</b>	<b>12.7%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-6-1a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	2.600-3.350
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-003		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14



**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	004
Boring No.	M-6-1b
Depth(ft)	2.250-2.900
<b>Sample No.</b>	<b>MP-1</b>
Tare Number	T+D
Wt. Tare & WS (g)	71.24
Wt. Tare & DS (g)	44.62
Wt. Tare (g)	37.25
Wt. Water (g)	26.62
Wt. DS (g)	7.37
<b>Moisture Content</b>	<b>361.2%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	42.39
Wt. Volatiles (g)	2.23
Wt. Ash (g)	5.14
<b>Ash Content</b>	<b>69.7%</b>
<b>Organic Matter</b>	<b>30.3%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-6-1b
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	2.250-2.900
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-004		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	005
Boring No.	M-6-2a
Depth(ft)	0.700-1.200
<b>Sample No.</b>	MP-1
Tare Number	C
Wt. Tare & WS (g)	40.18
Wt. Tare & DS (g)	30.23
Wt. Tare (g)	19.10
Wt. Water (g)	9.95
Wt. DS (g)	11.13
<b>Moisture Content</b>	<b>89.4%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	29.76
Wt. Volatiles (g)	0.47
Wt. Ash (g)	10.66
<b>Ash Content</b>	<b>95.8%</b>
<b>Organic Matter</b>	<b>4.2%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-6-2a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	0.700-1.200
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-005		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	006
Boring No.	M-6-2a
Depth(ft)	2.150-2.800
<b>Sample No.</b>	<b>MP-2</b>
Tare Number	12+X
Wt. Tare & WS (g)	70.41
Wt. Tare & DS (g)	52.25
Wt. Tare (g)	38.13
Wt. Water (g)	18.16
Wt. DS (g)	14.12
<b>Moisture Content</b>	<b>128.6%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	51.05
Wt. Volatiles (g)	1.20
Wt. Ash (g)	12.92
<b>Ash Content</b>	<b>91.5%</b>
<b>Organic Matter</b>	<b>8.5%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-6-2a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	2.150-2.800
Project No.	2013-465-002	Sample No.	MP-2
Lab ID #	2013-465-002-006		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14



**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	007
Boring No.	M-7-1a
Depth(ft)	1.000-1.550
<b>Sample No.</b>	MP-1
Tare Number	N
Wt. Tare & WS (g)	35.94
Wt. Tare & DS (g)	26.44
Wt. Tare (g)	18.11
Wt. Water (g)	9.50
Wt. DS (g)	8.33
<b>Moisture Content</b>	<b>114.0%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	25.80
Wt. Volatiles (g)	0.64
Wt. Ash (g)	7.69
<b>Ash Content</b>	<b>92.3%</b>
<b>Organic Matter</b>	<b>7.7%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-1a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	1.000-1.550
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-007		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	008
Boring No.	M-7-1a
Depth(ft)	4.100-4.625
<b>Sample No.</b>	MP-2
Tare Number	N+J
Wt. Tare & WS (g)	67.01
Wt. Tare & DS (g)	55.42
Wt. Tare (g)	38.80
Wt. Water (g)	11.59
Wt. DS (g)	16.62
<b>Moisture Content</b>	<b>69.7%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	54.93
Wt. Volatiles (g)	0.49
Wt. Ash (g)	16.13
<b>Ash Content</b>	<b>97.1%</b>
<b>Organic Matter</b>	<b>2.9%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-1a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	4.100-4.625
Project No.	2013-465-002	Sample No.	MP-2
Lab ID #	2013-465-002-008		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	009
Boring No.	M-7-2a
Depth(ft)	6.000-6.600
<b>Sample No.</b>	MP-1
Tare Number	H+R
Wt. Tare & WS (g)	67.53
Wt. Tare & DS (g)	44.22
Wt. Tare (g)	37.28
Wt. Water (g)	23.31
Wt. DS (g)	6.94
<b>Moisture Content</b>	<b>335.9%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	41.64
Wt. Volatiles (g)	2.58
Wt. Ash (g)	4.36
<b>Ash Content</b>	<b>62.8%</b>
<b>Organic Matter</b>	<b>37.2%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	6.000-6.600
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-009		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14



