



Geosyntec
consultants

APPENDIX C

Soil Boring Logs



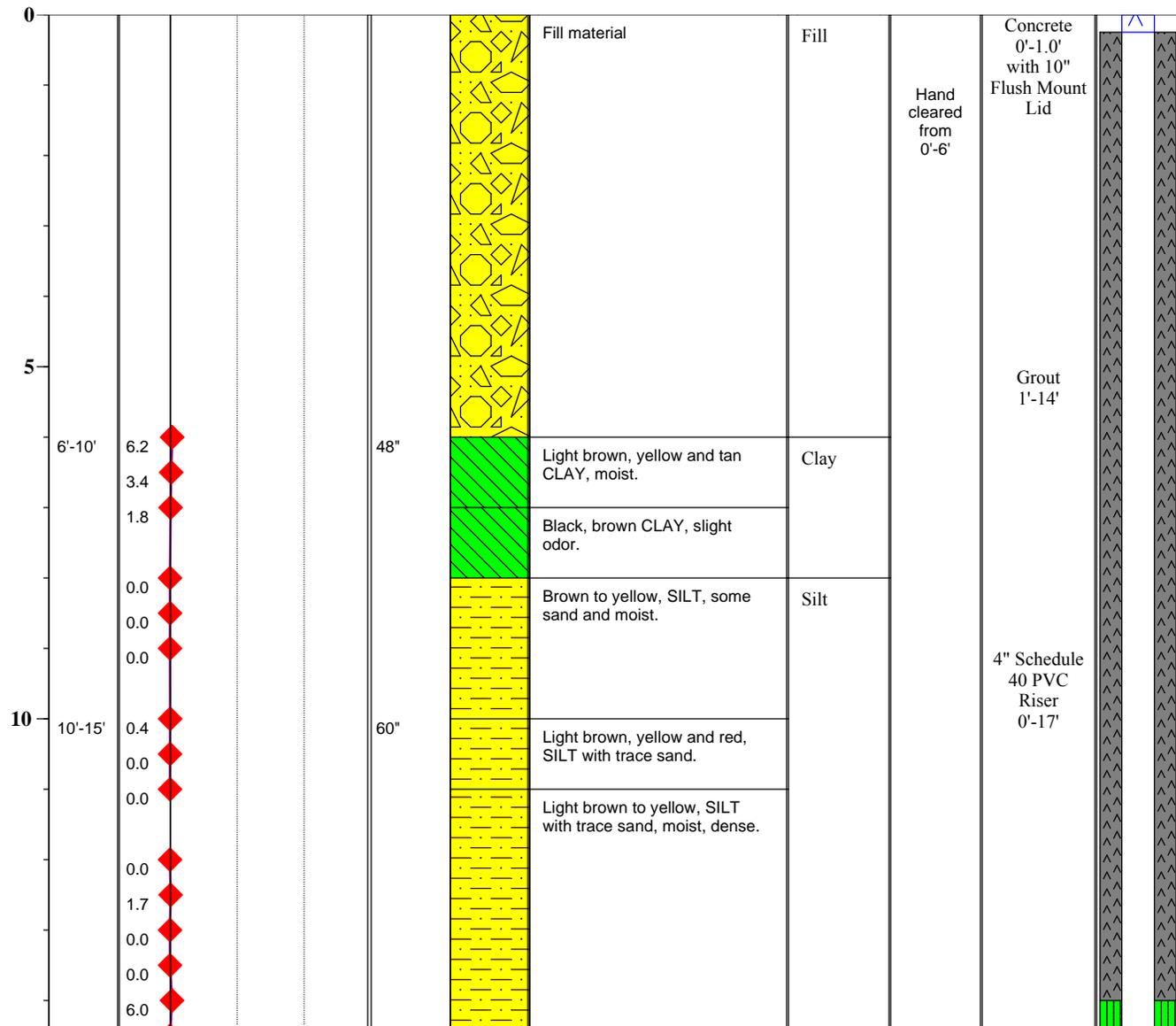
BORING AND WELL COMPLETION LOG ID NO. MW-01S

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **27'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/29/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

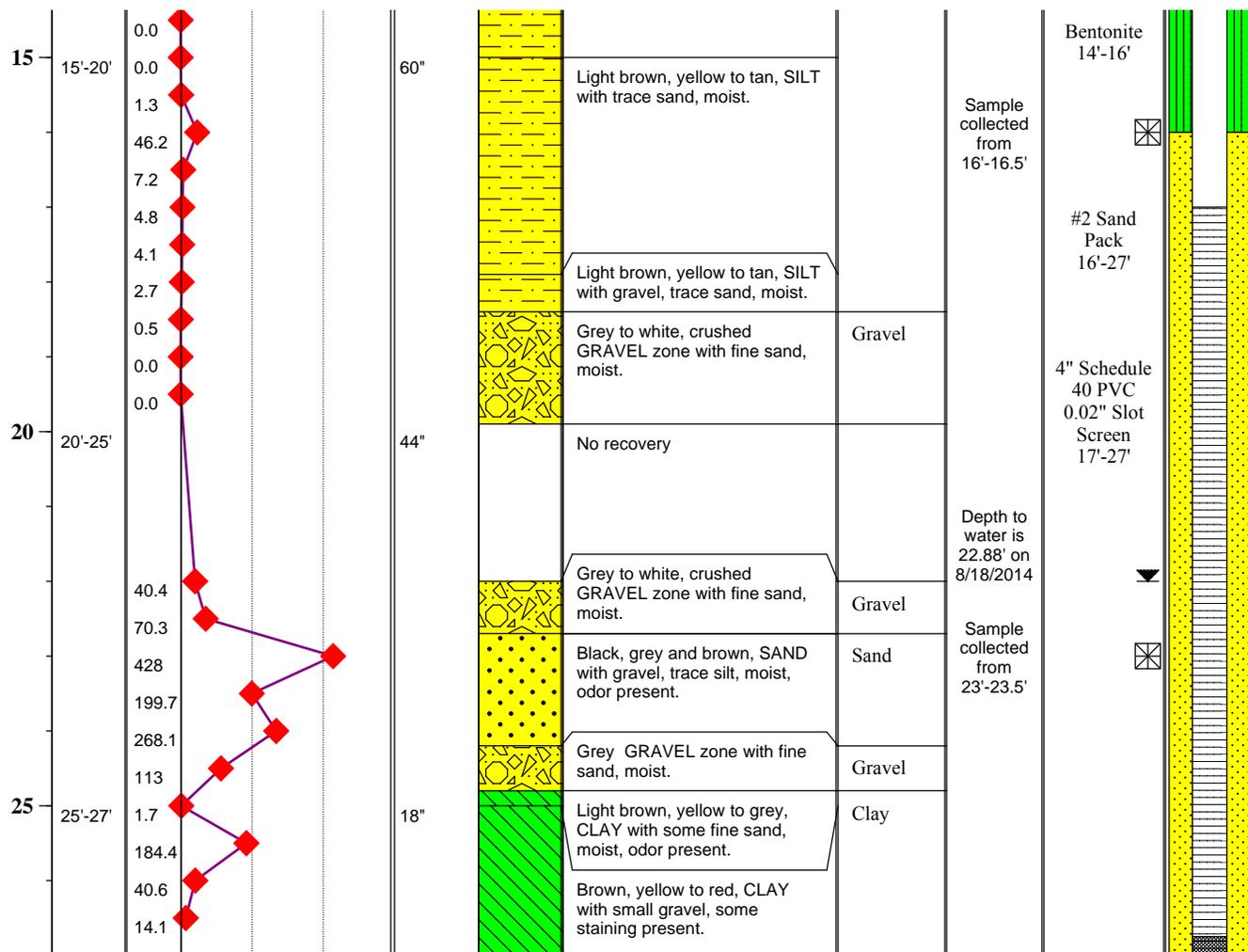
" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **27'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/29/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
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 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-05**

Groundwater & Environmental Services, Inc.

Page 1 of 4

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/01/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0 _____ 600		Fill material	Fill	Hand cleared from 0'-6'	Concrete 0'-1.0' with 10" Flush Mount Lid
5			34"	Light brown and red CLAY with gravel, moist. (CC)	Clay		4" Schedule 40 PVC Riser 0'-25'
10			34"	No recovery			

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

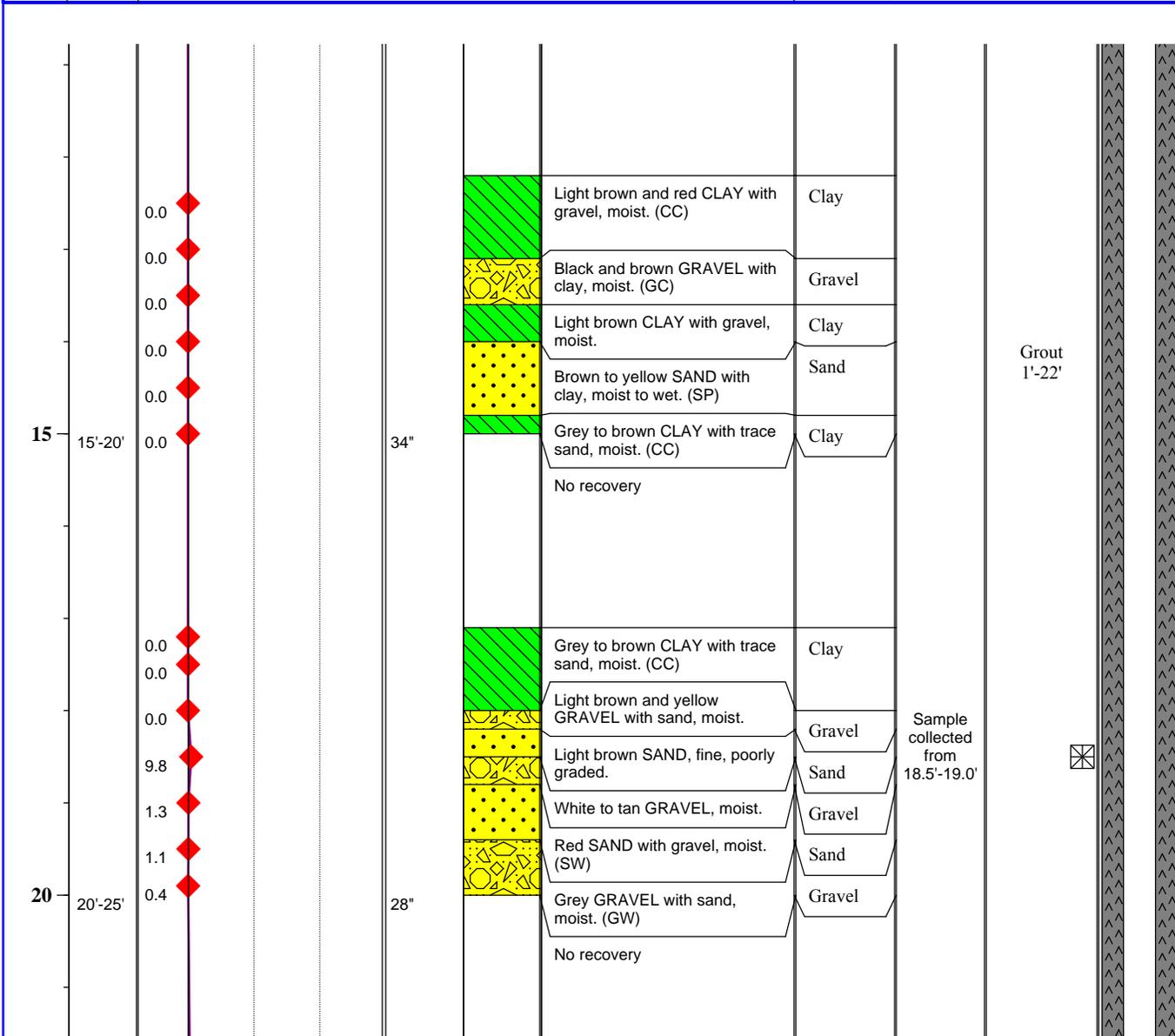
ID NO. **MW-05**

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/01/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

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 Trace = <10% Some = <50%
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Symbol Key:
 Water Level
 Sample Location

" = inches
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 ppm = parts per million
 eV = electron volt

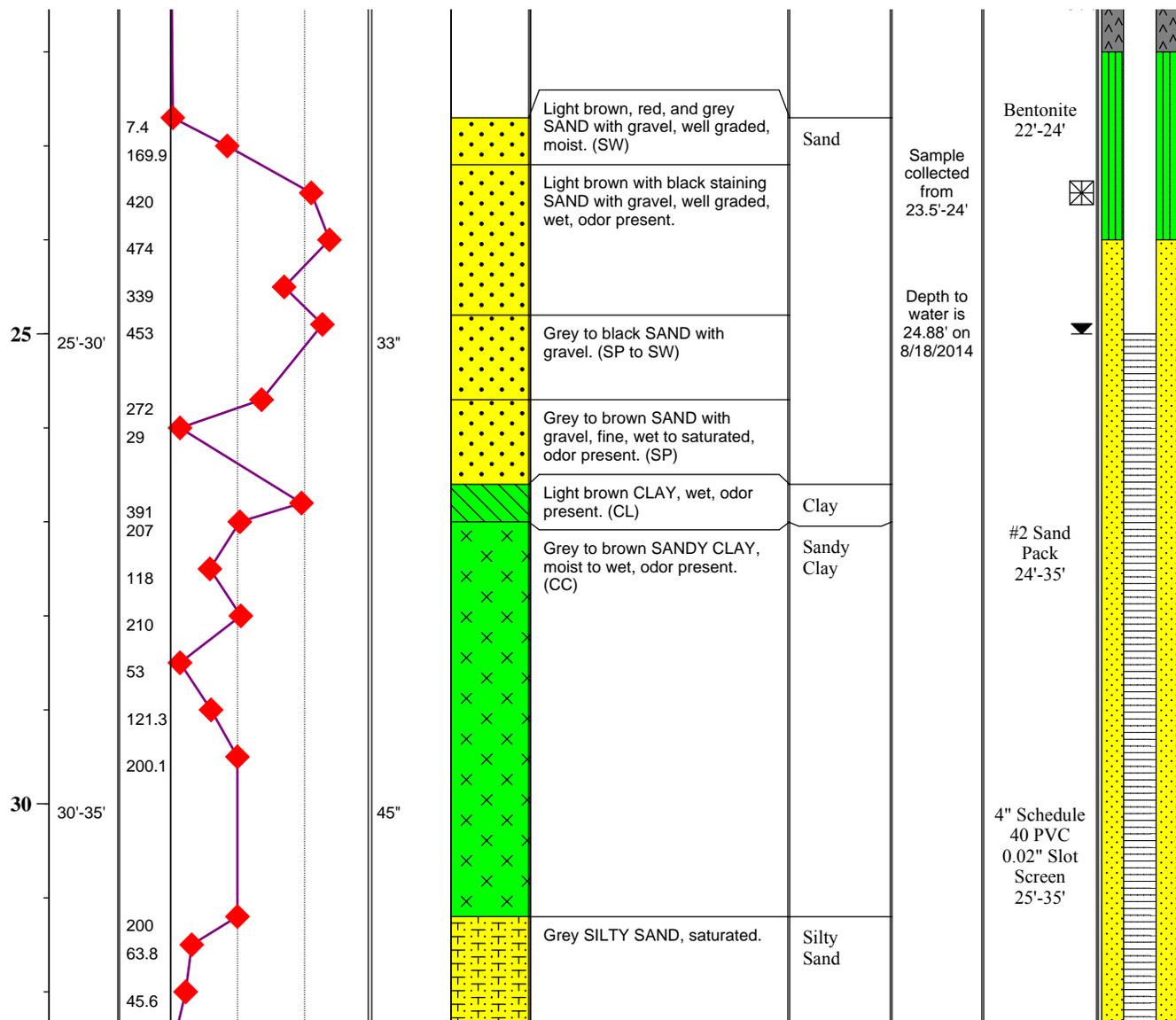
Well ID: **MW-05**



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/01/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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 Little = <25% And = 50%

Symbol Key:
 Water Level " = inches
 Sample Location ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-05**

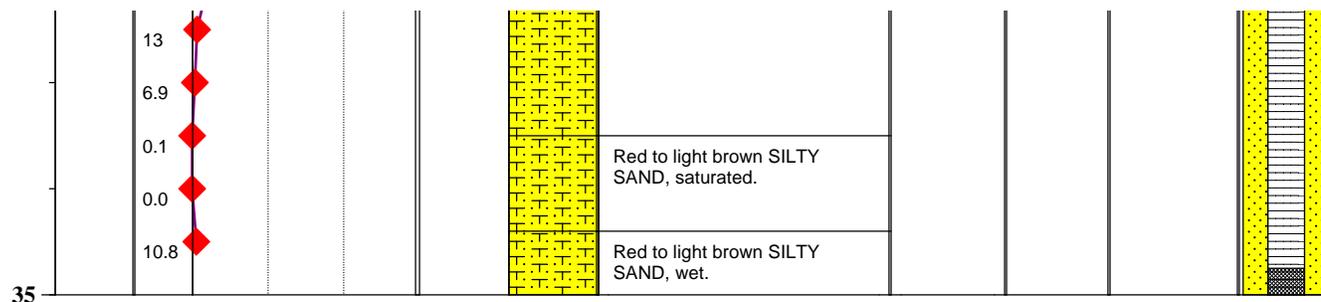
Groundwater & Environmental Services, Inc.

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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/01/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level 
 Sample Location 

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

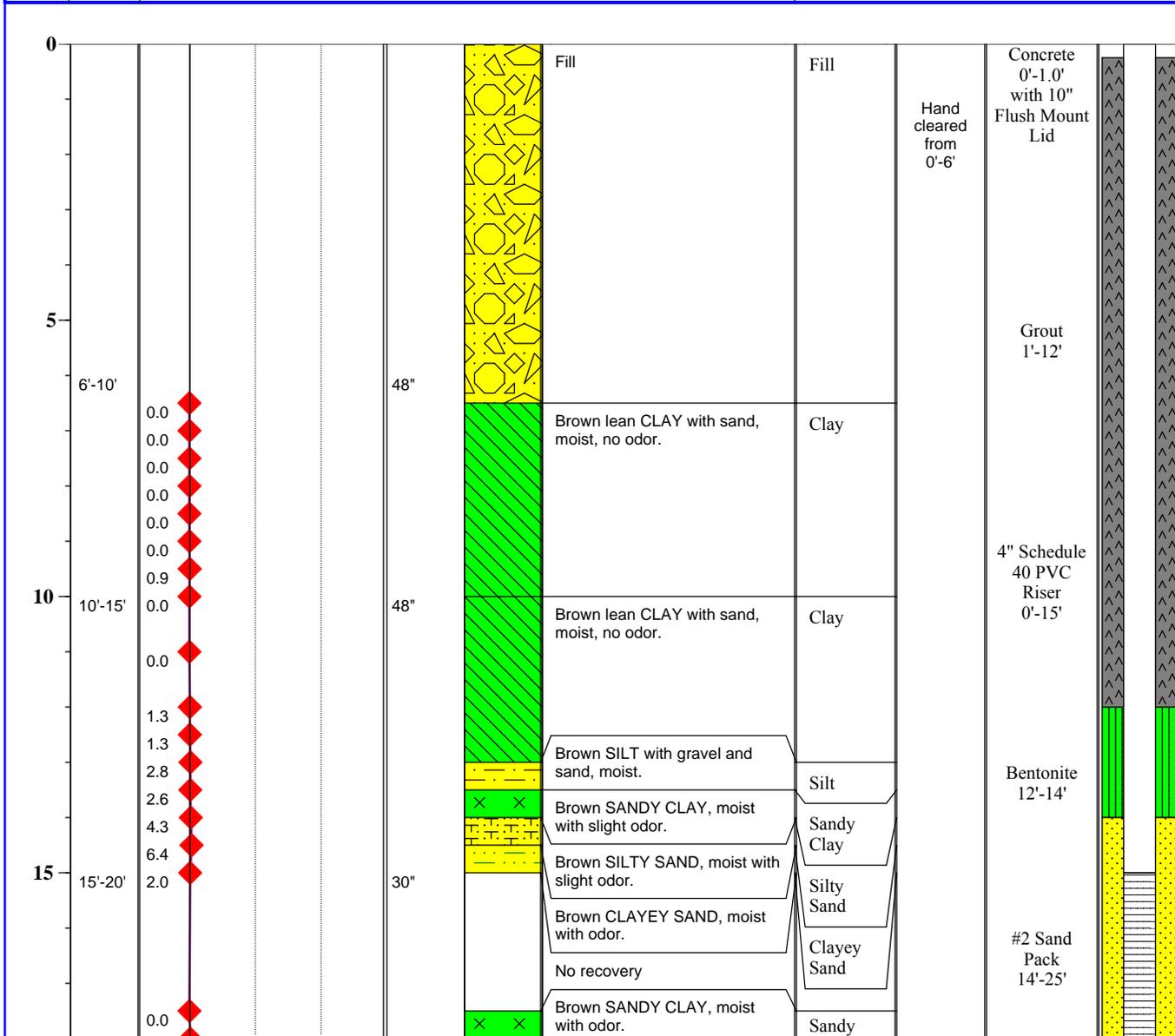
Well ID: **MW-05**



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **25'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/23/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-08S**

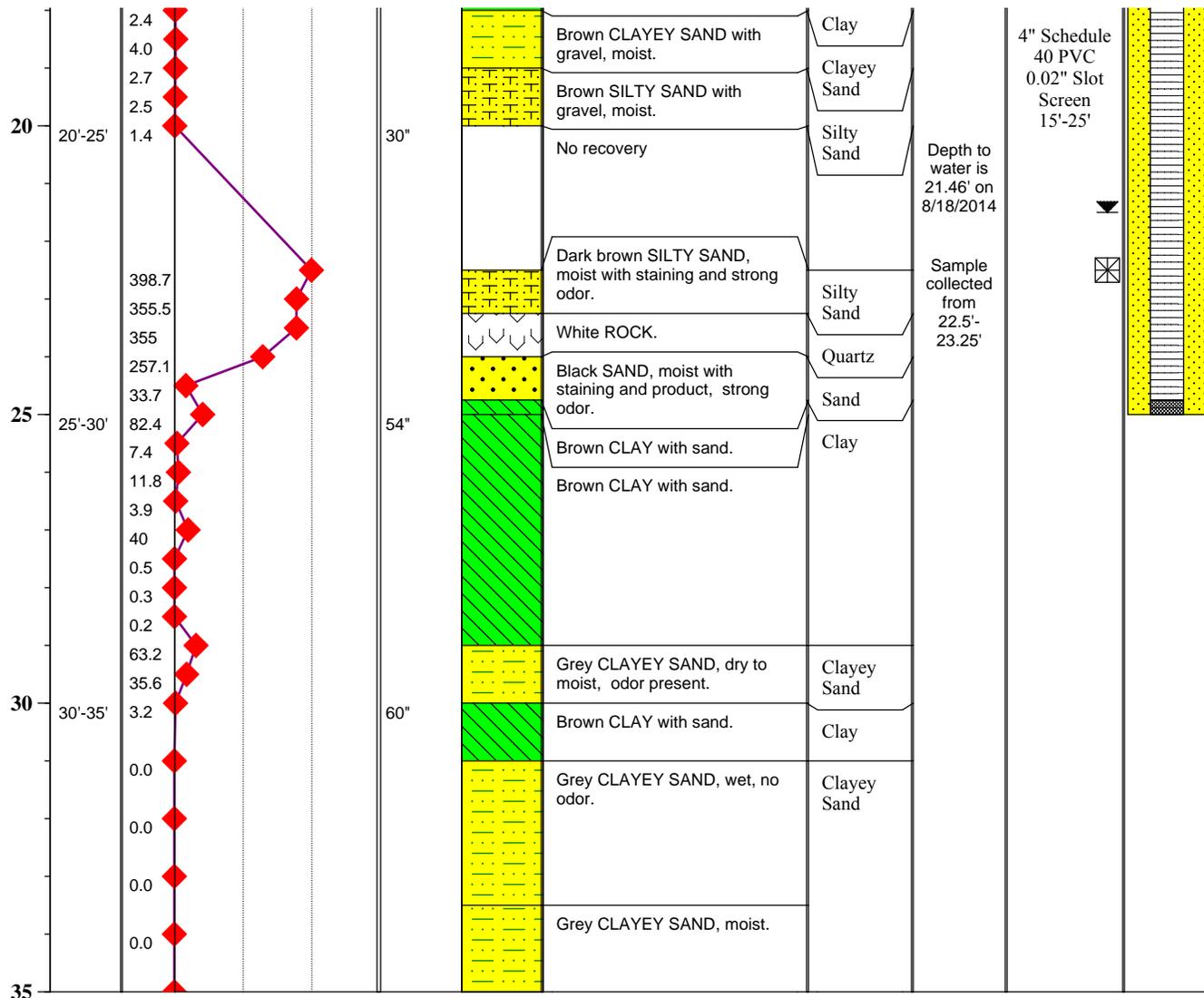
Groundwater & Environmental Services, Inc.