**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	010
Boring No.	M-7-2b
Depth(ft)	1.625-2.300
<b>Sample No.</b>	MP-1
Tare Number	A+K
Wt. Tare & WS (g)	61.27
Wt. Tare & DS (g)	41.33
Wt. Tare (g)	37.78
Wt. Water (g)	19.94
Wt. DS (g)	3.55
<b>Moisture Content</b>	<b>561.7%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	39.38
Wt. Volatiles (g)	1.95
Wt. Ash (g)	1.60
<b>Ash Content</b>	<b>45.1%</b>
<b>Organic Matter</b>	<b>54.9%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	1.625-2.300
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-010		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	011
Boring No.	M-7-2b
Depth(ft)	3.350-4.100
<b>Sample No.</b>	<b>MP-2</b>
Tare Number	P+S
Wt. Tare & WS (g)	68.50
Wt. Tare & DS (g)	41.54
Wt. Tare (g)	36.54
Wt. Water (g)	26.96
Wt. DS (g)	5.00
<b>Moisture Content</b>	<b>539.2%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	38.83
Wt. Volatiles (g)	2.71
Wt. Ash (g)	2.29
<b>Ash Content</b>	<b>45.8%</b>
<b>Organic Matter</b>	<b>54.2%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	3.350-4.100
Project No.	2013-465-002	Sample No.	MP-2
Lab ID #	2013-465-002-011		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	012
Boring No.	M-7-2c
Depth(ft)	2.100-2.800
<b>Sample No.</b>	MP-1
Tare Number	16+P
Wt. Tare & WS (g)	63.43
Wt. Tare & DS (g)	47.99
Wt. Tare (g)	37.41
Wt. Water (g)	15.44
Wt. DS (g)	10.58
<b>Moisture Content</b>	<b>145.9%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	46.92
Wt. Volatiles (g)	1.07
Wt. Ash (g)	9.51
<b>Ash Content</b>	<b>89.9%</b>
<b>Organic Matter</b>	<b>10.1%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2c
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	2.100-2.800
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-012		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	013
Boring No.	M-7-3a
Depth(ft)	1.000-1.550
<b>Sample No.</b>	MP-1
Tare Number	10+15
Wt. Tare & WS (g)	70.93
Wt. Tare & DS (g)	51.84
Wt. Tare (g)	38.98
Wt. Water (g)	19.09
Wt. DS (g)	12.86
<b>Moisture Content</b>	<b>148.4%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	50.52
Wt. Volatiles (g)	1.32
Wt. Ash (g)	11.54
<b>Ash Content</b>	<b>89.7%</b>
<b>Organic Matter</b>	<b>10.3%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13



**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-3a
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	1.000-1.550
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-013		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

**Moisture, Ash, and Organic Matter (Loss on Ignition)**  
ASTM D 2974-07a

Client Paul C. Rizzo & Associates  
 Client Reference Turkey Point NPP Units 6 & 7 13-5054  
 Project No. 2013-465-002

**Moisture Content ( Oven Dried, minus #10 Sieve Material )**

Lab ID	014
Boring No.	M-7-3b
Depth(ft)	4.000-4.800
<b>Sample No.</b>	<b>MP-1</b>
Tare Number	M+I
Wt. Tare & WS (g)	67.55
Wt. Tare & DS (g)	41.46
Wt. Tare (g)	37.69
Wt. Water (g)	26.09
Wt. DS (g)	3.77
<b>Moisture Content</b>	<b>692.0%</b>

**Ash Content, Organic Matter**

Furnace Temperature ° C	440
Wt. Tare & Ash (g)	39.26
Wt. Volatiles (g)	2.20
Wt. Ash (g)	1.57
<b>Ash Content</b>	<b>41.6%</b>
<b>Organic Matter</b>	<b>58.4%</b>

*Tested By* PC      *Date* 11/19/13      *Checked By* KC      *Date* 11/20/13

**Moisture, Ash and Organic Matter (LOI)**

ASTM D2974-07a

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-3b
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	4.000-4.800
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-014		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1395	6/4/14
Ashing Furnace	G255	5/29/14

## SHELBY TUBE UNIT WEIGHT

ASTM D2937-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-2b
Client Reference:	Turkey Point NPP Units 6 & 7 13-5054	Depth Pushed (ft):	0.000-1.775
Project No.:	2013-465-002	Shelby Tube No.:	ST-1
Lab ID:	2013-465-002-001	Recovery (ft):	1.775