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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **25'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/23/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-08S**



BORING AND WELL COMPLETION LOG

ID NO. **MW-10S**

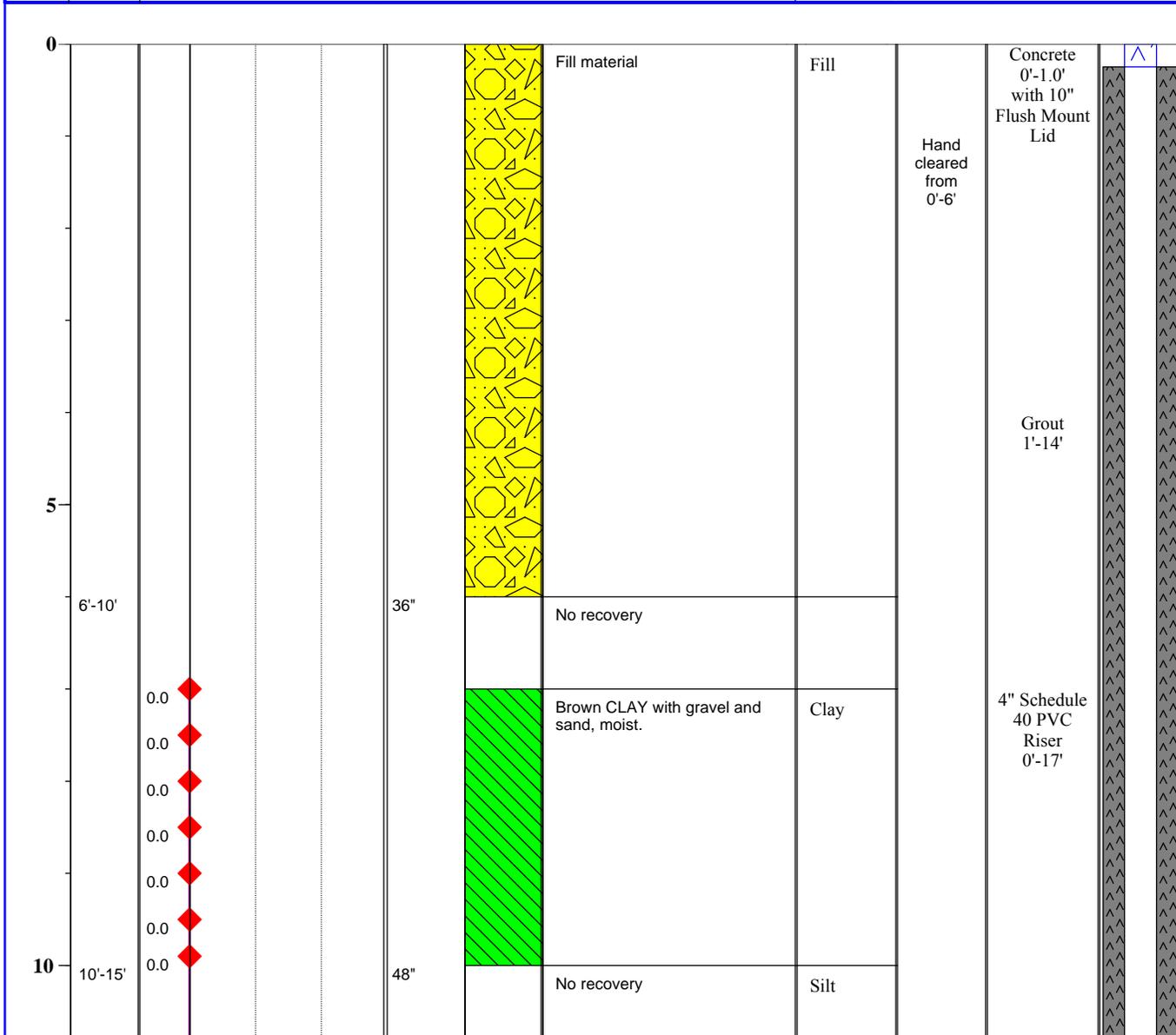
Groundwater & Environmental Services, Inc.

Page 1 of 3

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **27'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/28/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-10S**

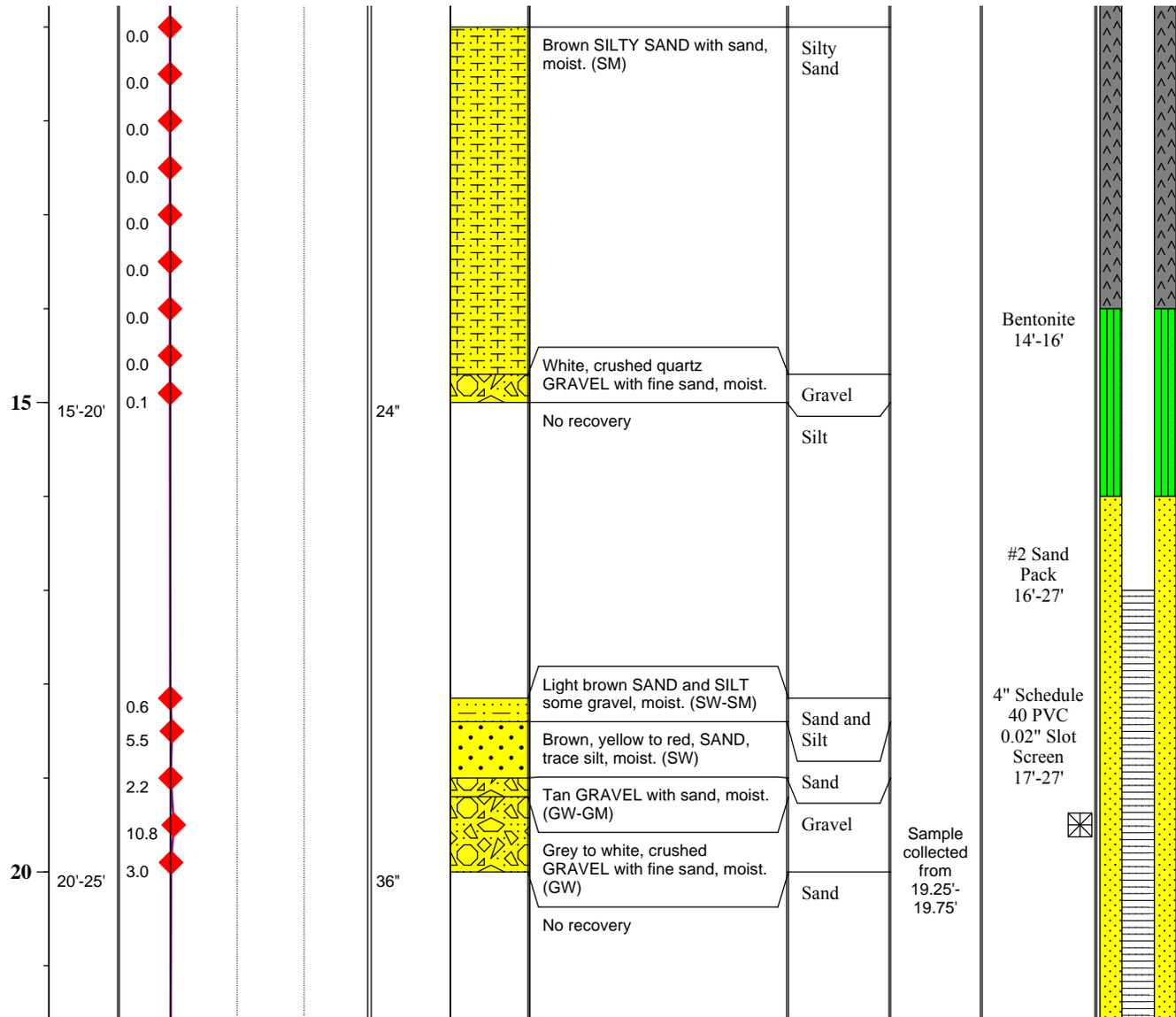
Groundwater & Environmental Services, Inc.
 1350 Blair Drive, Suite A, Odenton, Maryland 800.220.3606 Fax 410.721.3733 p. 1 of 3



PROJECT: Potomac River Generating Station WATER DEPTH: TOTAL DEPTH: 27'
 ADDRESS: 1400 N Royal St, Alexandria, VA CASING EL.:
 0402859 BOREHOLE DIA.: 10.5" WELL DIA.: 4"

Logged By: P. Reichardt Drilling Method: Geoprobe 7822DT
 Dates Drilled: 7/28/2014 Sampling Method: 5' Acetate Sleeve
 Drilling Company: Odyssey Soil Class. System: Unified Soil Classification System
 Well Permit #: Field Screening: PID, 10.6 eV Lamp

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level [Symbol]
 Sample Location [Symbol]

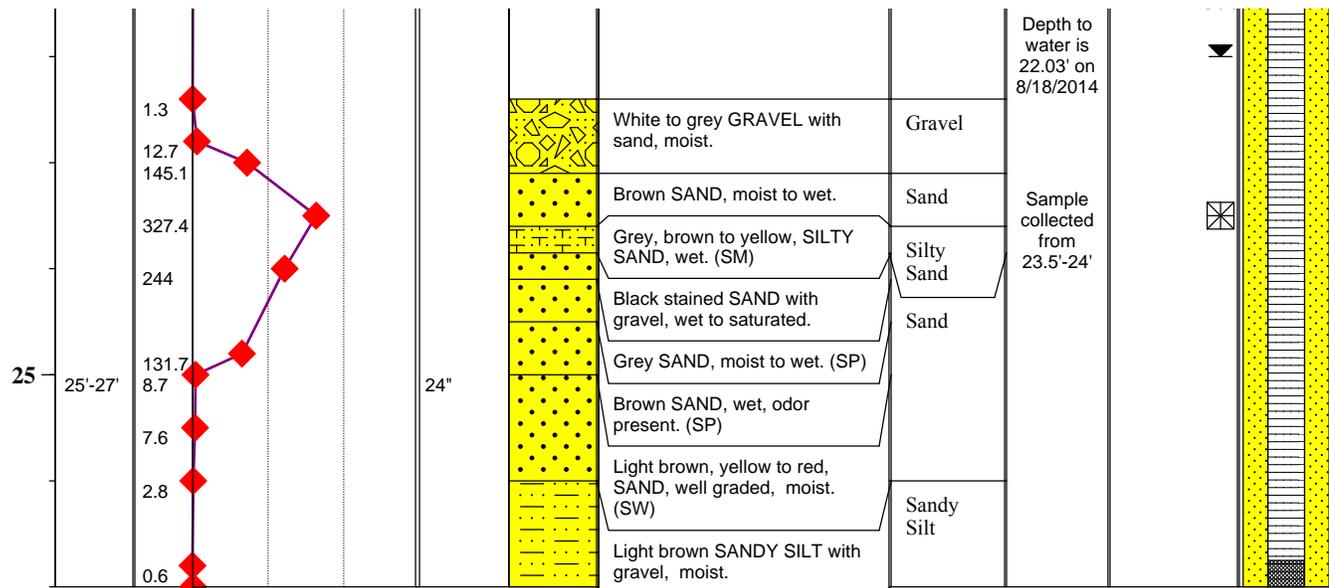
" = inches
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 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **27'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/28/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

" = inches
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 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-11**

Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/24/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0		Fill	Fill	Hand cleared from 0'-6.5'	Concrete 0'-1.0' with 10" Flush Mount Lid
6'-10'			12"	No recovery			Grout 1'-22'
10'-15'	0.7 0.3 0.2		6"	Reddish brown SANDY SILT with gravel, moist.	Sandy Silt		
15'-20'	0.0 0.4		12"	Reddish brown SANDY SILT with gravel, moist.	Sandy Silt		4" Schedule 40 PVC Riser 0'-25'
20'-25'	0.0 0.0		0"	Poorly graded GRAVEL with sand.	Gravel		
25'-30'	1.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0		54"	SANDY CLAY, low moisture, no odor.	Sandy Clay	Sample collected from 25.5'-26.5'	Bentonite 22'-24'
30'-35'	0.0 0.0 0.0 0.0 0.0		60"	Brown CLAY with sand, moist.	Clay	Depth to water is 26.77' on 8/18/2014	#2 Sand Pack 24'-35'
				Brown SILT, wet, no odor.	Silt	Sample collected from 30'-31'	
35				Brown CLAYEY SAND, moist.	Clayey Sand		

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level 
 Sample Location 

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-11**

Groundwater & Environmental Services, Inc.
 1350 Blair Drive, Suite A, Odenton, Maryland 800.220.3606 Fax 410.721.3733 p. 1 of 1



BORING AND WELL COMPLETION LOG

ID NO. **MW-14**

Groundwater & Environmental Services, Inc.

Page 1 of 3

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **38.5'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/29/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0 _____ 600		Fill	Fill	Hand cleared from 0'-6'	Concrete 0'-1.0' with 10" Flush Mount Lid
6'-10'			24"	No recovery			Grout 1'-25.5'
10'-15'			24"	Brown SILT with gravel, low moisture.	Silt		
				No recovery			
				Brown SILT with gravel.	Silt		
				Brown SANDY SILT with gravel, low moisture.	Sandy Silt		
				Reddish brown SAND with gravel, moist.	Sand		

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

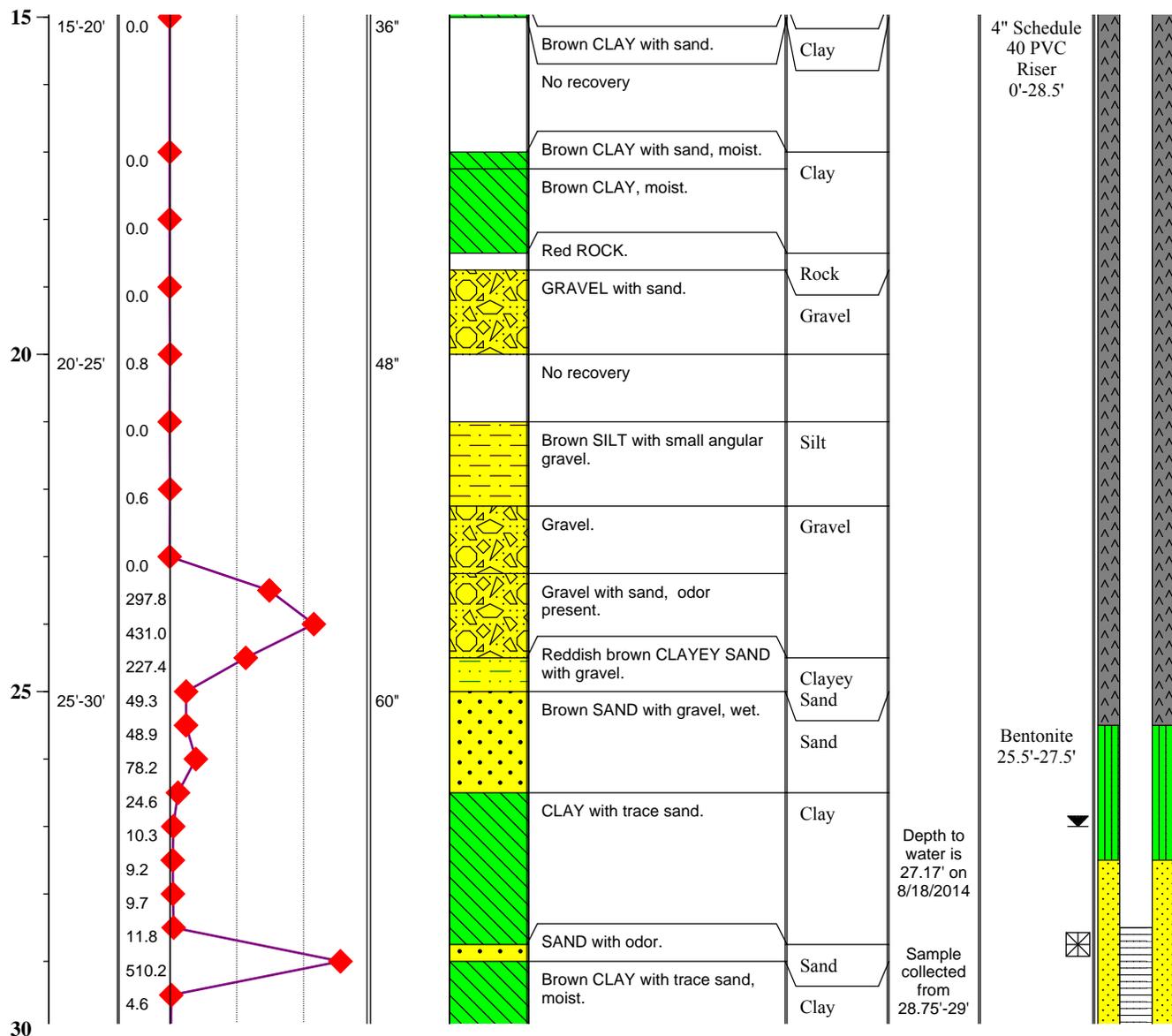
Well ID: **MW-14**



PROJECT: Potomac River Generating Station WATER DEPTH: TOTAL DEPTH: 38.5'
 ADDRESS: 1400 N Royal St, Alexandria, VA CASING EL.:
 0402859 BOREHOLE DIA.: 10.5" WELL DIA.: 4"

Logged By: D. Rice Drilling Method: Geoprobe 7822DT
 Dates Drilled: 7/29/2014 Sampling Method: 5' Acetate Sleeve
 Drilling Company: Odyssey Soil Class. System: Unified Soil Classification System
 Well Permit #: Field Screening: PID, 10.6 eV Lamp

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
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Symbol Key:
 Water Level [Symbol]
 Sample Location [Symbol]

" = inches
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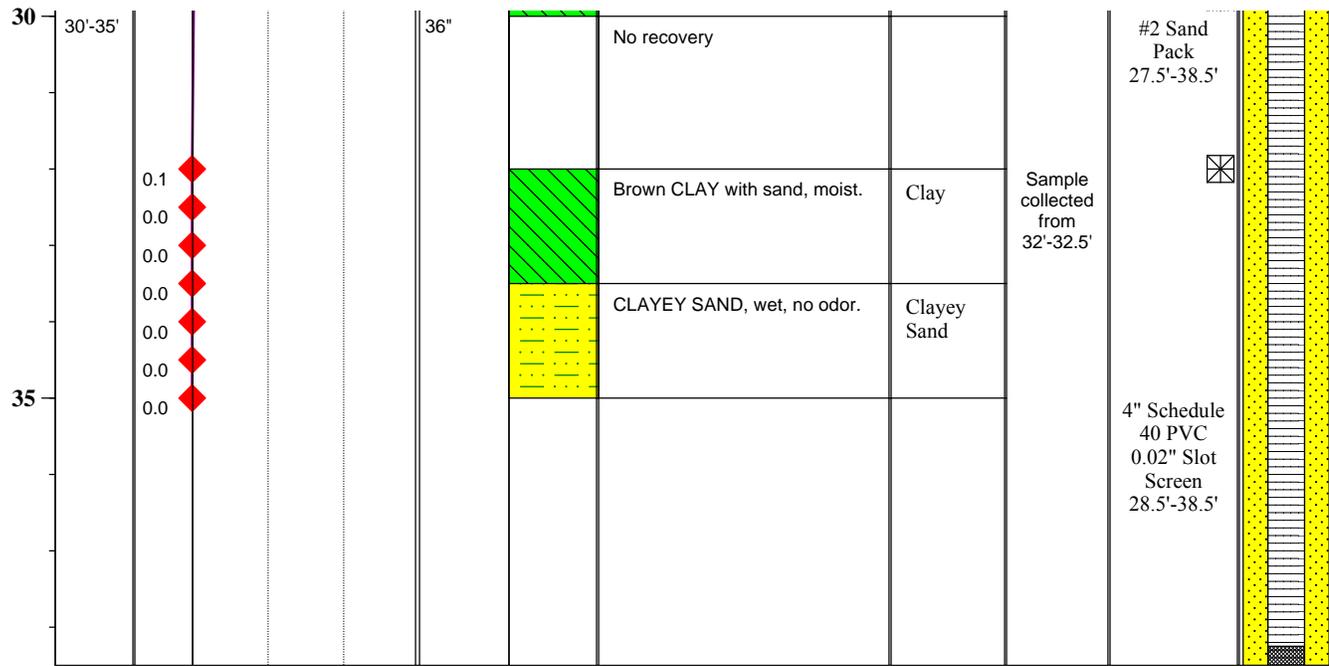
BORING AND WELL COMPLETION LOG ID NO. MW-14

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **38.5'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/29/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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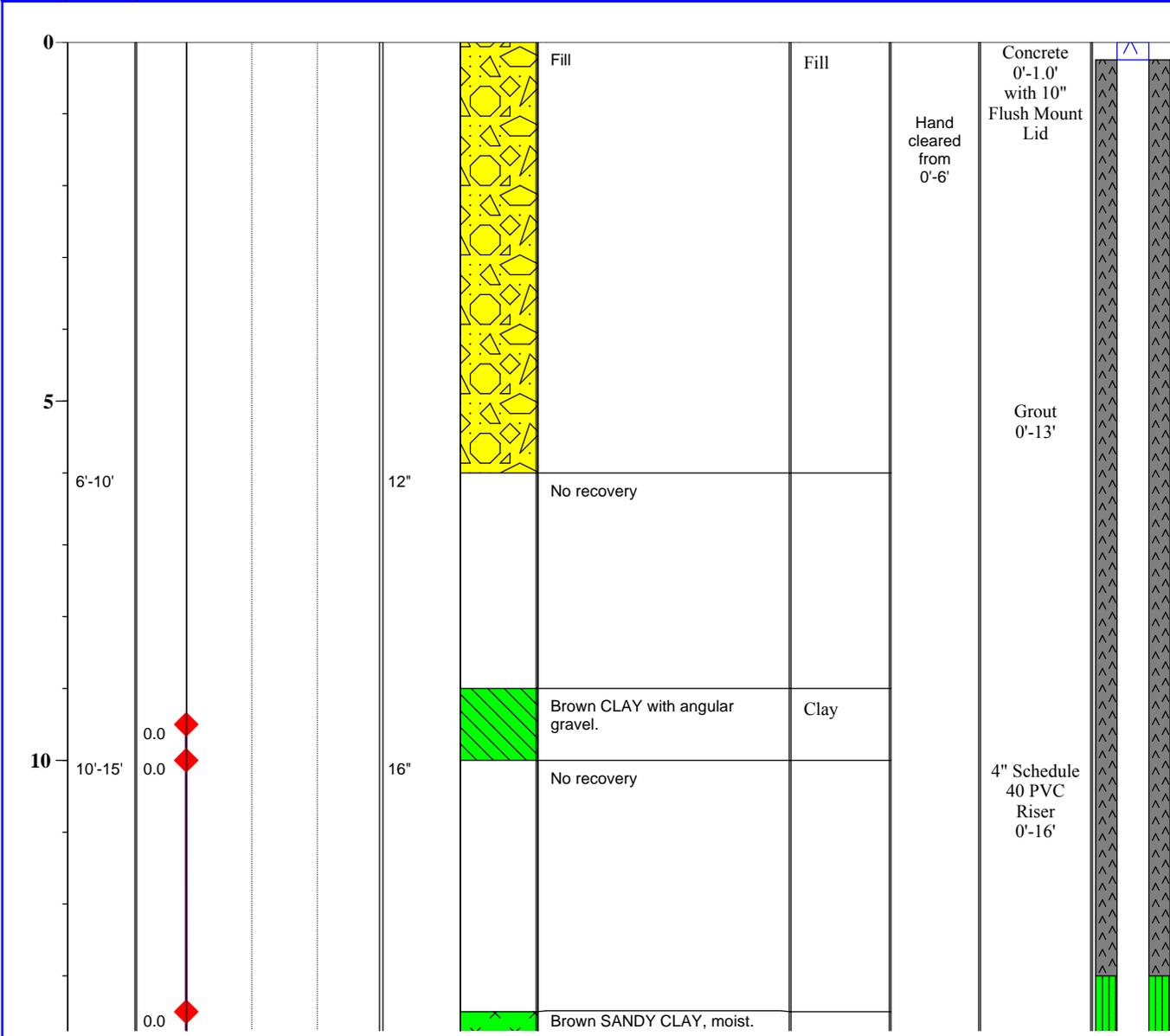
LEGEND Proportion Descriptions: Trace = <10% Some = <50% Little = <25% And = 50%
 Symbol Key: Water Level [Symbol] Sample Location [Symbol] " = inches ' = feet ppm = parts per million eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/31/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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Symbol Key:
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 Sample Location