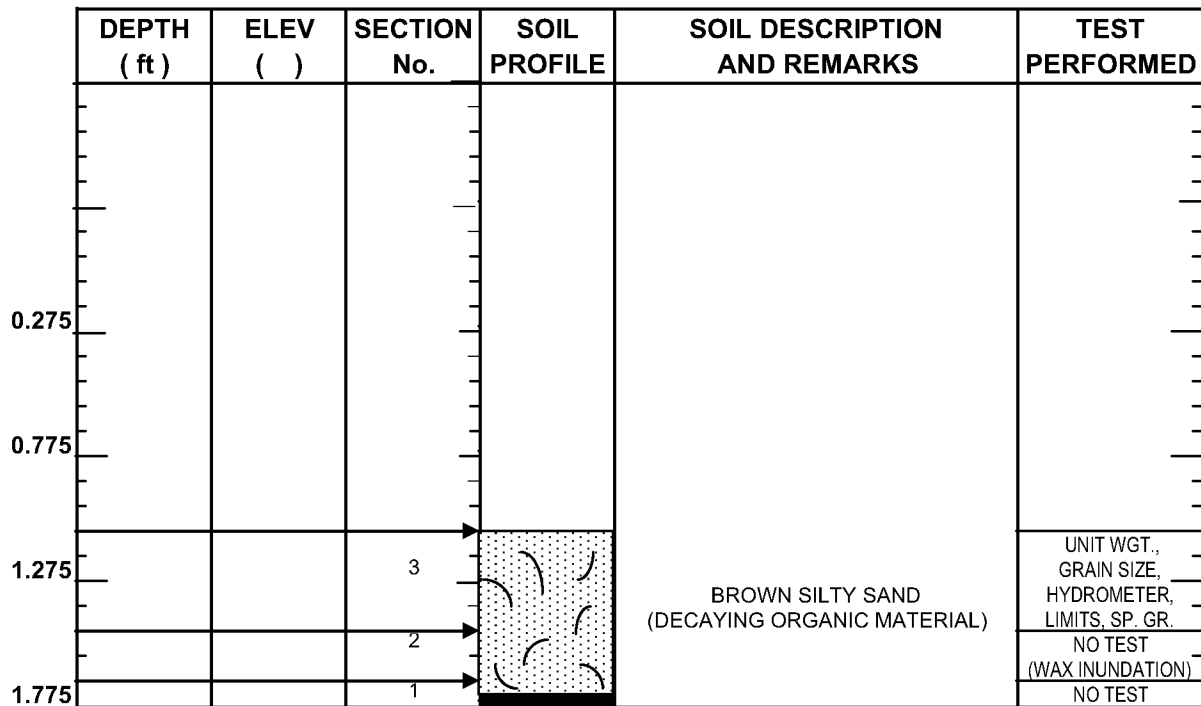
### MOISTURE CONTENT

Section Number	1	2	3	4	5
Tare Number			874		
Weight of Tare & Wet Sample (g)			193.87		
Weight of Tare & Dry Sample (g)			122.39		
Weight of Tare (g)			110.31		
Moisture Content (%)			591.72		

### UNIT WEIGHT

Weight of Tube & Wet Sample (g)	830.96
Weight of Tube (g)	320.75
Weight of Wet Sample (g)	510.21
Length 1 (in)	4.663
Length 2 (in)	4.647
Length 3 (in)	4.655
Top Diameter (in)	2.852
Middle Diameter (in)	2.856
Bottom Diameter (in)	2.854
Sample Volume (cm <sup>3</sup> )	488.00
Moisture Content (%)	591.72
Unit Wet Weight (g/cm <sup>3</sup> )	1.05
Unit Wet Weight (pcf)	65.24
<b>Unit Dry Weight (g/cm<sup>3</sup>)</b>	<b>0.15</b>
<b>Unit Dry Weight (pcf)</b>	<b>9.4</b>

## SOIL PROFILE AND SAMPLING



*Note: When full recovery is not achieved, the elevation can not be accurately defined.  
 Indicate each cut of the tube with an arrow  
 Indicate dividing line between soil types with a solid line  
 Indicate wax by cross-hatching. Indicate soil types by standard symbols*

Tested By	JCM	Date	11/14/13	Checked By	CLK	Date	12/10/13
-----------	-----	------	----------	------------	-----	------	----------