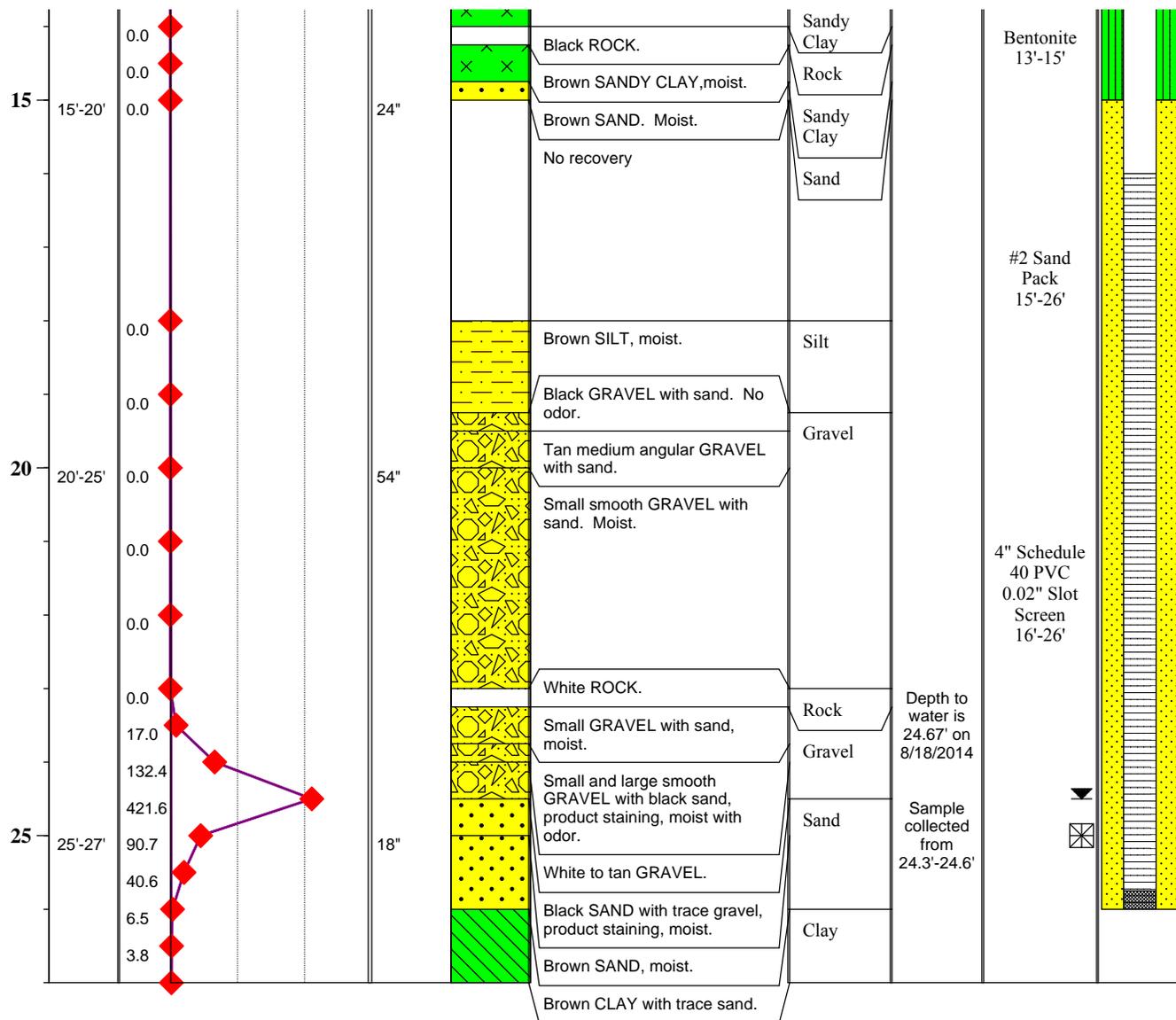
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 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/31/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level " = inches
 Sample Location ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-16S**

Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Christman** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/13/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Kodiak** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0 - 600		Fill material	Fill	Hand cleared from 0'-7'	Concrete 0'-1.0' with 10" Flush Mount Lid
5							Grout 1'-11'
7'-10'	0.0		36"	Tan SANDY CLAY with fine to coarse grained angular gravel, moist with medium to soft plasticity.	Sandy Clay		2" Schedule 40 PVC Riser 0'-15'
10'-15'	0.0		60"	CLAY with trace sand and tan gravel, moist.	Clay		Bentonite 11'-13'
15'-20'	0.0		60"	CLAY with trace sand and tan gravel, moist.		Lithology is derived from MW-16 which is adjacent to this boring	#2 Sand Pack 13'-25'
20'-25'	0.0		60"	Brown to black CLAY.		Sample collected at 23' from adjacent boring MW-16	2" Schedule 40 PVC 0.02" Slot Screen 15'-25'
25	0.0			Orange to tan CLAYEY SAND, medium density, poorly graded, moist.	Clayey Sand	Depth to water is 24.13' on 8/18/2014	

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-16**

Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **36'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Christman** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/13/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Kodiak** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0				Fill material	Fill	Hand cleared from 0'-7'	Concrete 0'-1.0' with 10" Flush Mount Lid Grout 1'-22'
7'-10'	0.0	0.0	36"	Tan SANDY CLAY with fine to coarse grained angular gravel, moist with medium to soft plasticity.	Sandy Clay		2" Schedule 40 PVC Riser 0'-26'
10'-15'	0.0	0.0	60"	CLAY with trace sand and tan gravel, moist.			
15'-20'	0.0	0.0	60"	CLAY with trace sand and tan gravel, moist.			#2 Sand Pack 24'-36'
20'-25'	0.0	0.0	60"	Brown to black CLAY.	Clay		
25'-30'	0.0	0.0	60"	Orange to tan CLAYEY SAND, medium density, poorly graded, moist.	Clayey Sand	Sample collected at 23'	Bentonite 22'-24'
30'-35'	0.0	0.0	60"	CLAY with trace fine grained sand, moist.	Clay	Depth to water is 27.63' on 8/18/2014	2" Schedule 40 PVC 0.02" Slot Screen 26'-36'
35'	0.0	0.0		Tan CLAYEY SAND, fine grained, low plasticity, moist to wet.	Clayey Sand	Sample collected at 32'	

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-16**



BORING AND WELL COMPLETION LOG

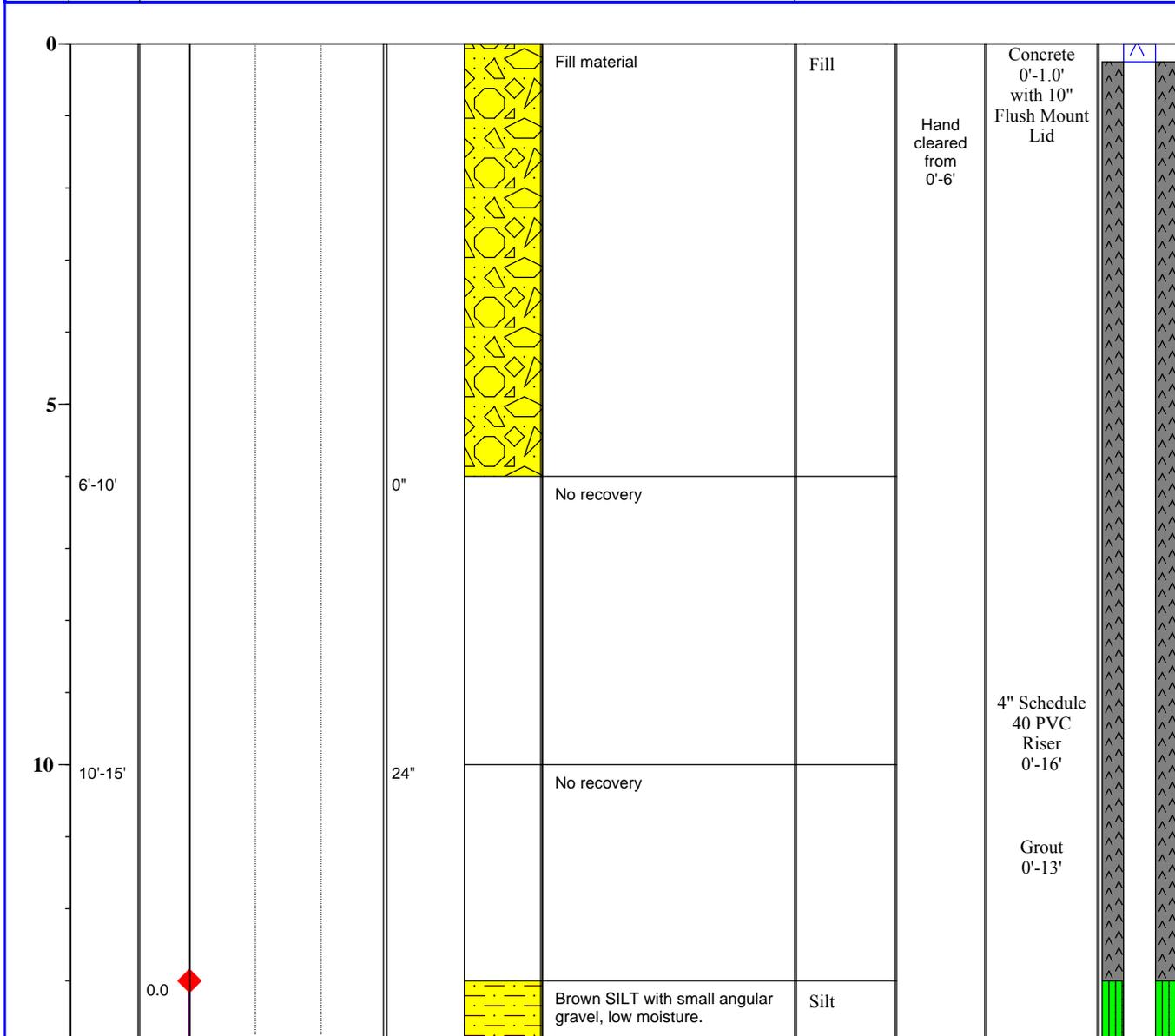
ID NO. **MW-25S**

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/05/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-25S**

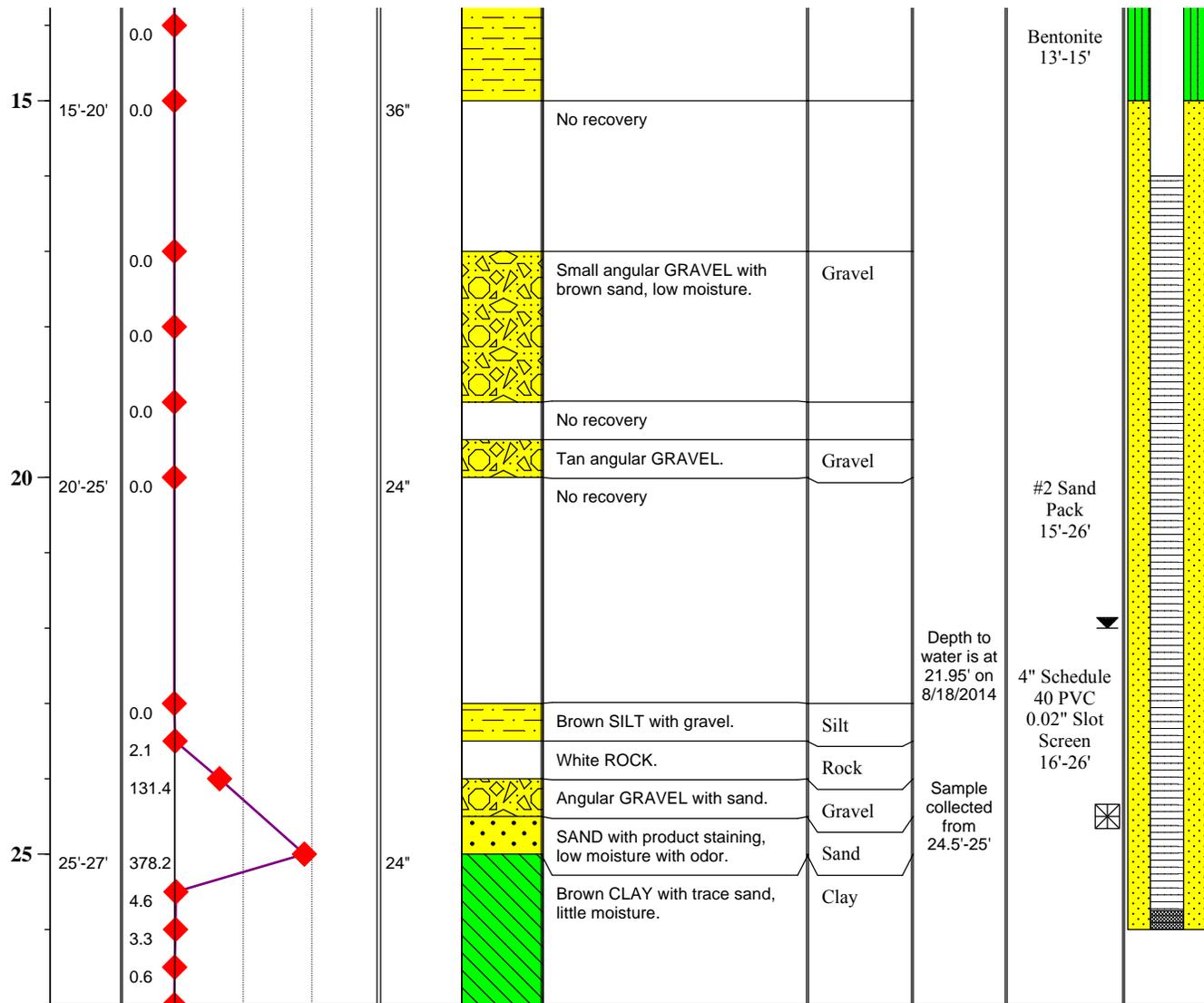
Groundwater & Environmental Services, Inc.

Page 2 of 2

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/05/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-25S**



BORING AND WELL COMPLETION LOG

ID NO. **MW-25**

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/25/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0		Hand cleared	Silt	Hand cleared from 0'-6.5'	Concrete 0'-1.0' with 10" Flush Mount Lid Grout 1'-22'
6'-10'			18"	No Recovery			
10'-15'		0.0 0.9 0.5 0.0	12"	Brown SILT. Brown CLAY with gravel, dry to moist.	Silt Clay		4" Schedule 40 PVC Riser 0'-25'
15'-20'		0.2 0.0 0.4 0.0 1.1 0.9 0.4 0.2	30"	Brown CLAY with gravel, moist. Poorly graded GRAVEL with sand, white from 15'-15.5' and brown from 15.5'-17'.	Clay Gravel		
				No recovery			

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-25**



BORING AND WELL COMPLETION LOG

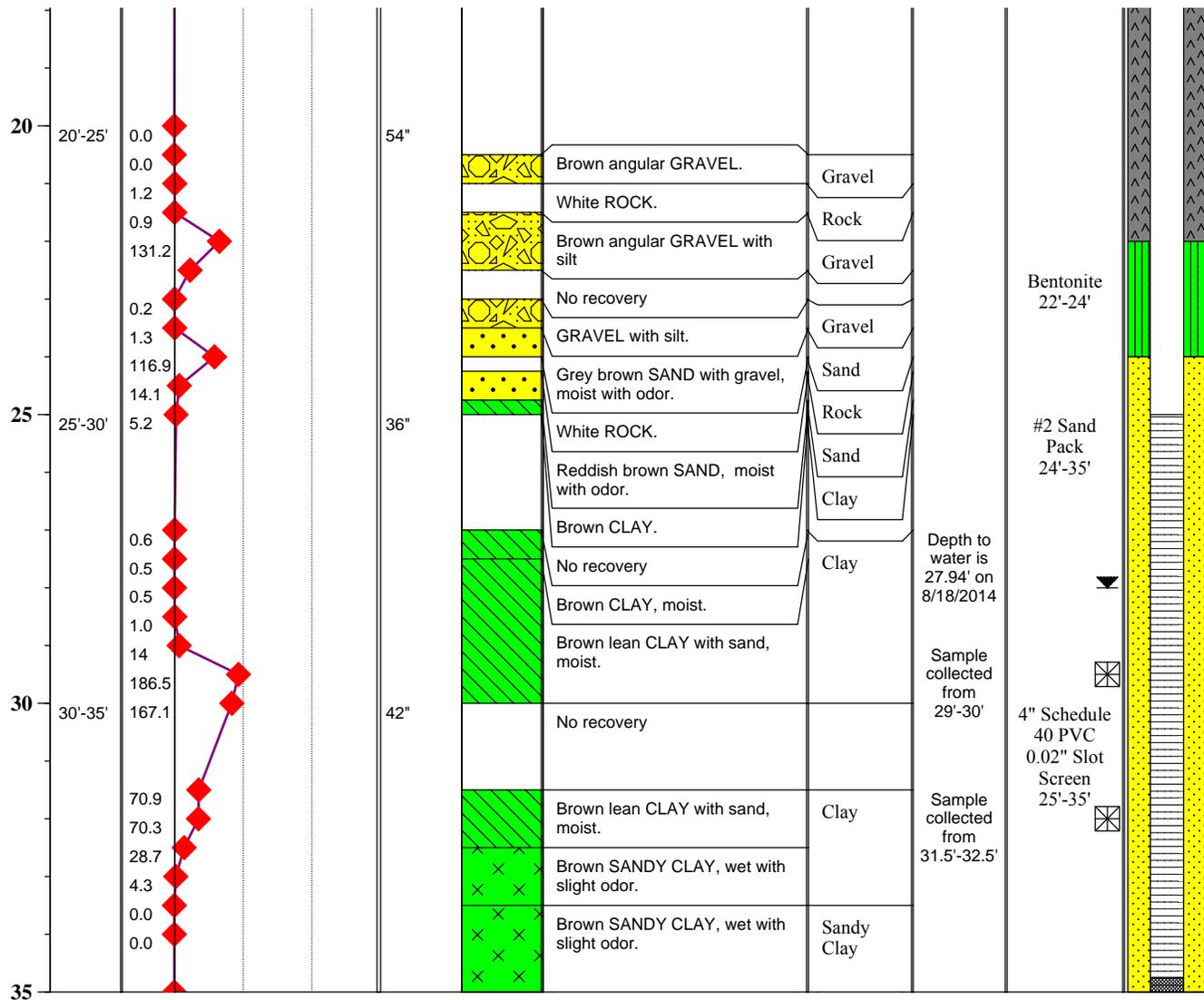
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Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/25/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-25**



BORING AND WELL COMPLETION LOG

ID NO. **B-27**

Groundwater & Environmental Services, Inc.

Page 1 of 2

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/21/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0 _____ 600		Red to brown SILT with cobbles and small gravel, moist.	Silt	Hand cleared from 0'-6'	Concrete 0'-1.0' with 10" Flush Mount Lid
6'-10'		0.0 0.0 0.0 0.0 0.0 0.0	42"	No recovery			
				Brown to red CLAY with gravel, trace sand, moist.	Clay		Grout 1'-24'
10	10'-15'	0.0 0.0 0.0	25"	Concrete zone	Concrete		
				No recovery			
		0.0 0.0 0.0 0.0		Brown to red CLAY with gravel, moist, no odor. (CW)	Clay		
				Grey to white GRAVEL zone, moist.	Gravel		
15	15'-20'	0.0 0.0 0.0	36"	Brown to red CLAY with gravel, trace sand, moist. (CW)	Clay		4" Schedule 40 PVC Riser 0'-25'
				No recovery			
		0.0 0.0 0.0		Brown to red SILT, with sand and gravel, moist. (MC)	Silt		
				Red to brown CLAY some sand	Clay		

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **B-27**



BORING AND WELL COMPLETION LOG

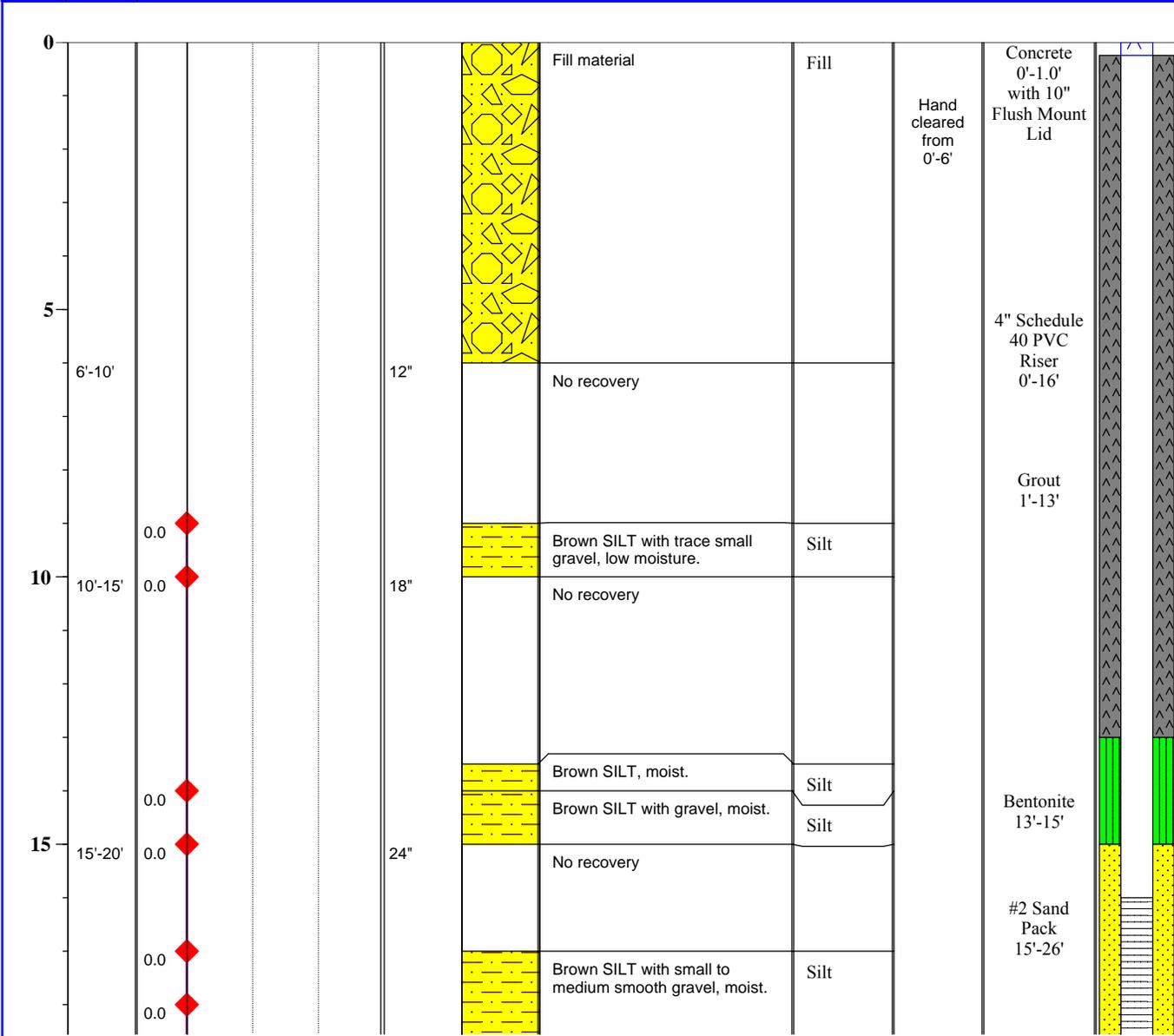
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Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/07/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. MW-30S

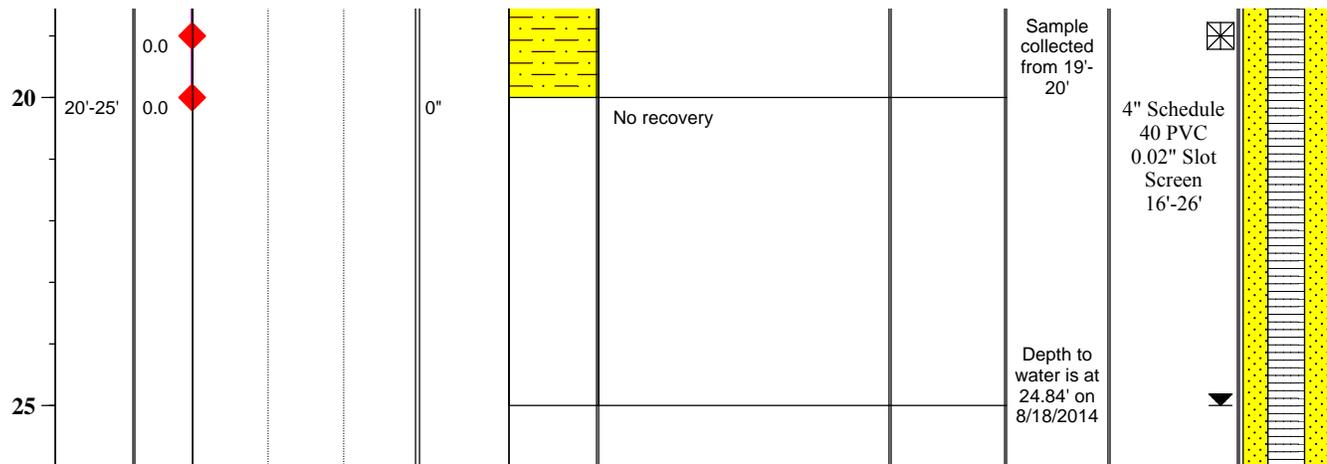
Groundwater & Environmental Services, Inc.

Page 2 of 2

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **26'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/07/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level 
 Sample Location 

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: MW-30S

Groundwater & Environmental Services, Inc.
 1350 Blair Drive, Suite A, Odenton, Maryland 800.220.3606 Fax 410.721.3733 p. 2 of 2



BORING AND WELL COMPLETION LOG

ID NO. **MW-31**

Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **36'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/04/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0		Fill material	Fill	Hand cleared from 0'-6'	Concrete 0'-1.0' with 10" Flush Mount Lid
6'-10'			12"	No recovery			4" Schedule 40 PVC Riser 0'-26'
10	10'-15'	0.0	18"	Brown SILT with trace small gravel, low moisture.	Silt		Grout 0'-23'
		0.0		No recovery			Bentonite 23'-25'
15	15'-20'	0.0	24"	Brown SILT, moist.	Silt		
		0.0		Brown SILT with gravel, moist.	Silt		
		0.0		No recovery	Silt		
20	20'-25'	0.0	0"	Brown SILT with small to medium smooth gravel, moist.	Silt	Lithology is derived from MW-30 which is adjacent to this boring	#2 Sand Pack 25'-26'
		0.0		No recovery		Depth to water is 27.11' on 8/18/2014	4" Schedule 40 PVC 0.02" Slot Screen 26'-36'
25							
30							
35							

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-31**



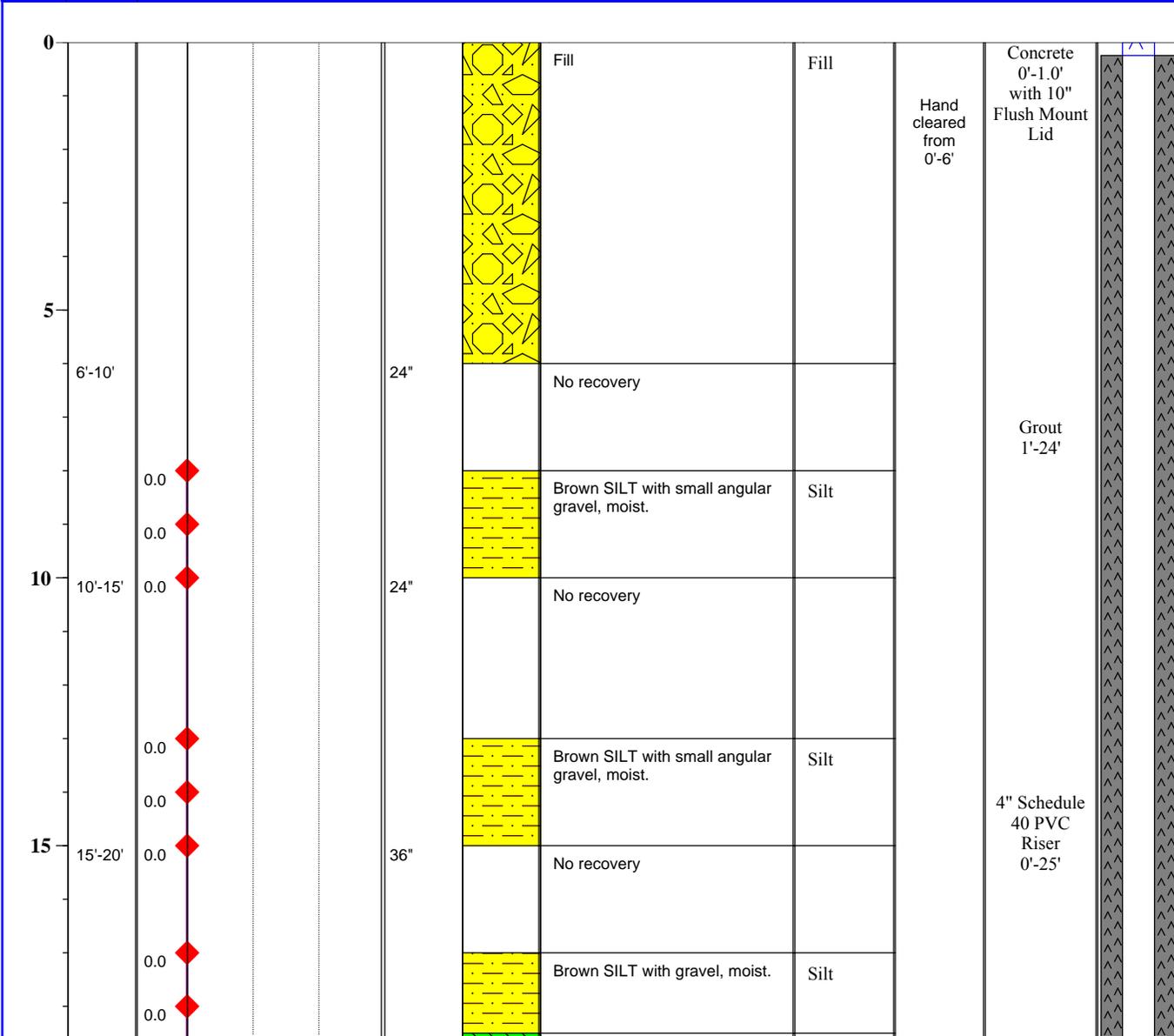
BORING AND WELL COMPLETION LOG ID NO. B-33

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/05/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: B-33



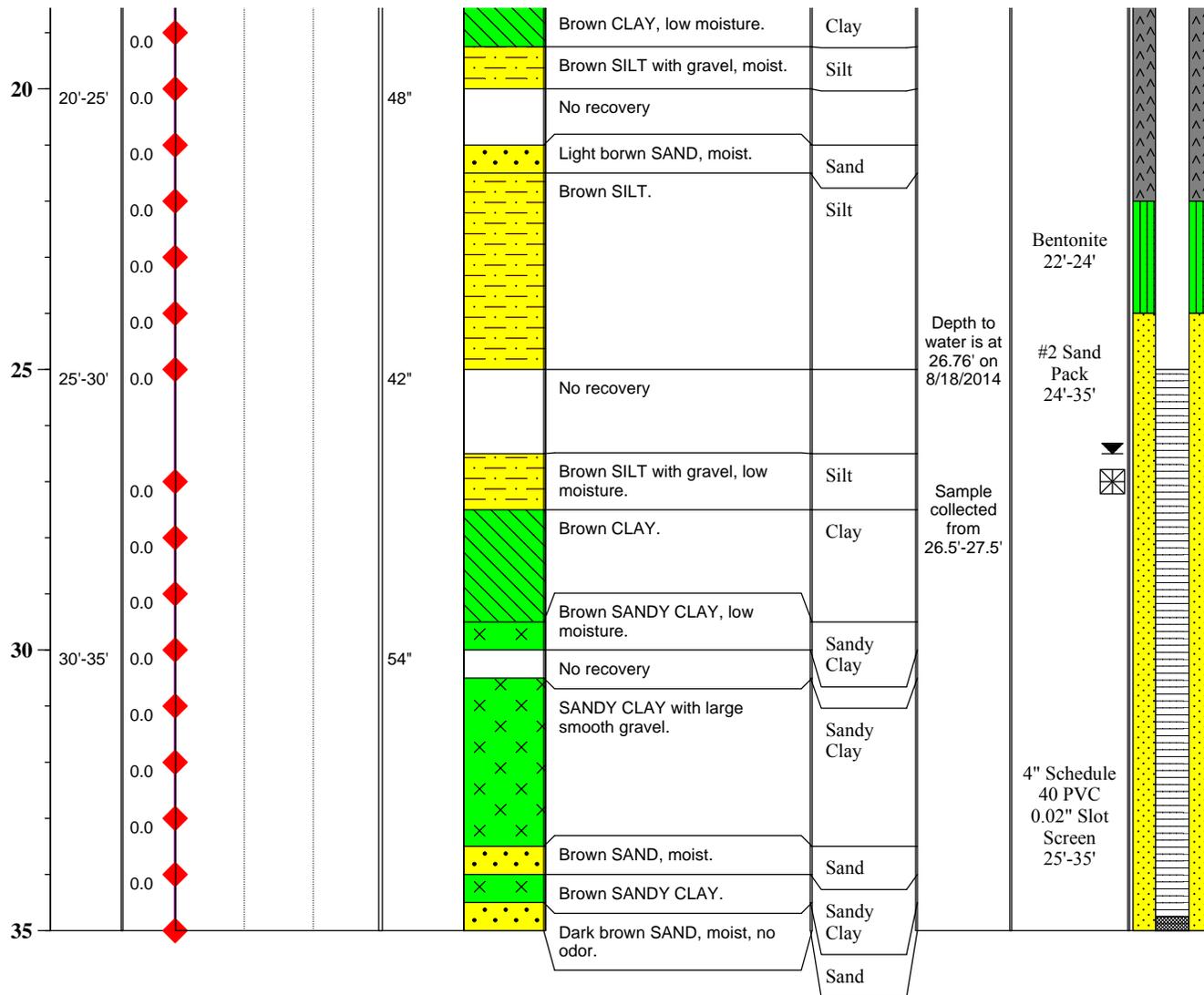
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Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/05/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

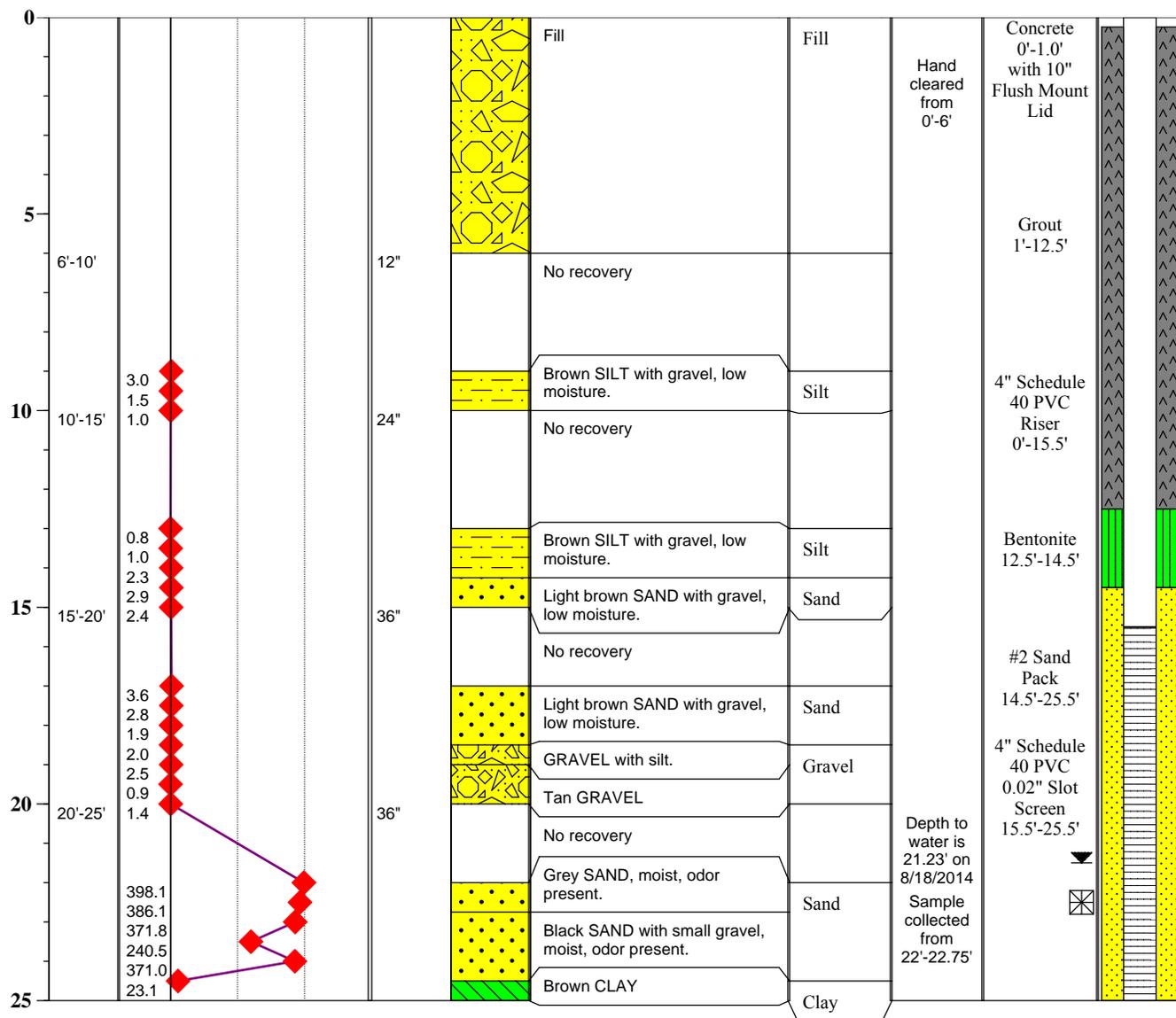
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **25'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/06/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG ID NO. B-51

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **37'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/22/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0 _____ 600		Fill material	Fill	Hand cleared from 0'-6'	Concrete 0'-1.0' with 10" Flush Mount Lid
5			30"	No recovery			
6'-10'				Light brown to yellow, SILTY GRAVEL some sand, moist. (GM)	Gravel		

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

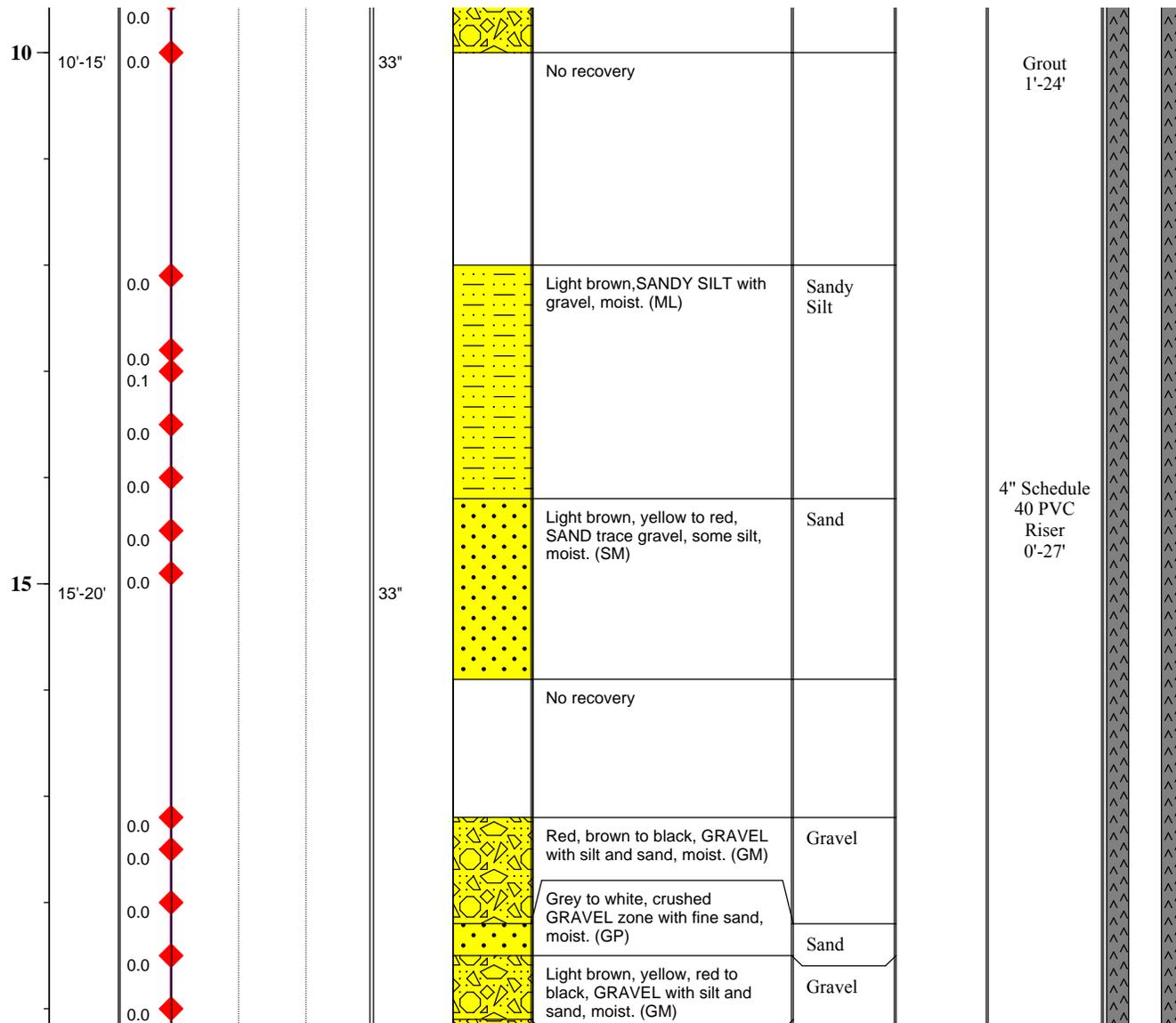
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Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **37'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/22/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

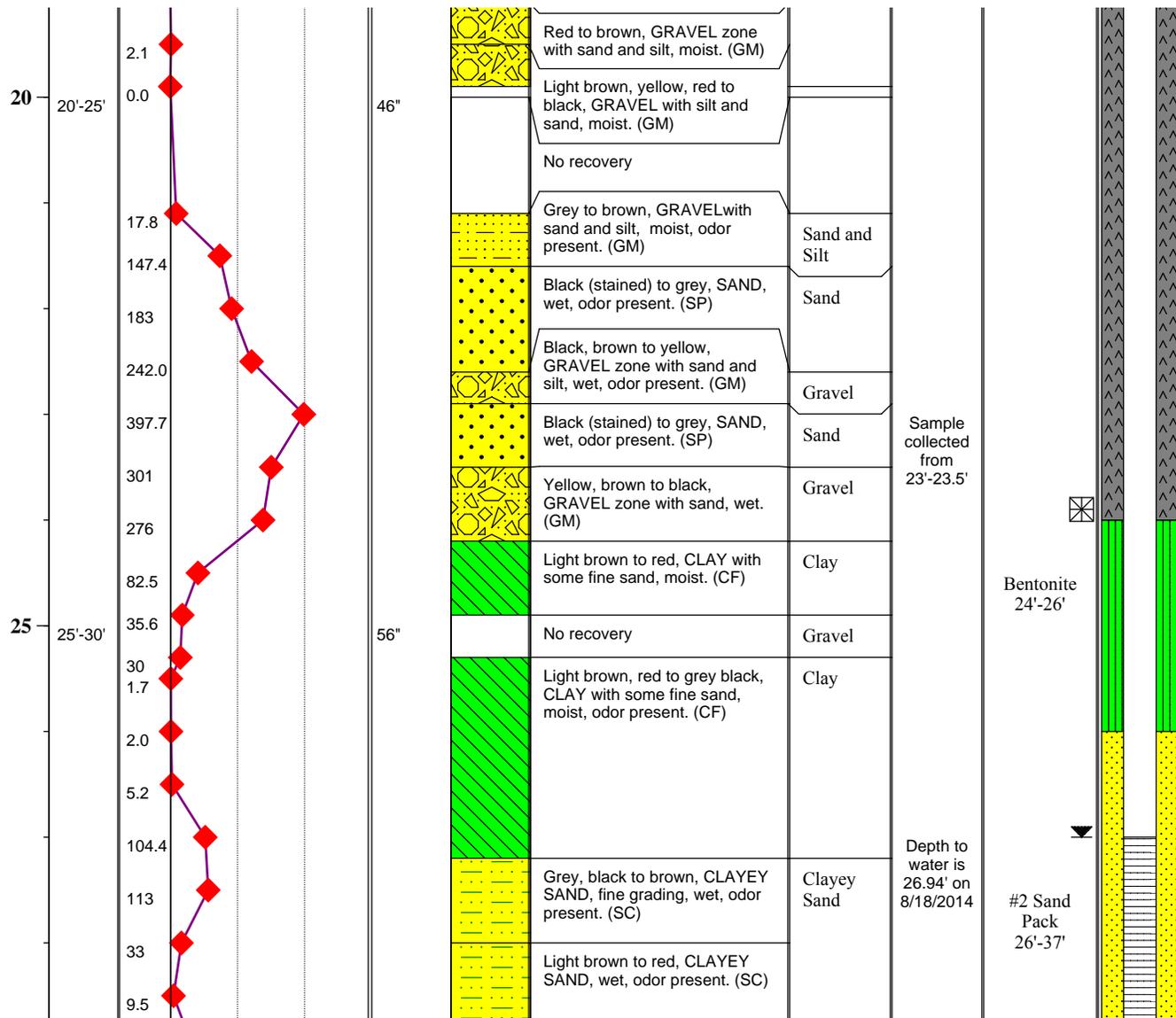
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **37'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/22/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **B-51**

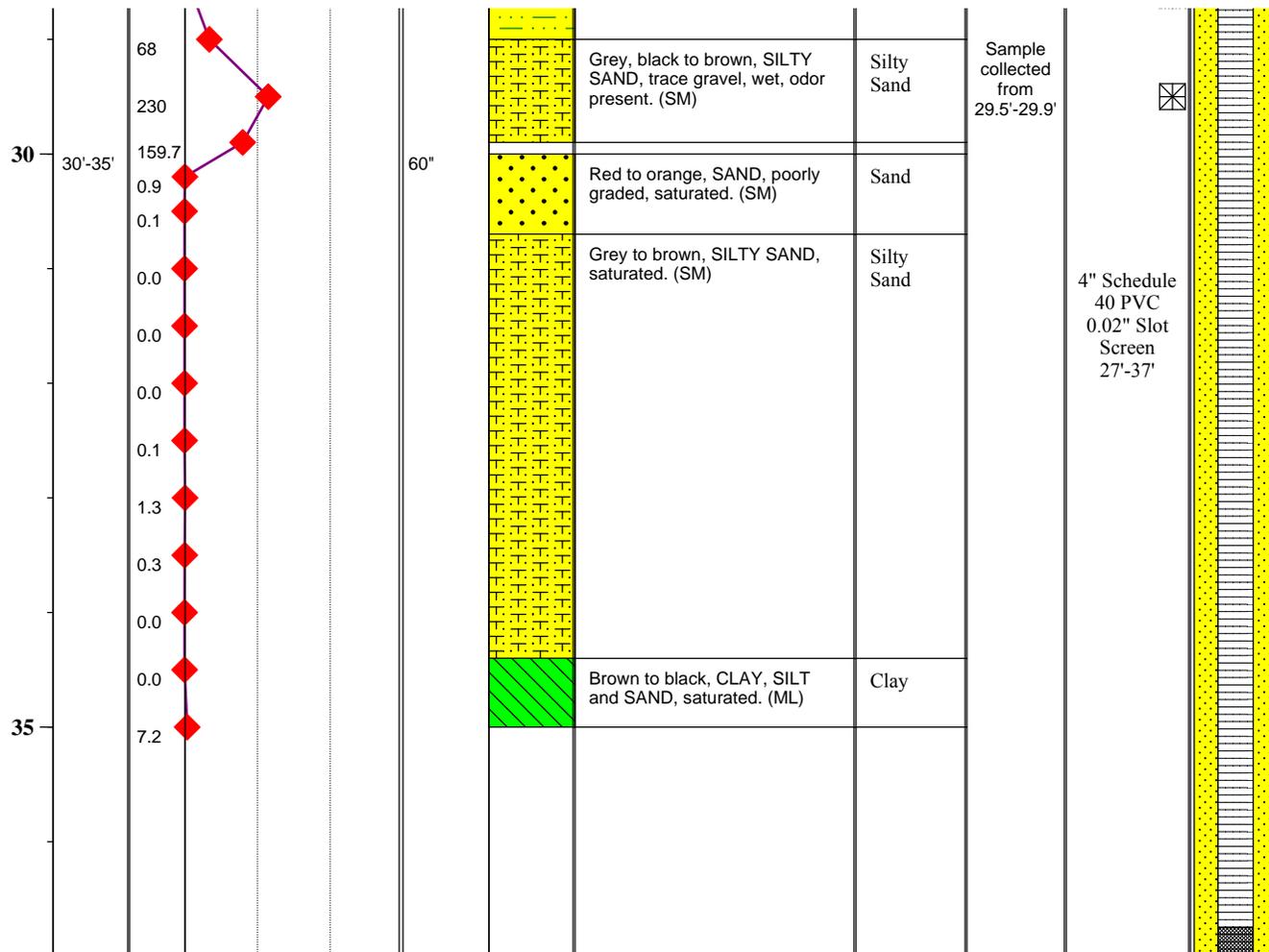
Groundwater & Environmental Services, Inc.