## Shelby Tube Unit Weight

ASTM D2937-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	0.000-1.775
Project No.	2013-465-002	Sample No.	ST-1
Lab ID #	2013-465-002-001	Recovery (ft)	1.775

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/13/13
Pi Tape	G1121	1/14/14
Balance		



## SHELBY TUBE UNIT WEIGHT

ASTM D2937-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-2c
Client Reference:	Turkey Point NPP Units 6 & 7 13-5054	Depth Pushed (ft):	0.000-1.775
Project No.:	2013-465-002	Shelby Tube No.:	ST-1
Lab ID:	2013-465-002-002	Recovery (ft):	1.775

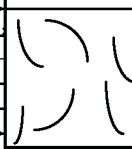
### MOISTURE CONTENT

Section Number	1	2	3	4	5
Tare Number	2729				
Weight of Tare & Wet Sample (g)	37.73				
Weight of Tare & Dry Sample (g)	18.29				
Weight of Tare (g)	6.91				
Moisture Content (%)	170.83				

### UNIT WEIGHT

Weight of Tube & Wet Sample (g)	1285.13
Weight of Tube (g)	436.72
Weight of Wet Sample (g)	848.41
Length 1 (in)	6.065
Length 2 (in)	6.049
Length 3 (in)	6.061
Top Diameter (in)	2.892
Middle Diameter (in)	2.890
Bottom Diameter (in)	2.893
Sample Volume (cm <sup>3</sup> )	651.99
Moisture Content (%)	170.83
Unit Wet Weight (g/cm <sup>3</sup> )	1.30
Unit Wet Weight (pcf)	81.20
<b>Unit Dry Weight (g/cm<sup>3</sup>)</b>	<b>0.48</b>
<b>Unit Dry Weight (pcf)</b>	<b>30.0</b>

## SOIL PROFILE AND SAMPLING

DEPTH (ft)	ELEV ( )	SECTION No.	SOIL PROFILE	SOIL DESCRIPTION AND REMARKS	TEST PERFORMED
0.275					
0.775					
1.275		2		BROWN ELASTIC SILT (DECAYING ORGANIC MATERIAL)	GRAIN SIZE, HYDROMETER, SP. GR., LIMITS, UNIT WGT., LOI
1.775		1			W.C.

*Note: When full recovery is not achieved, the elevation can not be accurately defined.  
 Indicate each cut of the tube with an arrow  
 Indicate dividing line between soil types with a solid line  
 Indicate wax by cross-hatching. Indicate soil types by standard symbols*

Tested By	JCM	Date	12/4/13	Checked By	CLK	Date	12/10/13
-----------	-----	------	---------	------------	-----	------	----------

## Shelby Tube Unit Weight

ASTM D2937-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2c
Client Reference	Turkey Point NPP Units 6 & 7 13-5054	Depth (ft)	0.000-1.775
Project No.	2013-465-002	Sample No.	ST-1
Lab ID #	2013-465-002-002	Recovery (ft)	1.775

Equipment	Equipment ID#	Calibration Due Date
Oven	G1387	8/16/14
Balance	G1047	3/25/14
Calipers	G1123	12/2/14
Pi Tape		
Balance		

## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-2b
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	1.075-1.475
Project No.:	2013-465-002	Sample No.:	ST-1
Lab ID:	2013-465-002-001	Visual Description:	<b>BROWN PEAT</b> (Minus No.4 sieve material, oven dried)

Replicate Number	1	2
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	694.03	686.35
Temperature (°C)	26.5	25.6
Weight of Pycnometer + Water (g)	684.91	675.32
Tare Number	958	950
Weight of Tare + Dry Soil (g)	118.12	124
Weight of Tare (g)	99.01	100.46
Weight of Dry Soil (g)	19.11	23.54
Specific Gravity of Soil @ Measured Temperature	1.913	1.882
Specific Gravity of Water @ Measured Temperature	0.99666	0.99690
Conversion Factor for Measured Temperature	0.99845	0.99869
Specific Gravity @ 20° Celsius	1.916	1.884