Page 4 of 4

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **37'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **P. Reichardt** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/22/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

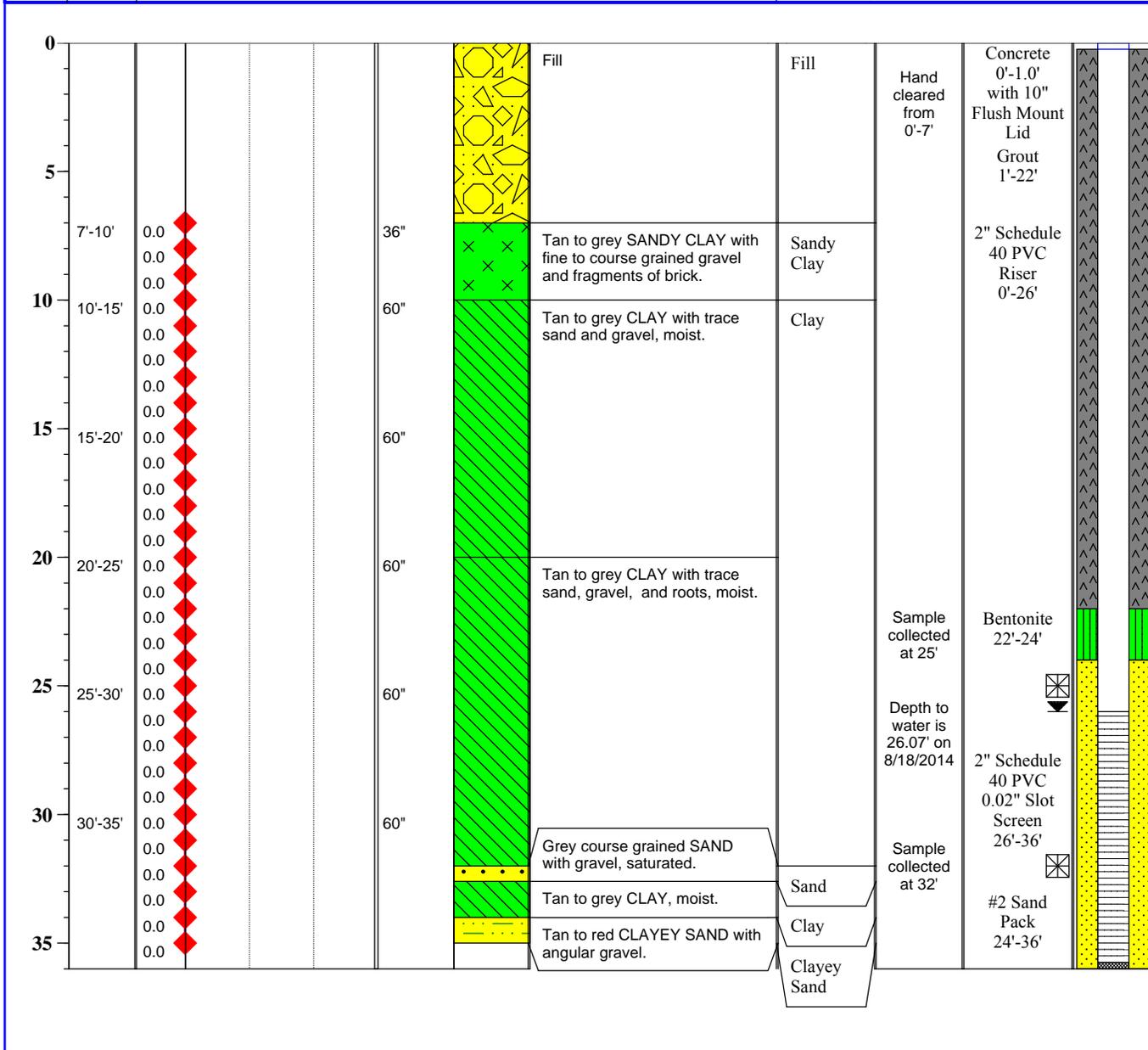
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **36'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Christman** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/14/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Kodiak** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND Proportion Descriptions: Trace = <10% Some = <50% Little = <25% And = 50%
 Symbol Key: Water Level [Symbol] Sample Location [Symbol] " = inches ' = feet ppm = parts per million eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-70**

Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **36'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Christman** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/12/14** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Kodiak** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0				Fill material	Fill	Hand cleared from 0'-7'	Concrete 0'-1.0' with 10" Flush Mount Lid Grout 1'-22'
7'-10'	0.0		36"	Tan to grey SANDY SILT with trace clay, moist.	Sandy Silt		2" Schedule 40 PVC Riser 0'-26'
10'-15'	0.0		60"	Tan SANDY CLAY, soft to stiff, moist.	Sandy Clay		
15'-20'	0.0		60"	Tan CLAY, stiff, moist.	Clay		
20'-25'	0.0		60"				Bentonite 22'-24'
25'-30'	0.0		60"	Grey SAND with gravel and trace clay, moist to wet.	Sand	Depth to water is 26.61' on 8/18/2014	2" Schedule 40 PVC 0.02" Slot Screen 26'-36'
30'-35'	0.0		60"	Tan CLAY, high plasticity.	Clay		
35'	0.0			Tan to grey SANDY CLAY with coarse grained gravel.	Sandy Clay	Sample collected at 32'	#2 Sand Pack 24'-36'

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-70**

Groundwater & Environmental Services, Inc.
 1350 Blair Drive, Suite A, Odenton, Maryland 800.220.3606 Fax 410.721.3733 p. 1 of 1



BORING AND WELL COMPLETION LOG

ID NO. **MW-72S**

Groundwater & Environmental Services, Inc.

Page 1 of 2

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **25'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/07/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0		0 - 600		Fill	Fill	Hand cleared from 0'-6'	Concrete 0'-1.0' with 10" Flush Mount Lid
5	6'-10'		12"	No recovery			Grout 1'-12'
10	10'-15'	0.0	12"	Brown SILT with trace gravel, low moisture.	Silt		4" Schedule 40 PVC Riser 0'-15'
		0.0		No recovery			Bentonite 12'-14'

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

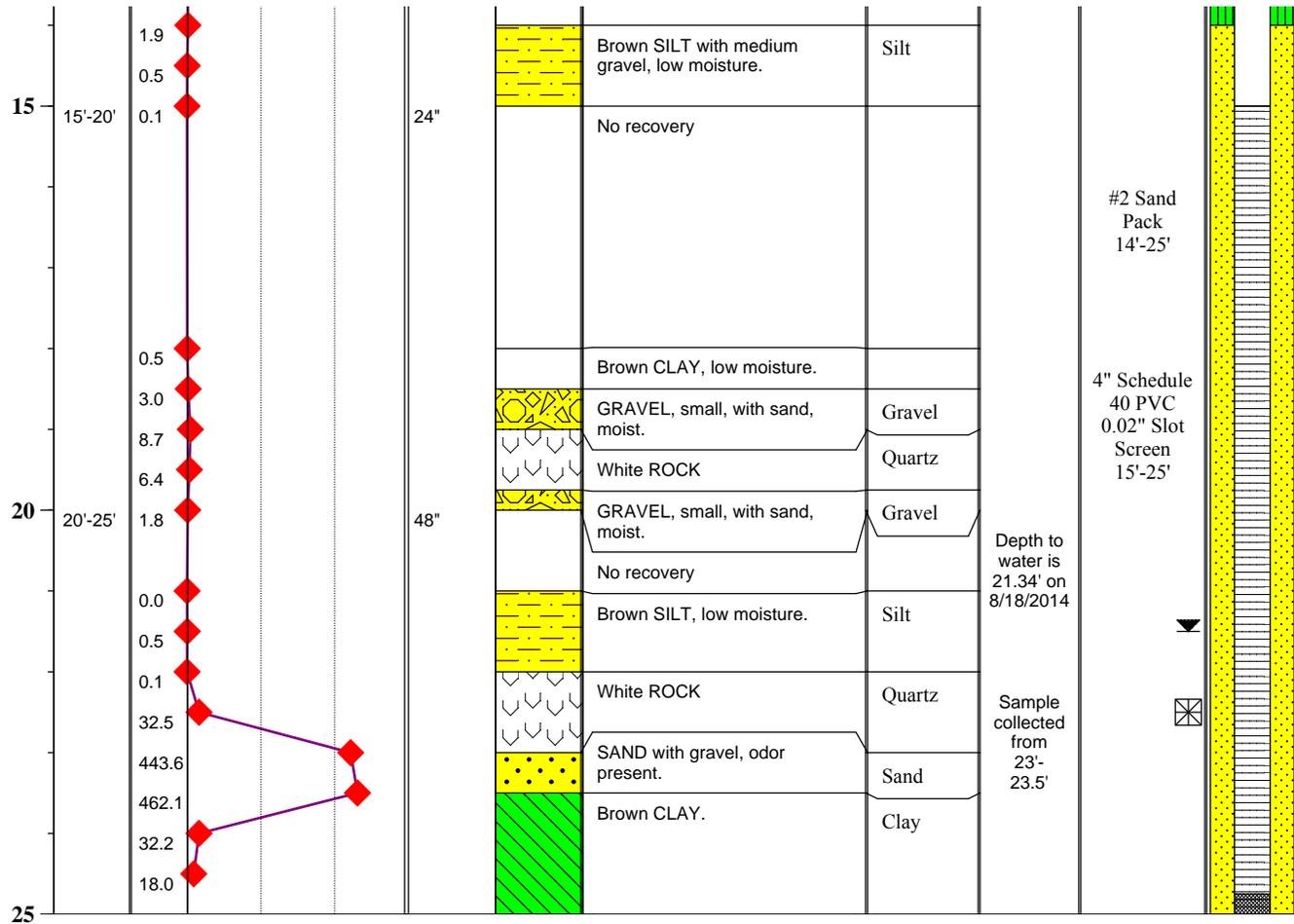
Well ID: **MW-72S**



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **25'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/07/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level ▽
 Sample Location ⊠

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-72**

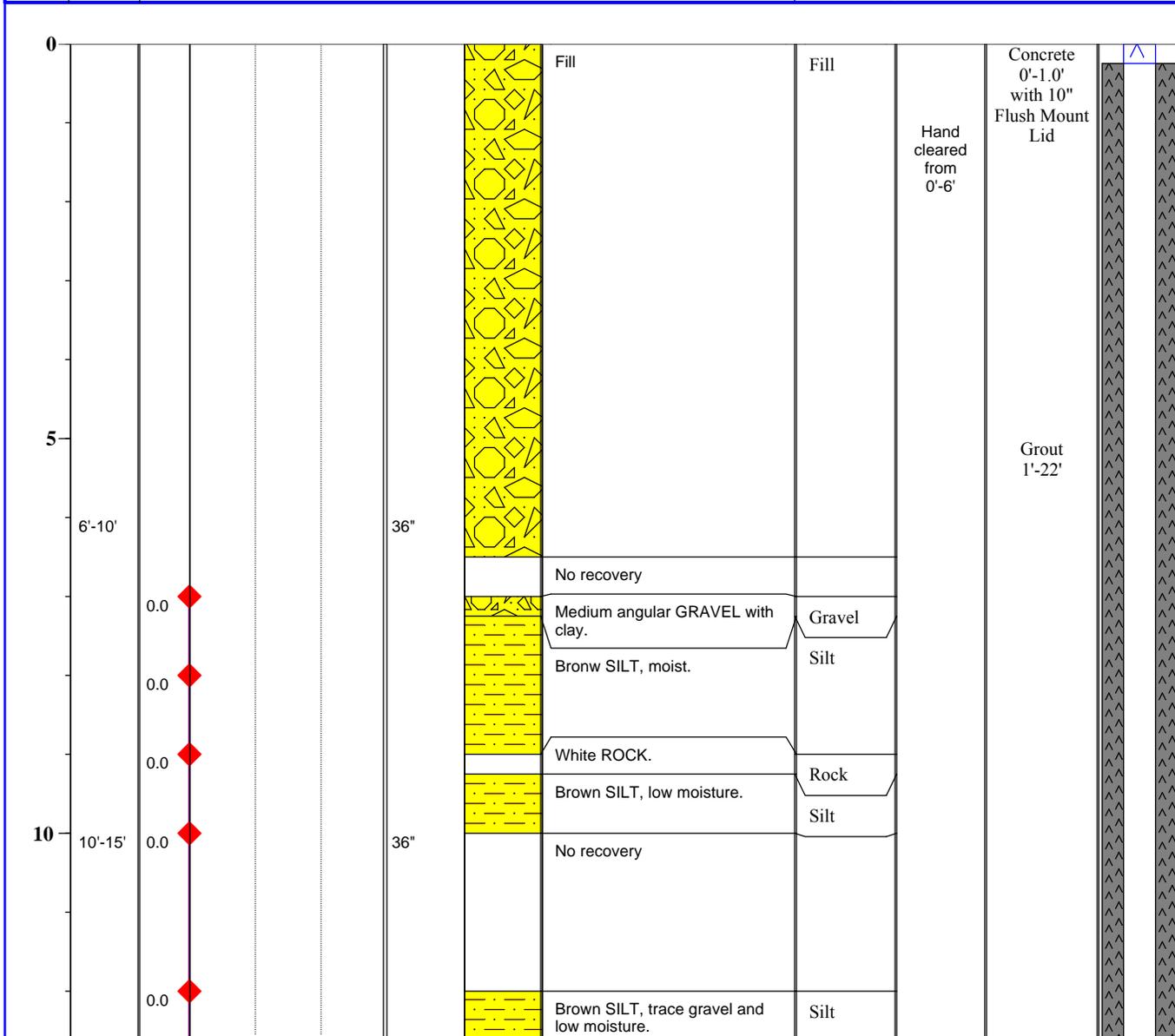
Groundwater & Environmental Services, Inc.

Page 1 of 3

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/30/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-72**

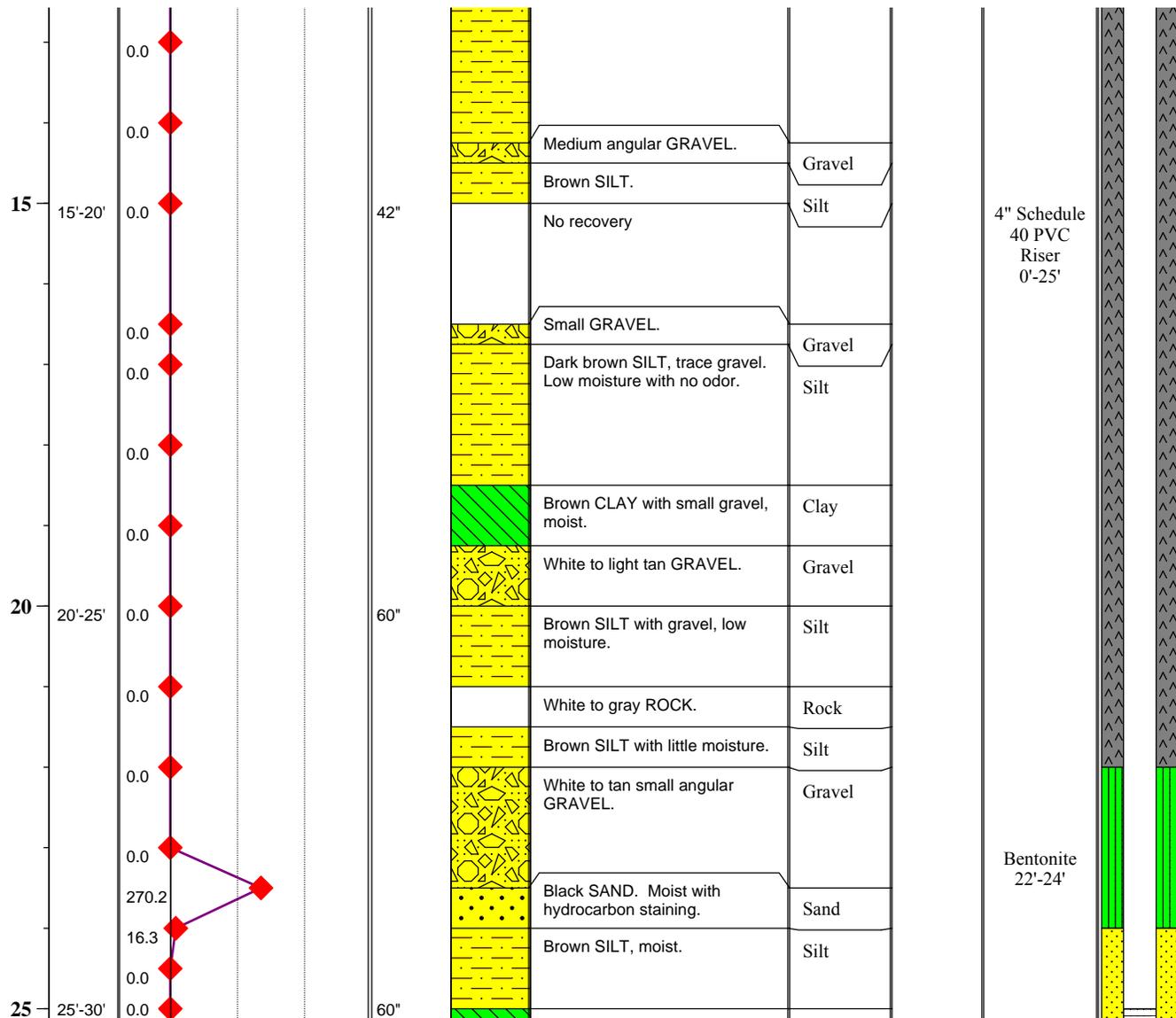
Groundwater & Environmental Services, Inc.
 1350 Blair Drive, Suite A, Odenton, Maryland 800.220.3606 Fax 410.721.3733 p. 1 of 3



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/30/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **35'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **7/30/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
25		0 _____ 600		Dark brown CLAY with gravel.	Clay	Sample collected from 26.25'-26.75'	
				Smooth GRAVEL.	Gravel		
				Black SAND. Moist with hydrocarbon staining.	Sand		
				Smooth GRAVEL with sand. Moist with no odor	Gravel	Depth to water is 27.00' on 8/18/2014	
				Brown CLAY with trace sand.	Clay		
				Brown clayey SAND. Moist.	Sand		
30	30'-35'		36"	No recovery			#2 Sand Pack 24'-35'
				Brown CLAYEY SAND. Moist with no odor.	Clayey Sand	Sample collected from 32'-33'	
				Brown SAND. Moist.	Sand		

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-100S**

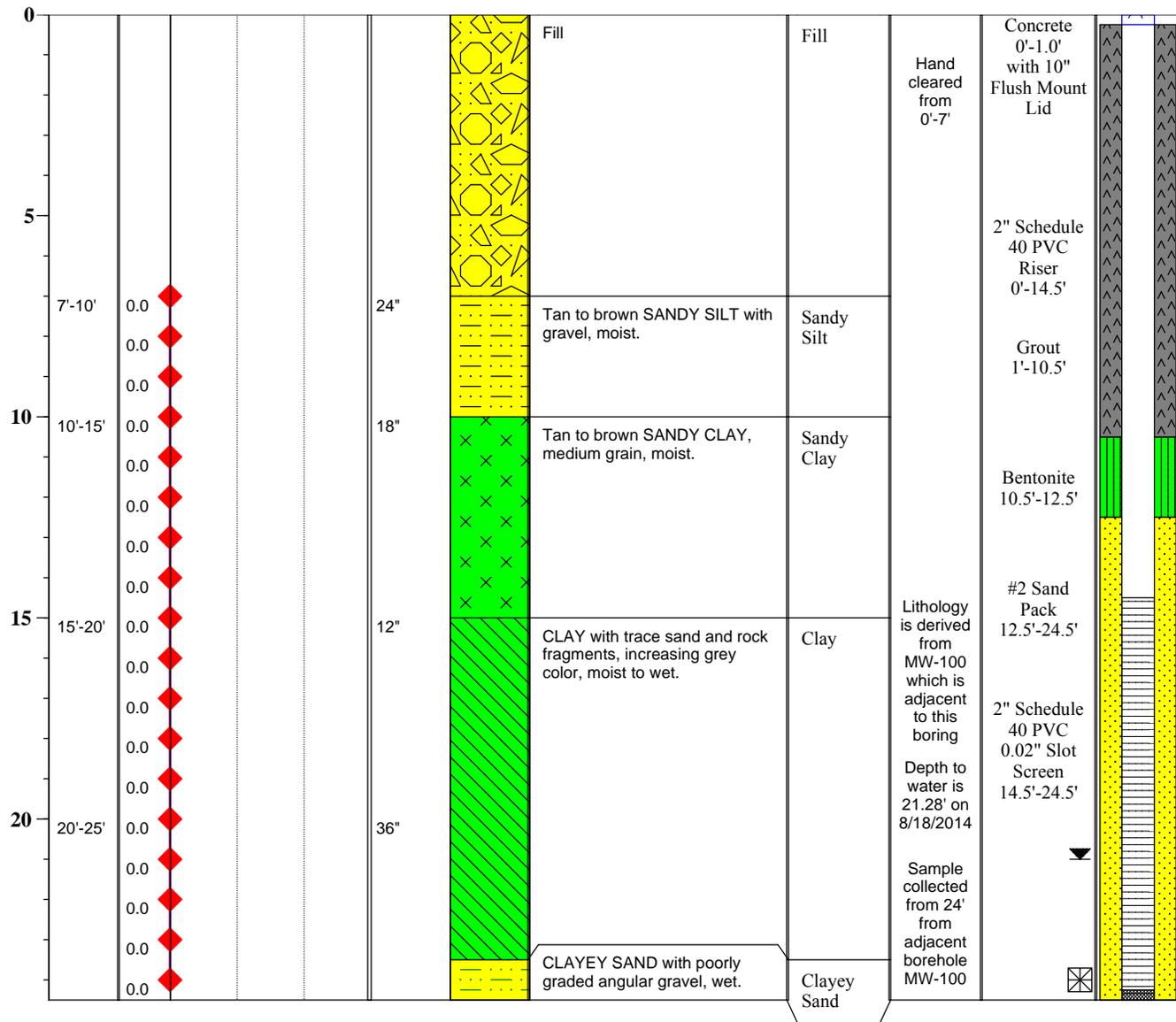
Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **24.5'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Christman** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/12/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Kodiak** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

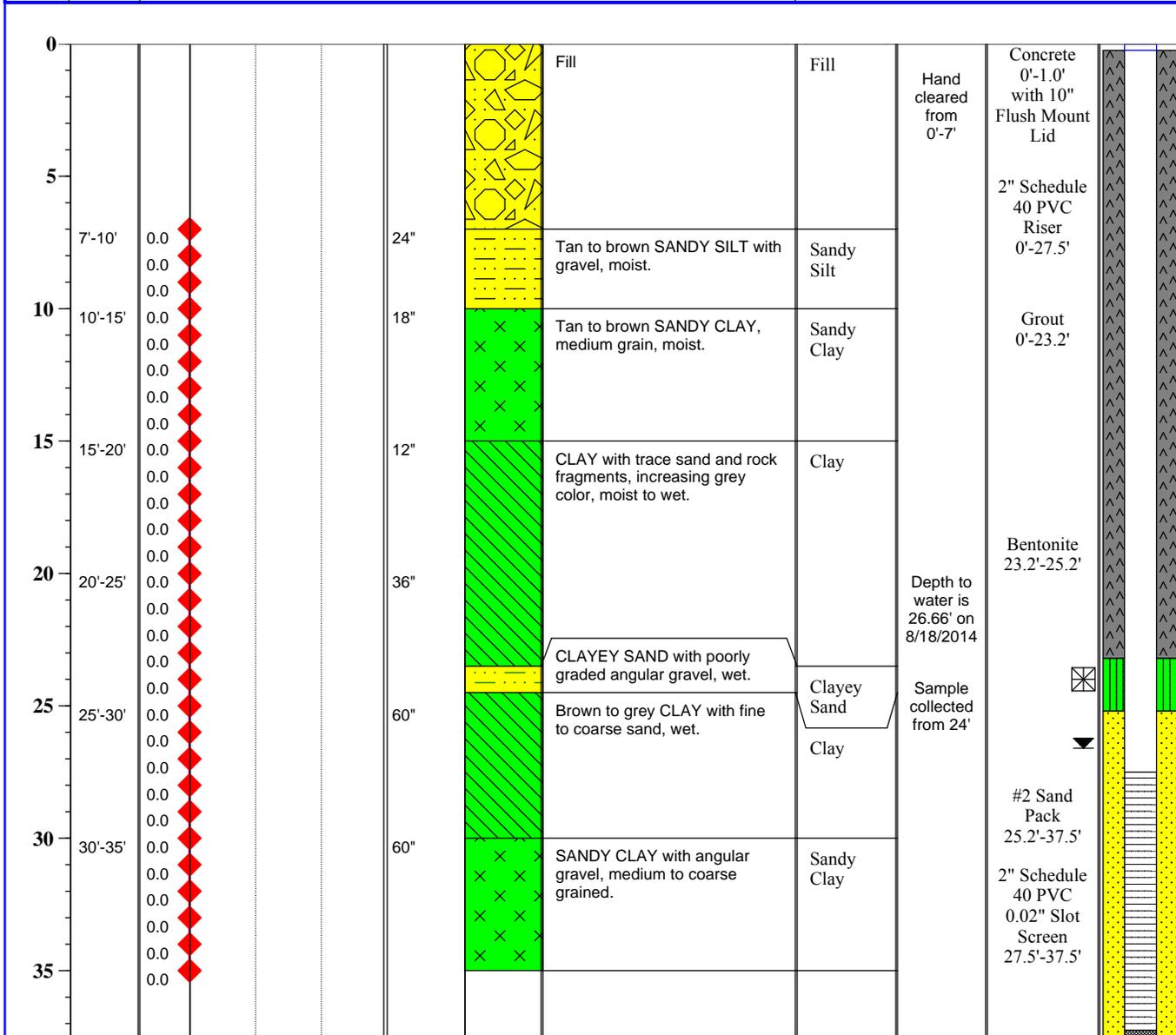
Well ID: **MW-100S**



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **-37.5**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Christman** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/12/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Kodiak** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

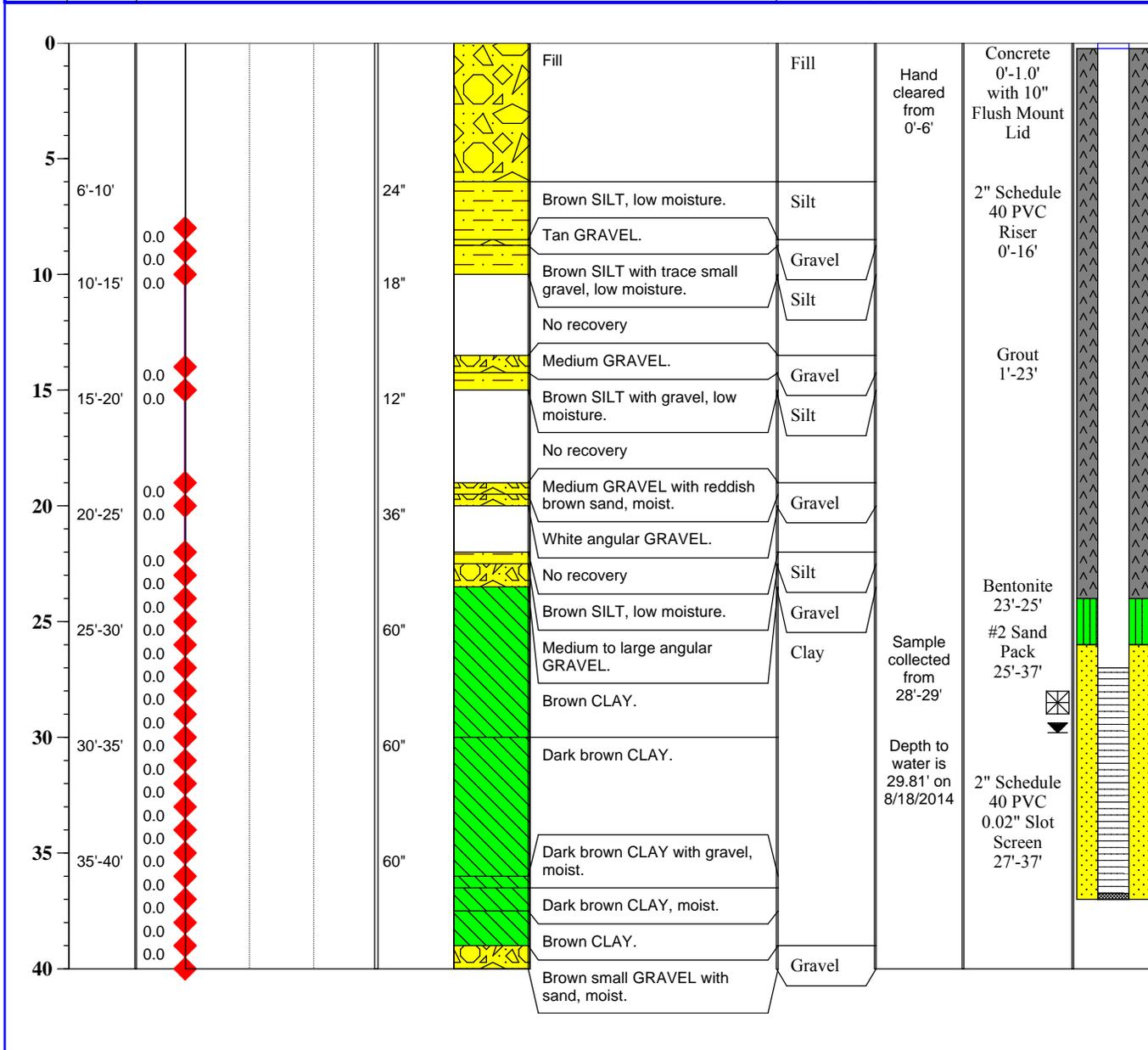
" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



PROJECT: Potomac River Generating Station WATER DEPTH: TOTAL DEPTH: 37'
 ADDRESS: 1400 N Royal St, Alexandria, VA CASING EL.:
 0402859 BOREHOLE DIA.: 8.5" WELL DIA.: 2"

Logged By: S. Christman Drilling Method: Geoprobe 7822DT
 Dates Drilled: 8/11/2014 Sampling Method: 5' Acetate Sleeve
 Drilling Company: Kodiak Soil Class. System: Unified Soil Classification System
 Well Permit #: Field Screening: PID, 10.6 eV Lamp

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND Proportion Descriptions: Trace = <10% Some = <50% Little = <25% And = 50%

Symbol Key: Water Level [Symbol] Sample Location [Symbol]

" = inches
' = feet
ppm = parts per million
eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-103**

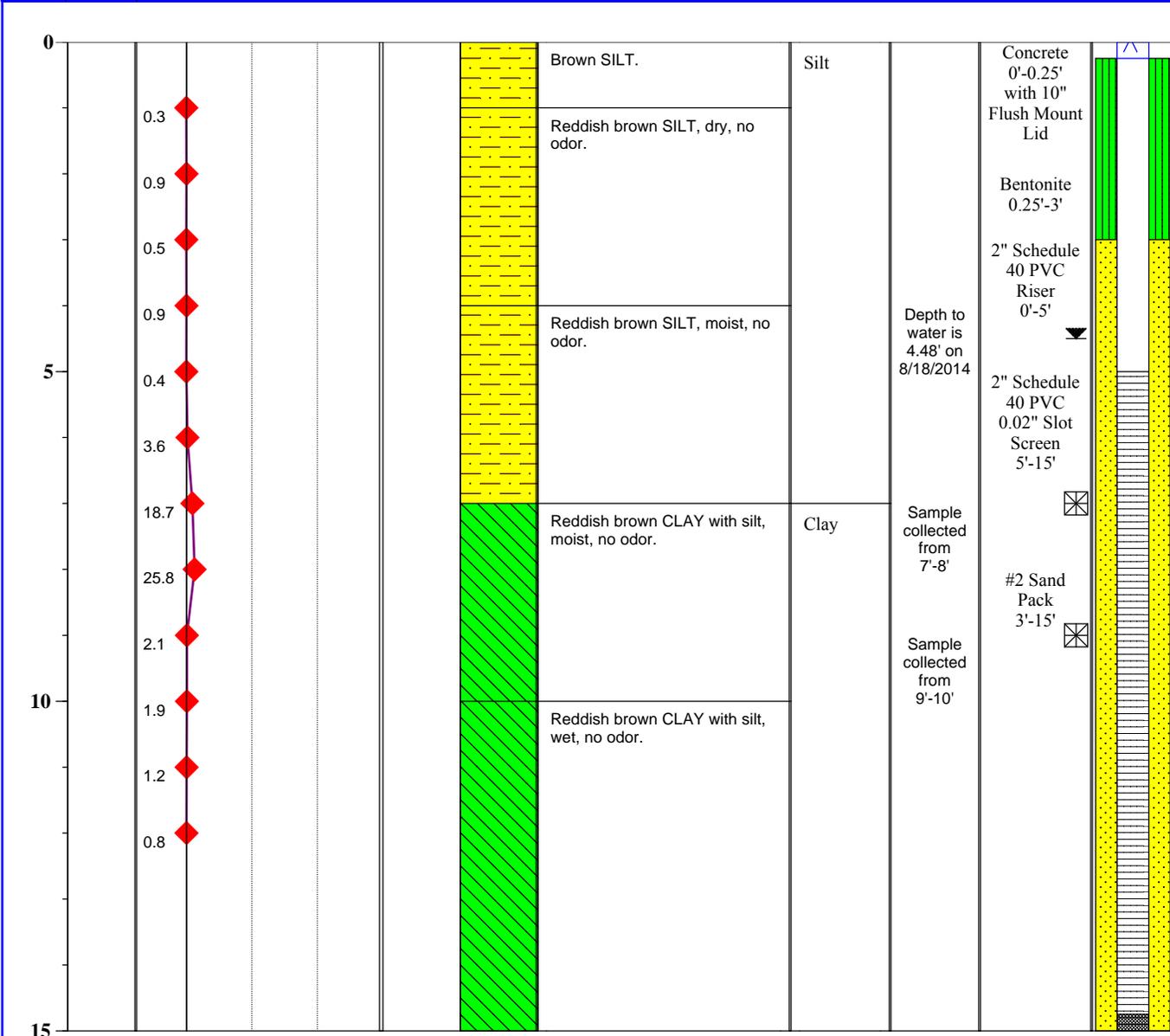
Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **15'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **4"** WELL DIA.: **2"**

Logged By: **J. Laube** Drilling Method: **Hand Auger**
 Dates Drilled: **7/23/2014** Sampling Method: **Hand Auger**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt

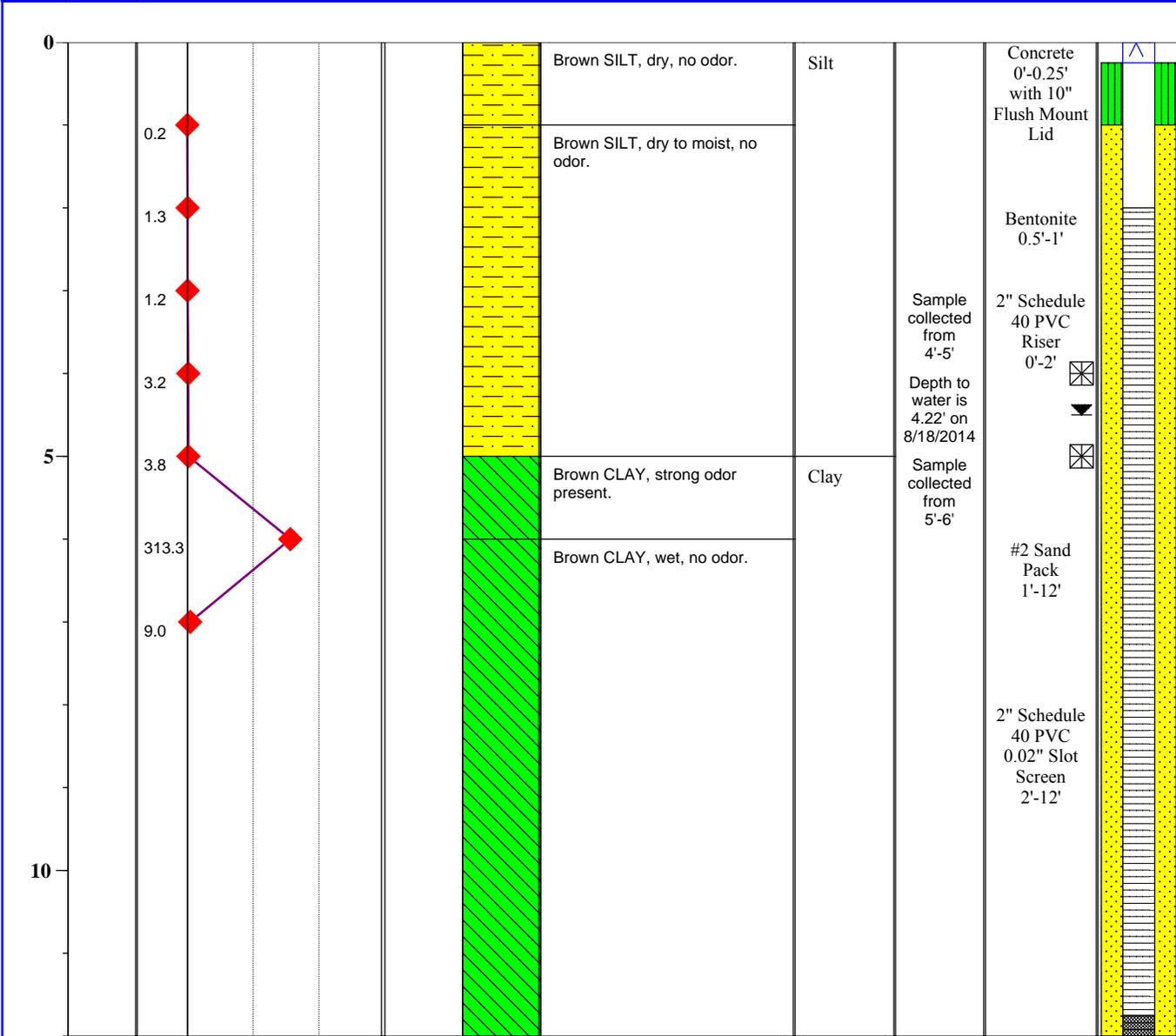
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **12'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **4"** WELL DIA.: **2"**

Logged By: **J. Laube** Drilling Method: **Hand Auger**
 Dates Drilled: **7/24/2014** Sampling Method: **Hand Auger**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

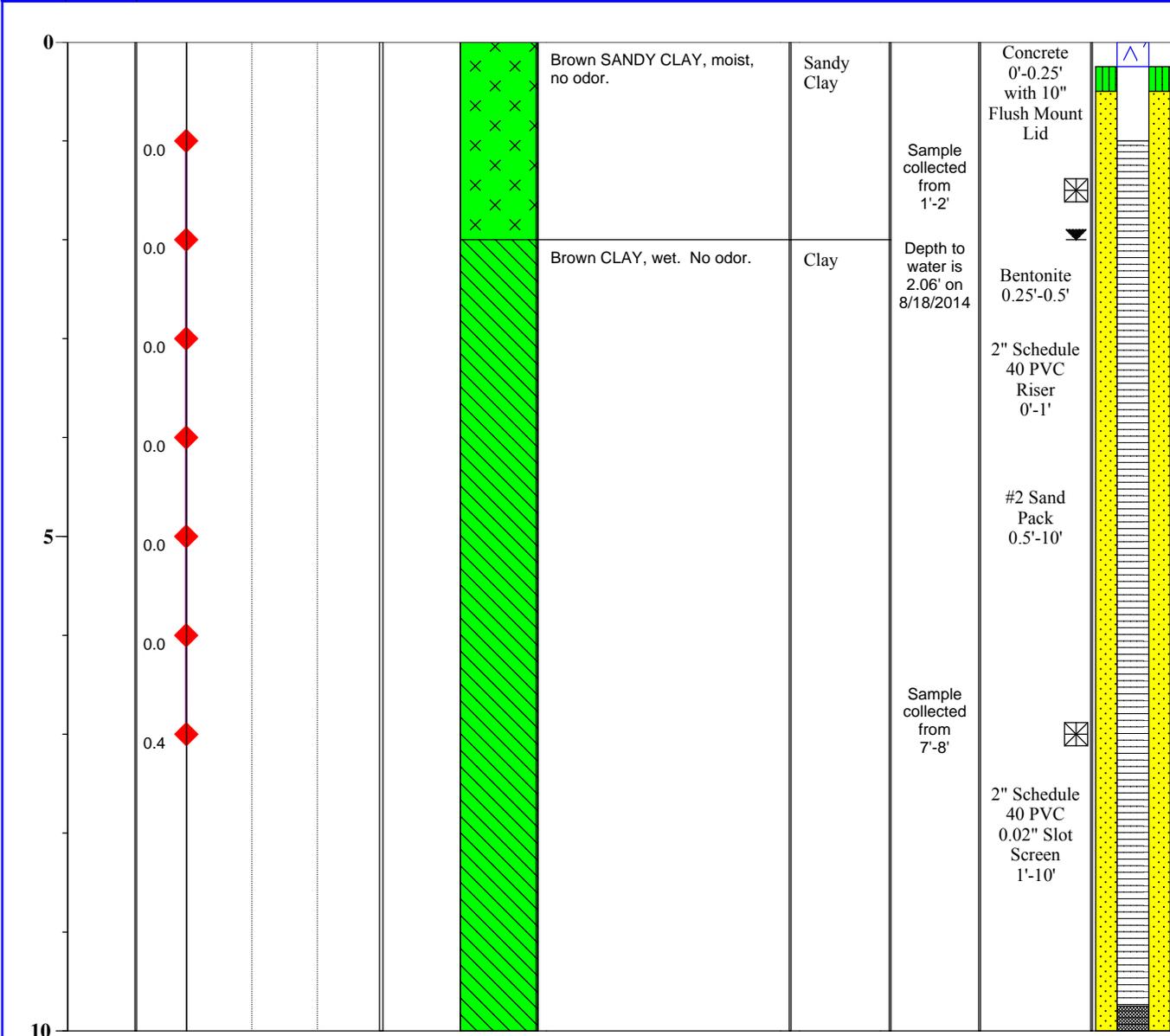
" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **10'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **4"** WELL DIA.: **2"**

Logged By: **J. Laube** Drilling Method: **Hand Auger**
 Dates Drilled: **7/24/2014** Sampling Method: **Hand Auger**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level ▾
 Sample Location ⊠

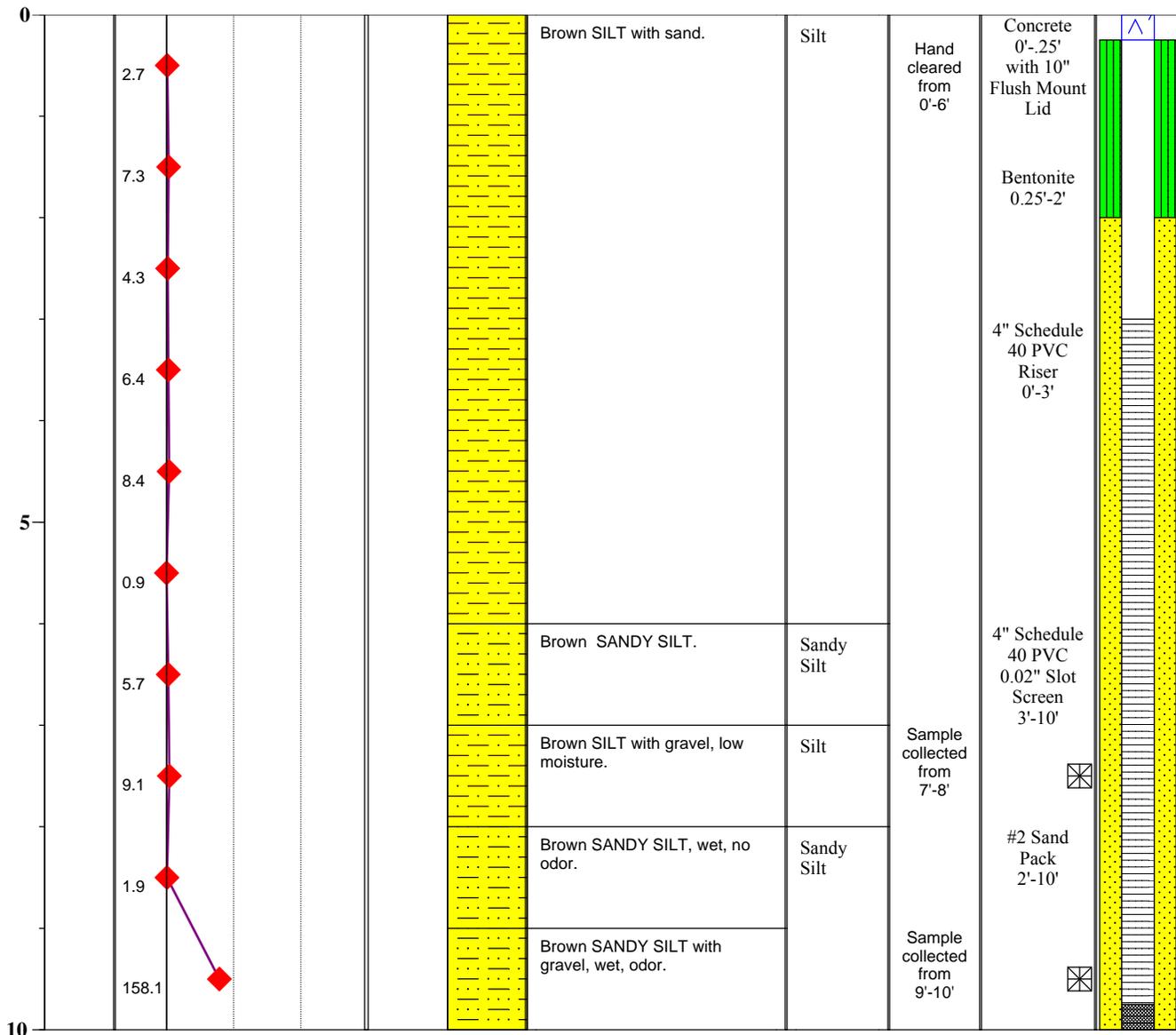
" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **10'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **4"** WELL DIA.: **2"**