Average Specific Gravity @ 20° Celsius	1.90
--	------

Tested By TO Date 11/22/13 Checked By KC Date 11/25/13

DCN: CT-S5 Date: 9/22/13 Revision: 19

Gravity.xls

## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	1.075-1.475
Project No.	2013-465-002	Sample No.	ST-1
Lab ID #	2013-465-002-001		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/27/13
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2c
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	1.175-1.675
Project No.	2013-465-002	Sample No.	ST-1
Lab ID #	2013-465-002-002		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-6-1a
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	2.600-3.350
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-003		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-6-1b
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	2.250-2.900
Project No.:	2013-465-002	Sample No.:	MP-1
Lab ID:	2013-465-002-004	Visual Description:	<b>DARK BROWN PEAT</b>

(Minus No.4 sieve material, oven dried)

<b>Replicate Number</b>	<b>1</b>	<b>2</b>
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	689.78	680.4
Temperature (°C)	25.6	24.8
Weight of Pycnometer + Water (g)	685.03	675.42
Tare Number	697	1092
Weight of Tare + Dry Soil (g)	108.99	110.97
Weight of Tare (g)	98.81	100.13
Weight of Dry Soil (g)	10.18	10.84
Specific Gravity of Soil @ Measured Temperature	1.875	1.849
Specific Gravity of Water @ Measured Temperature	0.99690	0.99710
Conversion Factor for Measured Temperature	0.99869	0.99889
Specific Gravity @ 20° Celsius	1.877	1.851

Average Specific Gravity @ 20° Celsius 1.86

---

Tested By	TO	Date	11/26/13	Checked By	KC	Date	11/27/13
-----------	----	------	----------	------------	----	------	----------

DCN: CT-S5 Date: 9/22/13 Revision: 19

Gravity.xls

## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-6-1b
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	2.250-2.900
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-004		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14

## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-6-2a
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	0.700-1.200
Project No.:	2013-465-002	Sample No.:	MP-1
Lab ID:	2013-465-002-005	Visual Description:	<b>BROWN SILTY CLAY</b>

(Minus No.4 sieve material, oven dried)

Replicate Number	1	2
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	697.4	687.11
Temperature (°C)	25.1	24.0
Weight of Pycnometer + Water (g)	685.09	675.52
Tare Number	947	979
Weight of Tare + Dry Soil (g)	121.88	118.19
Weight of Tare (g)	100.69	98.12
Weight of Dry Soil (g)	21.19	20.07
Specific Gravity of Soil @ Measured Temperature	2.385	2.366
Specific Gravity of Water @ Measured Temperature	0.99703	0.99730
Conversion Factor for Measured Temperature	0.99882	0.99909
Specific Gravity @ 20° Celsius	2.388	2.368

Average Specific Gravity @ 20° Celsius 2.38

---

Tested By *TO*      Date *11/26/13*      Checked By *KC*      Date *11/27/13*

## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-6-2a
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	0.700-1.200
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-005		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-6-2a
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	2.150-2.800
Project No.	2013-465-002	Sample No.	MP-2
Lab ID #	2013-465-002-006		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14

## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-1a
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	1.000-1.550
Project No.:	2013-465-002	Sample No.:	MP-1
Lab ID:	2013-465-002-007	Visual Description:	<b>BROWN SILTY CLAY</b>

(Minus No.4 sieve material, oven dried)

<b>Replicate Number</b>	<b>1</b>	<b>2</b>
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	699.38	688.58
Temperature (°C)	25.7	25.2
Weight of Pycnometer + Water (g)	685.02	675.37
Tare Number	633	976
Weight of Tare + Dry Soil (g)	121.54	124.48
Weight of Tare (g)	96.94	101.48
Weight of Dry Soil (g)	24.60	23.00
Specific Gravity of Soil @ Measured Temperature	2.403	2.349
Specific Gravity of Water @ Measured Temperature	0.99687	0.99700
Conversion Factor for Measured Temperature	0.99866	0.99879
Specific Gravity @ 20° Celsius	2.406	2.352

Average Specific Gravity @ 20° Celsius 2.38

---

Tested By *TO*      Date *11/25/13*      Checked By *KC*      Date *11/26/13*

## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-1a
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	1.000-1.550
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-007		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-1a
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	4.100-4.625
Project No.:	2013-465-002	Sample No.:	MP-2
Lab ID:	2013-465-002-008	Visual Description:	<b>Brown Sandy Silty Clay</b> (Minus No.4 sieve material, oven dried)