Logged By: **D. Rice** Drilling Method: **Hand Auger**
 Dates Drilled: **7/22/2014** Sampling Method: **Hand Auger**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-107**

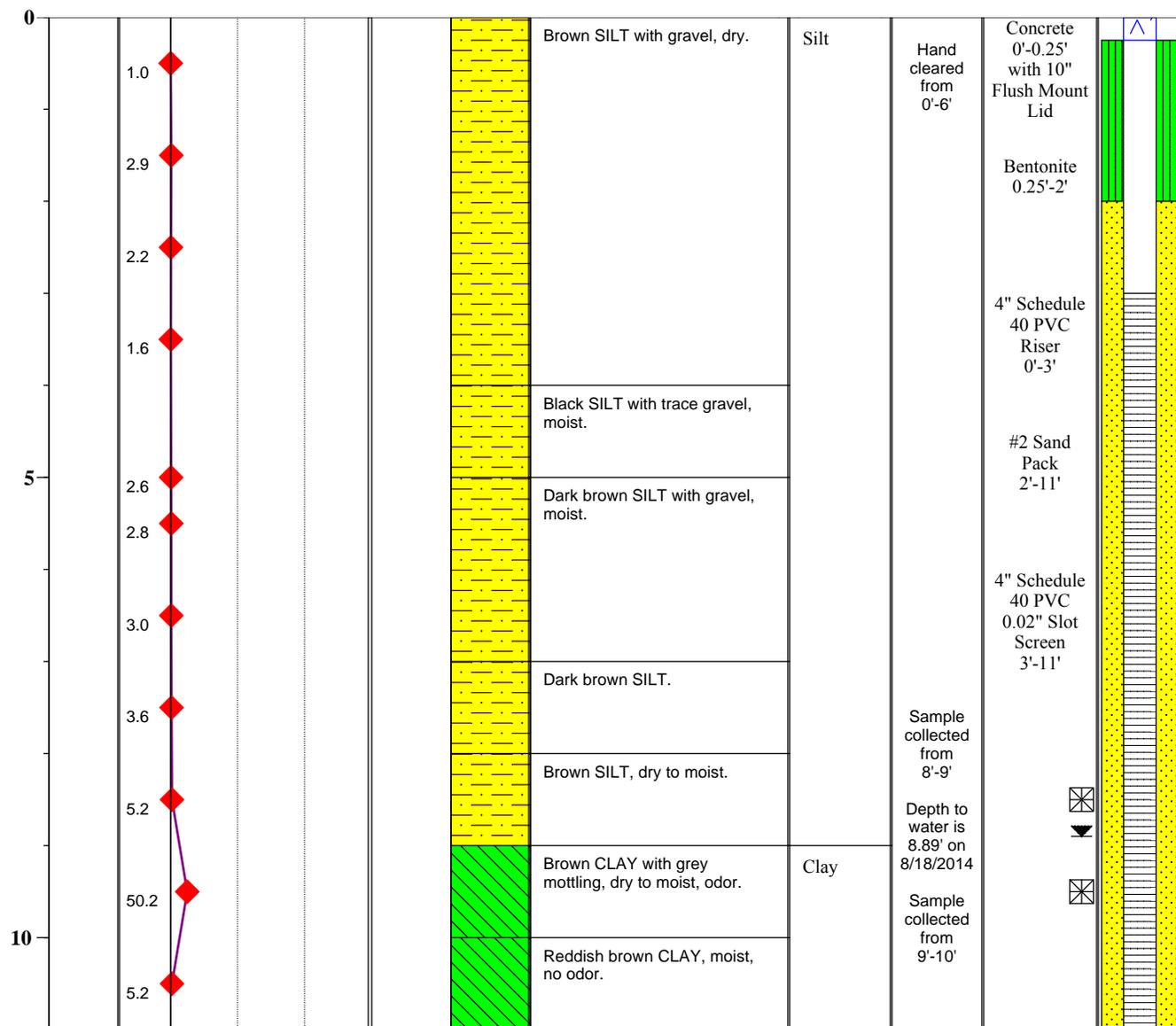
Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **11'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **4"** WELL DIA.: **2"**

Logged By: **D. Rice** Drilling Method: **Hand Auger**
 Dates Drilled: **7/22/2014** Sampling Method: **Hand Auger**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
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 ppm = parts per million
 eV = electron volt

Well ID: **MW-107**

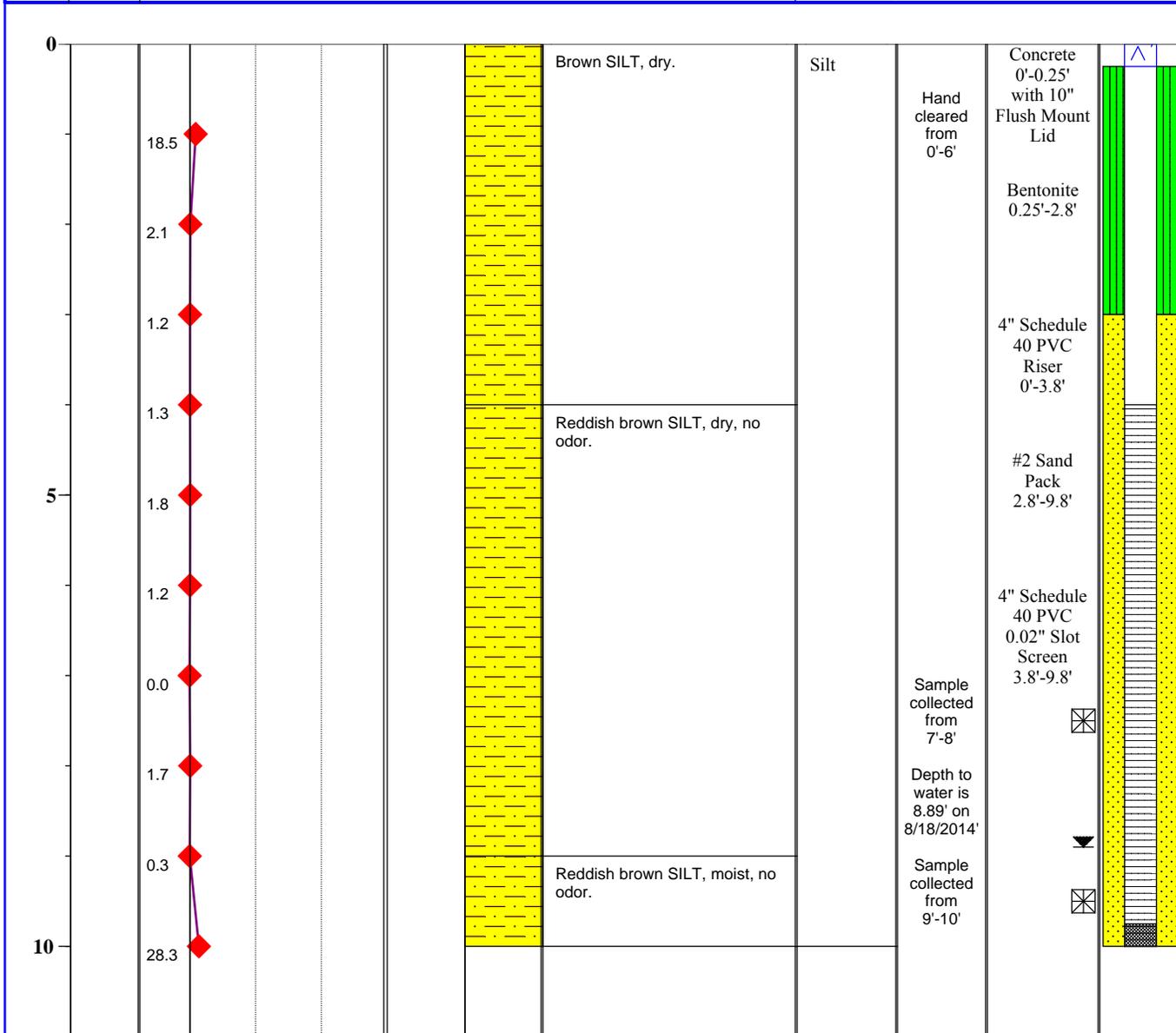
Groundwater & Environmental Services, Inc.
 1350 Blair Drive, Suite A, Odenton, Maryland 800.220.3606 Fax 410.721.3733 p. 1 of 1



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **10'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **4"** WELL DIA.: **2"**

Logged By: **J. Laube** Drilling Method: **Hand Auger**
 Dates Drilled: **7/23/2014** Sampling Method: **Hand Auger**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

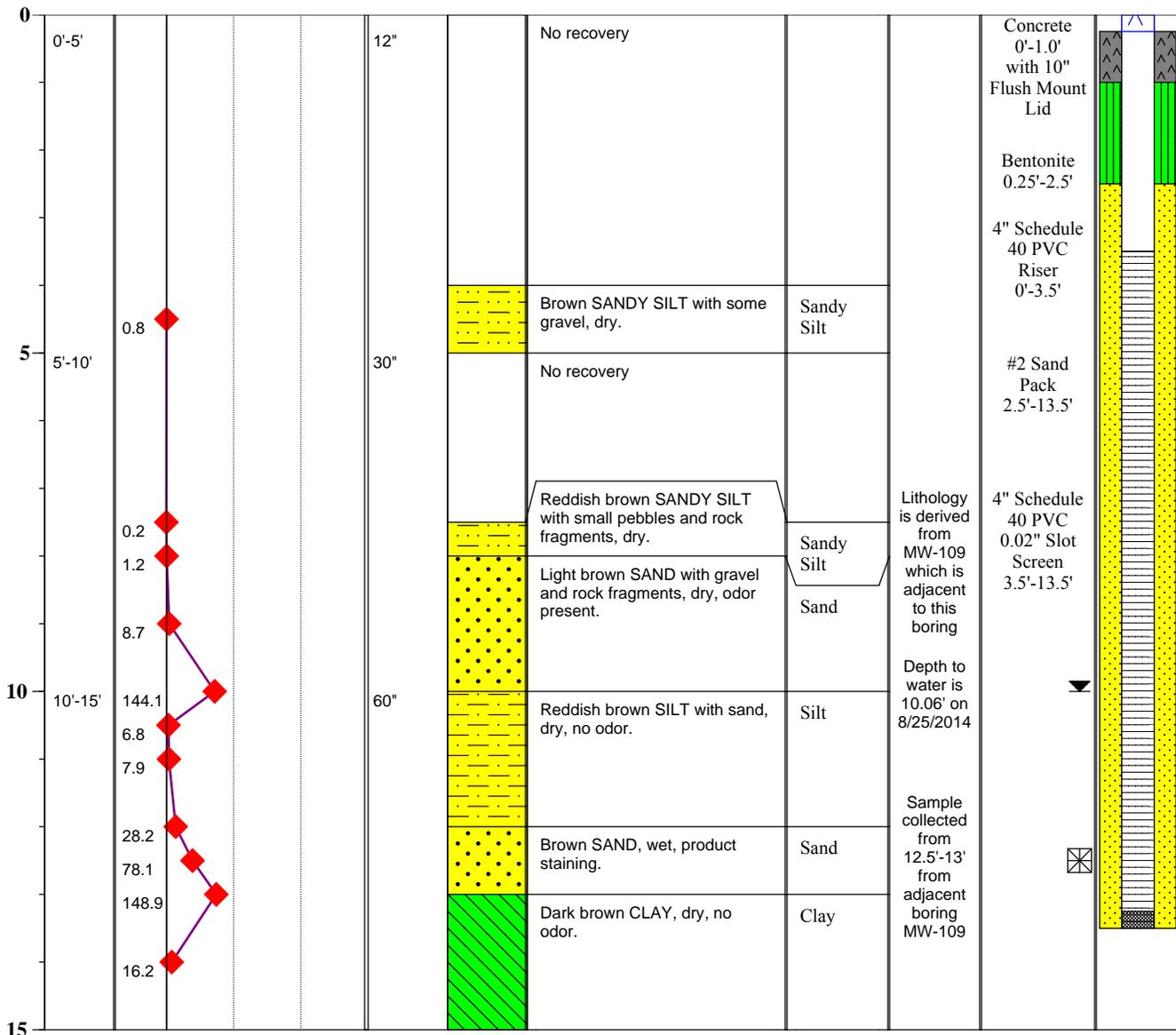
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 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **13.5'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/20/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level Sample Location

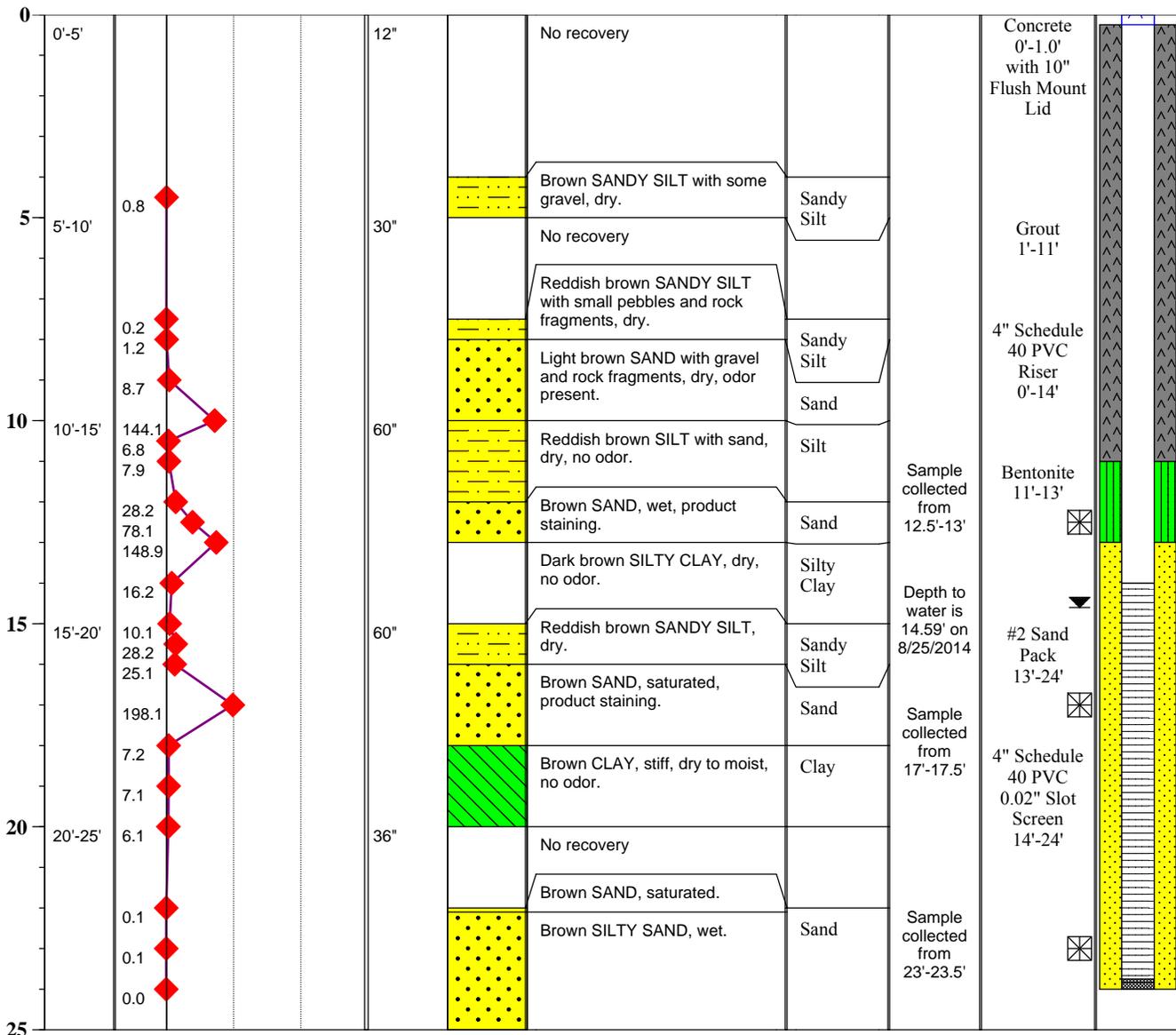
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 ' = feet
 ppm = parts per million
 eV = electron volt



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **24'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/19/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

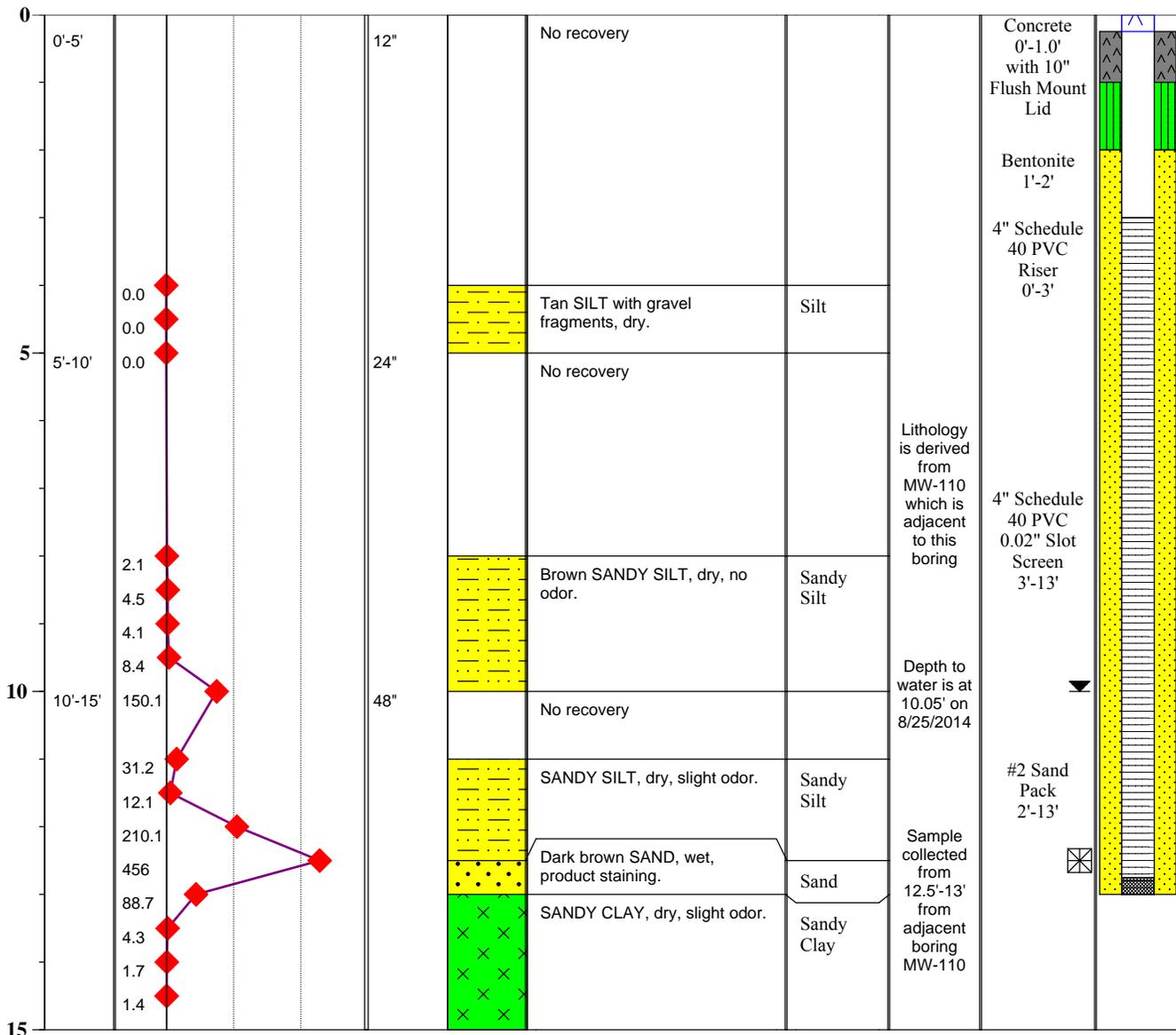
ID NO. **MW-110S**

Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **13'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/20/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level " = inches
 Sample Location ' = feet
 ppm = parts per million
 eV = electron volt

Well ID: **MW-110S**



PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **24'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/20/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0	0'-5'		12"	No recovery			Concrete 0'-1.0' with 10" Flush Mount Lid
5	5'-10'	0.0 0.0 0.0	24"	Tan SILT with gravel fragments, dry. No recovery	Silt		Grout 1'-11'
10	10'-15'	2.1 4.5 4.1 8.4 150.1	48"	Brown SANDY SILT, dry, no odor. No recovery	Sandy Silt		4" Schedule 40 PVC Riser 0'-14'
15	15'-20'	31.2 12.1 210.1 456 88.7 4.3 1.7 1.4 32 38.1 42.1 54 215 144.2 48.4 85.7 29.5 25.2	60"	SANDY SILT, dry, slight odor. Dark brown SAND, wet, product staining. SANDY CLAY, dry, slight odor.	Sandy Silt Sand Sandy Clay	Sample collected from 12.5'-13'	Bentonite 11'-13'
20	20'-25'	37.4 47.1 111.2 145.1 38.2 37.1 35 16.6 9.6 9.9	60"	SAND with silt, saturated, odor. Brown CLAY, stiff, moist to wet. Brown SANDY SILT, saturated, odor.	Sand Clay Sandy Silt	Depth to water is at 14.70' on 8/25/2014 Sample collected from 17'-17.5'	4" Schedule 40 PVC 0.02" Slot Screen 14'-24'
25				Brown CLAY, saturated, slight odor.	Clay	Sample collected from 21'-21.5'	#2 Sand Pack 13'-24'

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
 Little = <25% And = 50%

Symbol Key:
 Water Level
 Sample Location

" = inches
 ' = feet
 ppm = parts per million
 eV = electron volt



BORING AND WELL COMPLETION LOG

ID NO. **MW-111**

Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **22'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/18/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
0	0'-5'		12"	No recovery			Concrete 0'-1.0' with 10" Flush Mount Lid
5	5'-10'	0.0	18"	Brown SILT with small gravel.	Silt		Grout 1'-9'
10	10'-15'	0.0	18"	GRAVEL, large angular, with brown silt.	Gravel		2" Schedule 40 PVC Riser 0'-12'
15	15'-20'	0.0	48"	GRAVEL, small to medium, with silt.	Gravel	Depth to water is 14.62' on 8/25/2014	Bentonite 9'-11'
		48.3		Brown SAND, large grained, wet.	Sand	Sample collected from 16'-16.5'	#2 Sand Pack 11'-22'
		20.6		Brown CLAY	Clay		
		12.1		Brown SANDY CLAY, moist.	Sandy Clay		2" Schedule 40 PVC 0.02" Slot Screen 12'-22'
		14.4					
		7.2					
		0.2					
		0.2					
20		0.0					

LEGEND

Proportion Descriptions:
 Trace = <10% Some = <50%
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Symbol Key:
 Water Level Sample Location

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Well ID: **MW-111**



BORING AND WELL COMPLETION LOG

ID NO. **MW-112S**

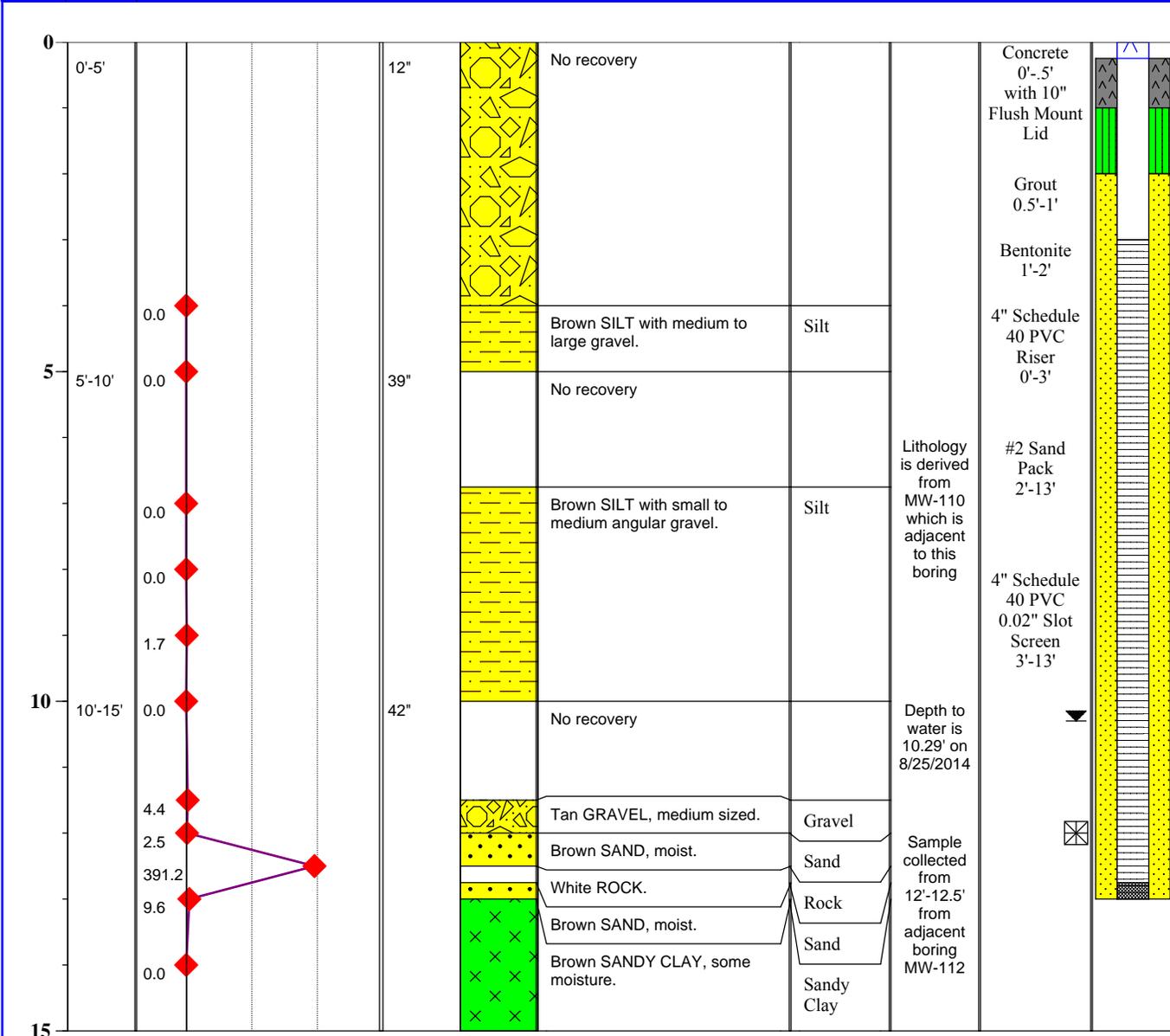
Groundwater & Environmental Services, Inc.

Page 1 of 1

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **13'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/12/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

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Symbol Key:
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BORING AND WELL COMPLETION LOG

ID NO. **MW-112**

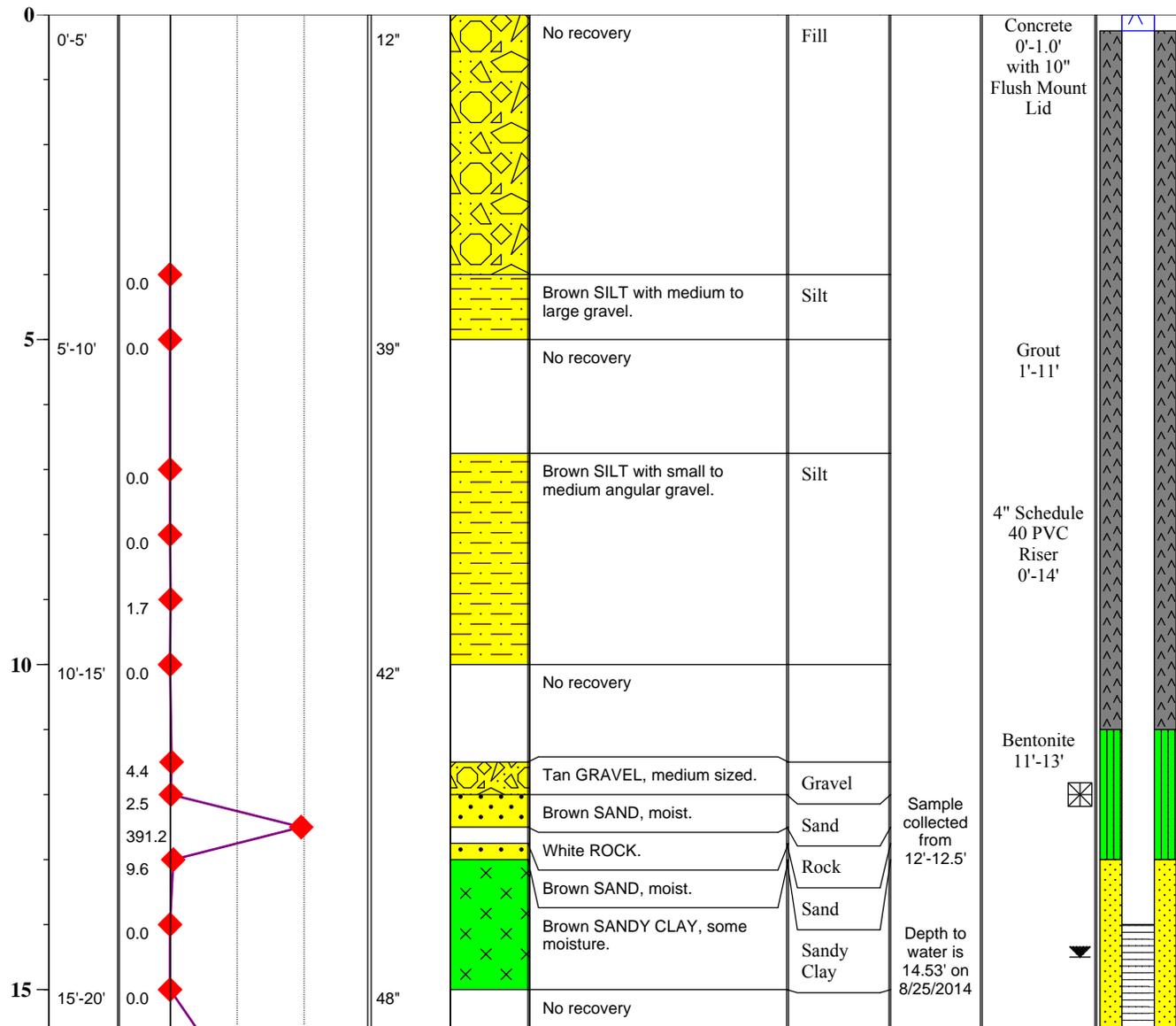
Groundwater & Environmental Services, Inc.

Page 1 of 2

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **24'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/12/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

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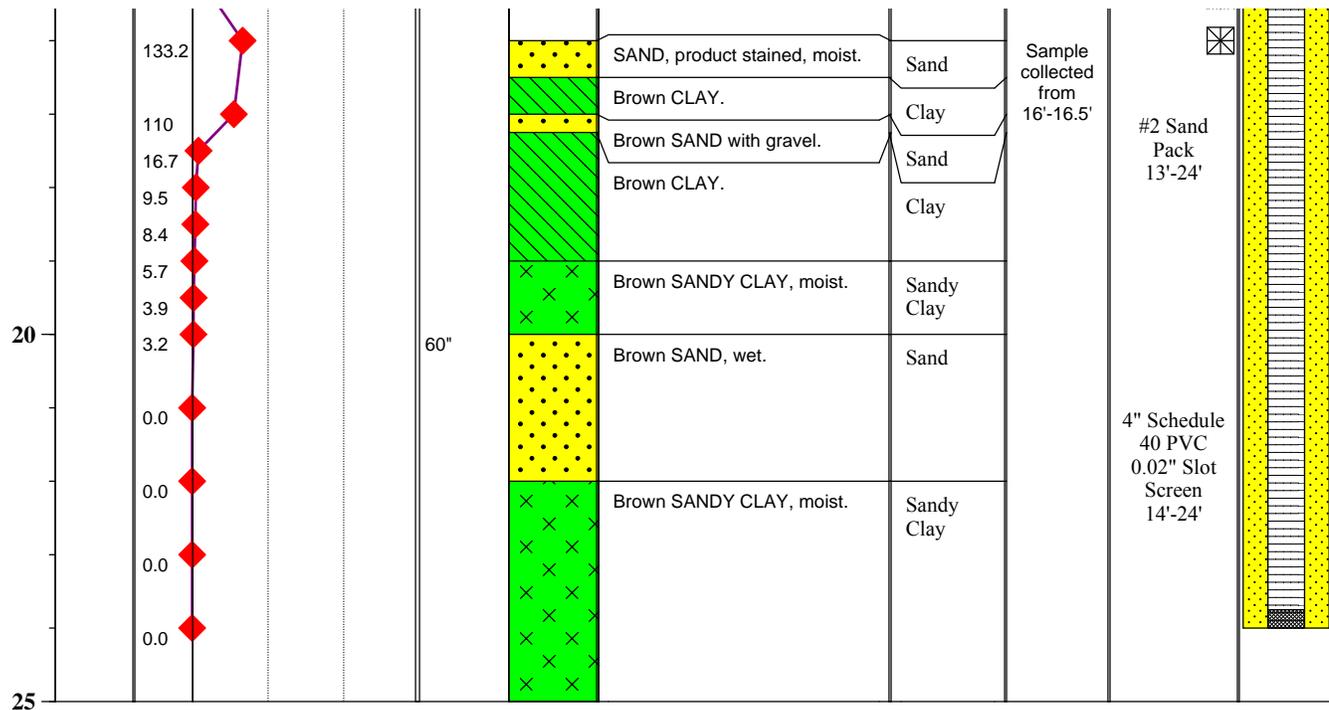
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **24'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **10.5"** WELL DIA.: **4"**

Logged By: **D. Rice** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/12/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

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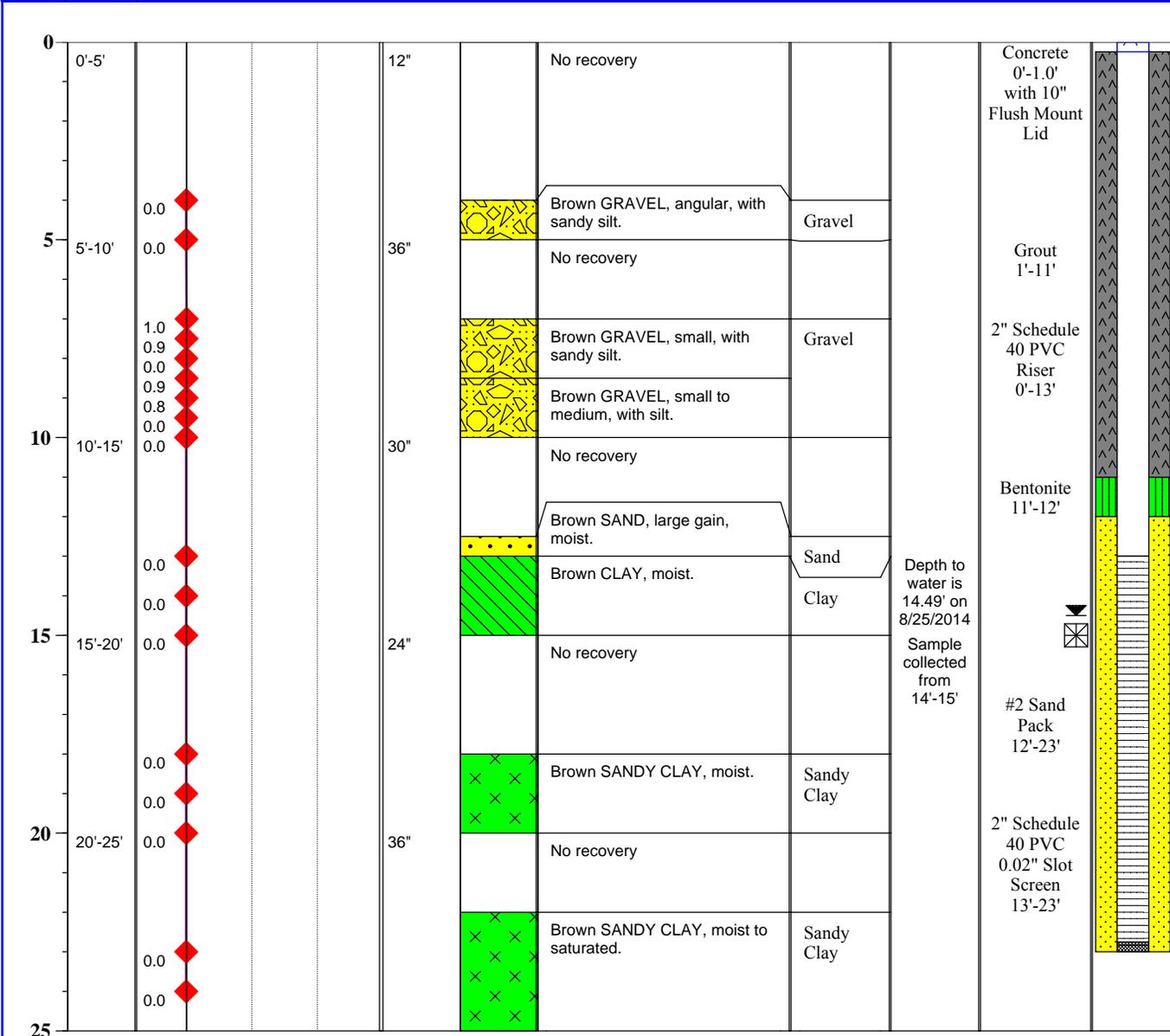
" = inches
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **23'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/19/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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BORING AND WELL COMPLETION LOG

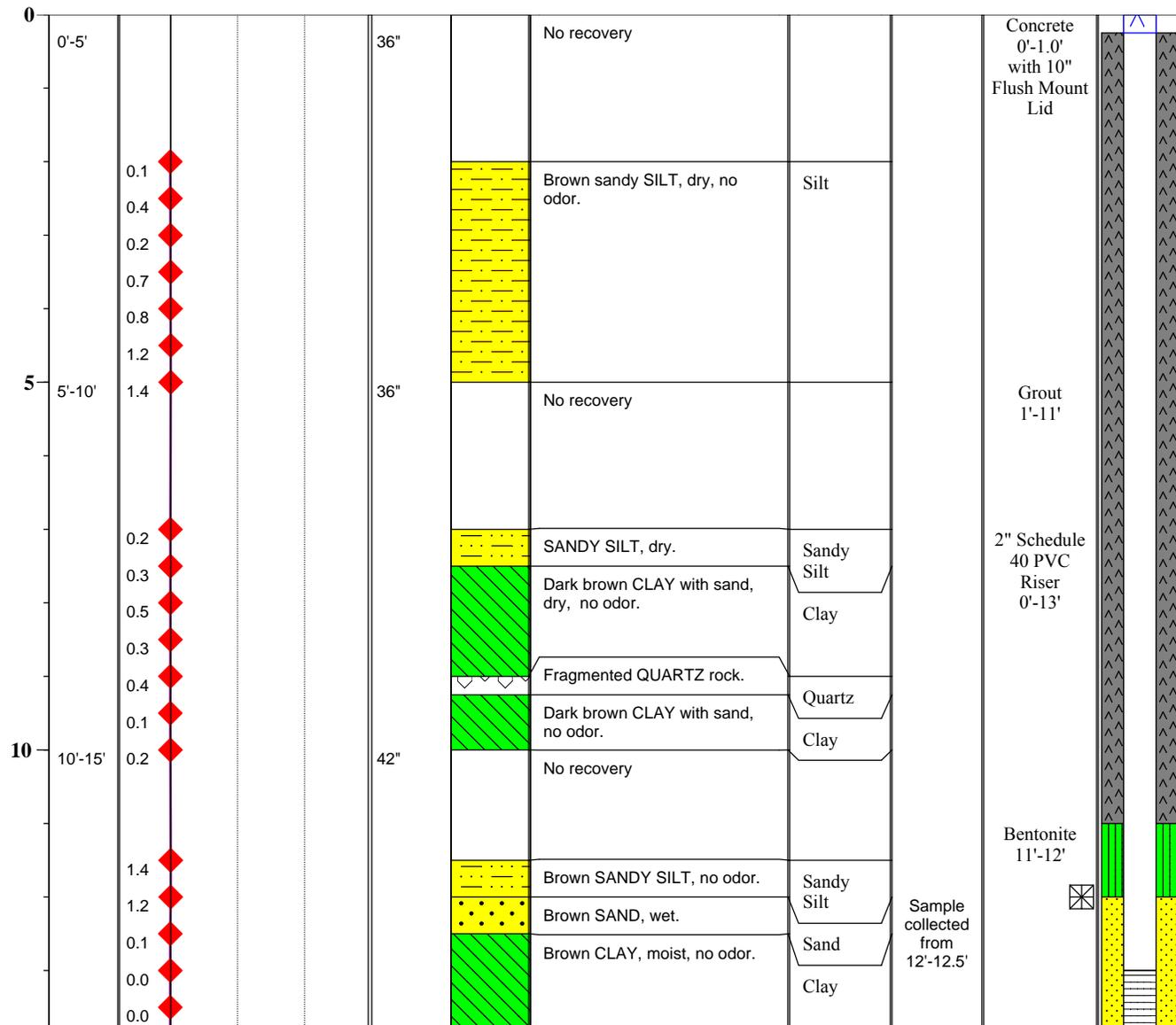
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Groundwater & Environmental Services, Inc.

PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **23'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/21/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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LEGEND

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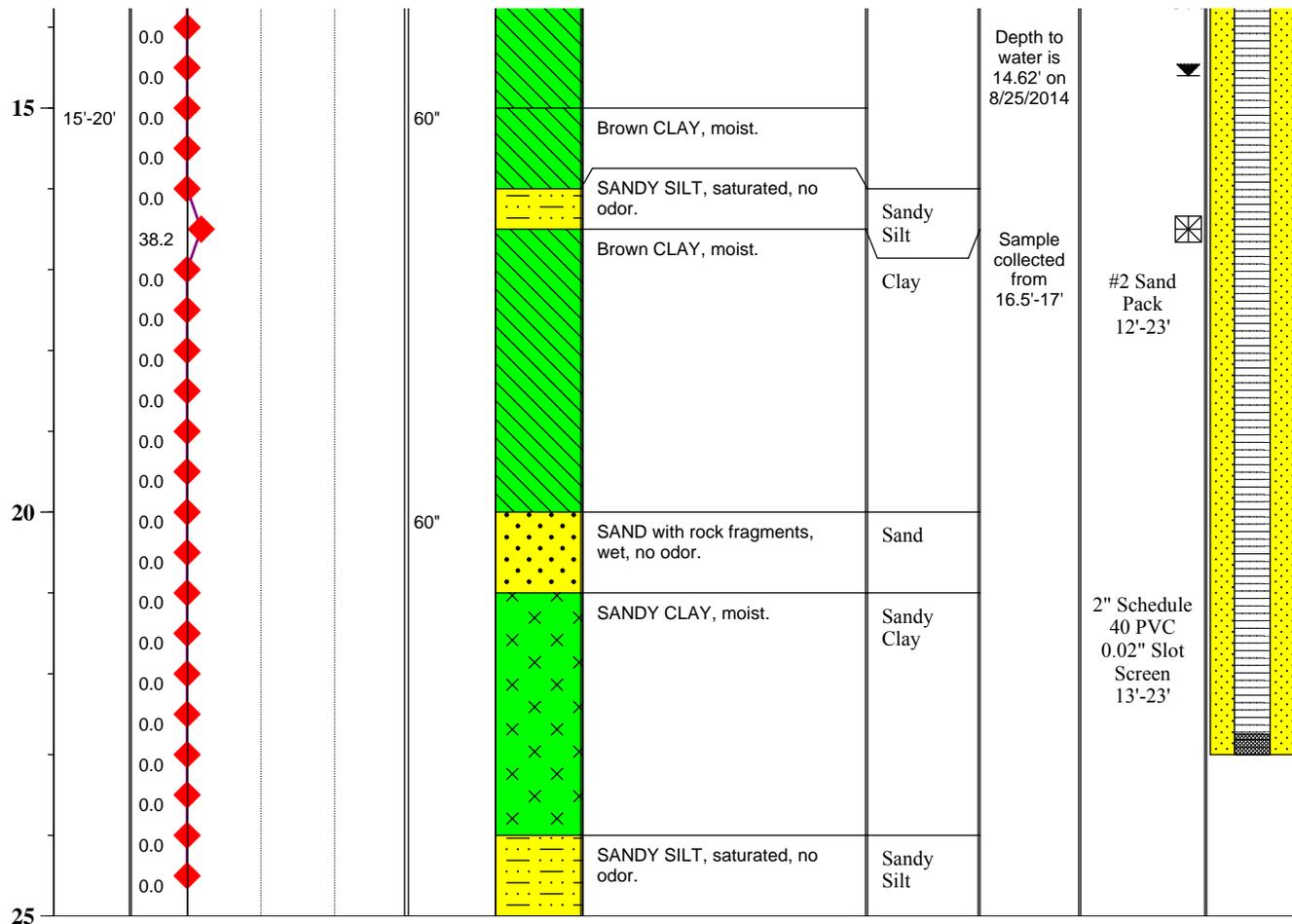
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PROJECT: **Potomac River Generating Station** WATER DEPTH: TOTAL DEPTH: **23'**
 ADDRESS: **1400 N Royal St, Alexandria, VA** CASING EL.:
0402859 BOREHOLE DIA.: **8.5"** WELL DIA.: **2"**

Logged By: **S. Andresini** Drilling Method: **Geoprobe 7822DT**
 Dates Drilled: **8/21/2014** Sampling Method: **5' Acetate Sleeve**
 Drilling Company: **Odyssey** Soil Class. System: **Unified Soil Classification System**
 Well Permit #: Field Screening: **PID, 10.6 eV Lamp**

Depth (feet)	Sample Interval (feet)	Field Screen: Total Organic Volatiles (ppm)	Recovery (feet)	Sample Lithology	Stratigraphy	Comments	Completion Details
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