Replicate Number	1	2
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	701.42	691.18
Temperature (°C)	26.3	25.6
Weight of Pycnometer + Water (g)	684.94	675.32
Tare Number	664	672
Weight of Tare + Dry Soil (g)	122.8	123.56
Weight of Tare (g)	96.14	97.33
Weight of Dry Soil (g)	26.66	26.23
Specific Gravity of Soil @ Measured Temperature	2.620	2.529
Specific Gravity of Water @ Measured Temperature	0.99671	0.99690
Conversion Factor for Measured Temperature	0.99850	0.99869
Specific Gravity @ 20° Celsius	2.623	2.533

Average Specific Gravity @ 20° Celsius 2.58

---

Tested By *TO*      Date *11/26/13*      Checked By *KC*      Date *11/27/13*

**SPECIFIC GRAVITY**

ASTM D 854-10

**EQUIPMENT LIST**

Client	Paul C. Rizzo & Associates	Boring No.	M-7-1a
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	4.100-4.625
Project No.	2013-465-002	Sample No.	MP-2
Lab ID #	2013-465-002-008		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2a
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	6.000-6.600
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-009		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/27/13
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	1.625-2.300
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-010		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/27/13
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14

## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-2b
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	3.350-4.100
Project No.:	2013-465-002	Sample No.:	MP-2
Lab ID:	2013-465-002-011	Visual Description:	<b>DARK BROWN PEAT</b>

(Minus No.4 sieve material, oven dried)

Replicate Number	1	2
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	690.11	680.53
Temperature (°C)	25.5	24.5
Weight of Pycnometer + Water (g)	685.04	675.46
Tare Number	656	637
Weight of Tare + Dry Soil (g)	106.73	109.09
Weight of Tare (g)	95.43	97.67
Weight of Dry Soil (g)	11.30	11.42
Specific Gravity of Soil @ Measured Temperature	1.813	1.798
Specific Gravity of Water @ Measured Temperature	0.99692	0.99718
Conversion Factor for Measured Temperature	0.99871	0.99897
Specific Gravity @ 20° Celsius	1.815	1.800

Average Specific Gravity @ 20° Celsius	1.81
--	------

Tested By TO Date 11/25/13 Checked By KC Date 11/26/13

## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2b
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	3.350-4.100
Project No.	2013-465-002	Sample No.	MP-2
Lab ID #	2013-465-002-011		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14



## SPECIFIC GRAVITY

ASTM D 854-10

Client:	Paul C. Rizzo & Associates	Boring No.:	M-7-2c
Client Reference:	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft):	2.100-2.800
Project No.:	2013-465-002	Sample No.:	MP-1
Lab ID:	2013-465-002-012	Visual Description:	<b>BROWN SILTY CLAY</b>

(Minus No.4 sieve material, oven dried)

Replicate Number	1	2
Pycnometer ID	G 1255	G 1403
Weight of Pycnometer + Soil + Water (g)	705.26	696.27
Temperature (°C)	23.4	22.5
Weight of Pycnometer + Water (g)	685.31	675.70
Tare Number	1139	950
Weight of Tare + Dry Soil (g)	131.48	135.92
Weight of Tare (g)	97.21	100.4
Weight of Dry Soil (g)	34.27	35.52
Specific Gravity of Soil @ Measured Temperature	2.394	2.376
Specific Gravity of Water @ Measured Temperature	0.99745	0.99766
Conversion Factor for Measured Temperature	0.99924	0.99945
Specific Gravity @ 20° Celsius	2.396	2.377

Average Specific Gravity @ 20° Celsius	2.39
--	------

Tested By TO Date 11/27/13 Checked By KC Date 12/2/13

DCN: CT-S5 Date: 9/22/13 Revision: 19

Gravity.xls

## SPECIFIC GRAVITY

ASTM D 854-10

### EQUIPMENT LIST

Client	Paul C. Rizzo & Associates	Boring No.	M-7-2c
Client Reference	Turkey Point NPP Units 6 and 7 13-5054	Depth (ft)	2.100-2.800
Project No.	2013-465-002	Sample No.	MP-1
Lab ID #	2013-465-002-012		

Equipment	Equipment ID#	Calibration Due Date
Oven	G1118	11/23/14
Balance	G1057	11/4/14
#4 Sieve	G025	8/20/14
Pycnometer	G1255	Initial Only
Pycnometer	G1403	Initial Only
Thermometer	G1412	6/12/14
Vacuum Pump	G824	10/11/14