

NOTES:

1. Installed on 07/30/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

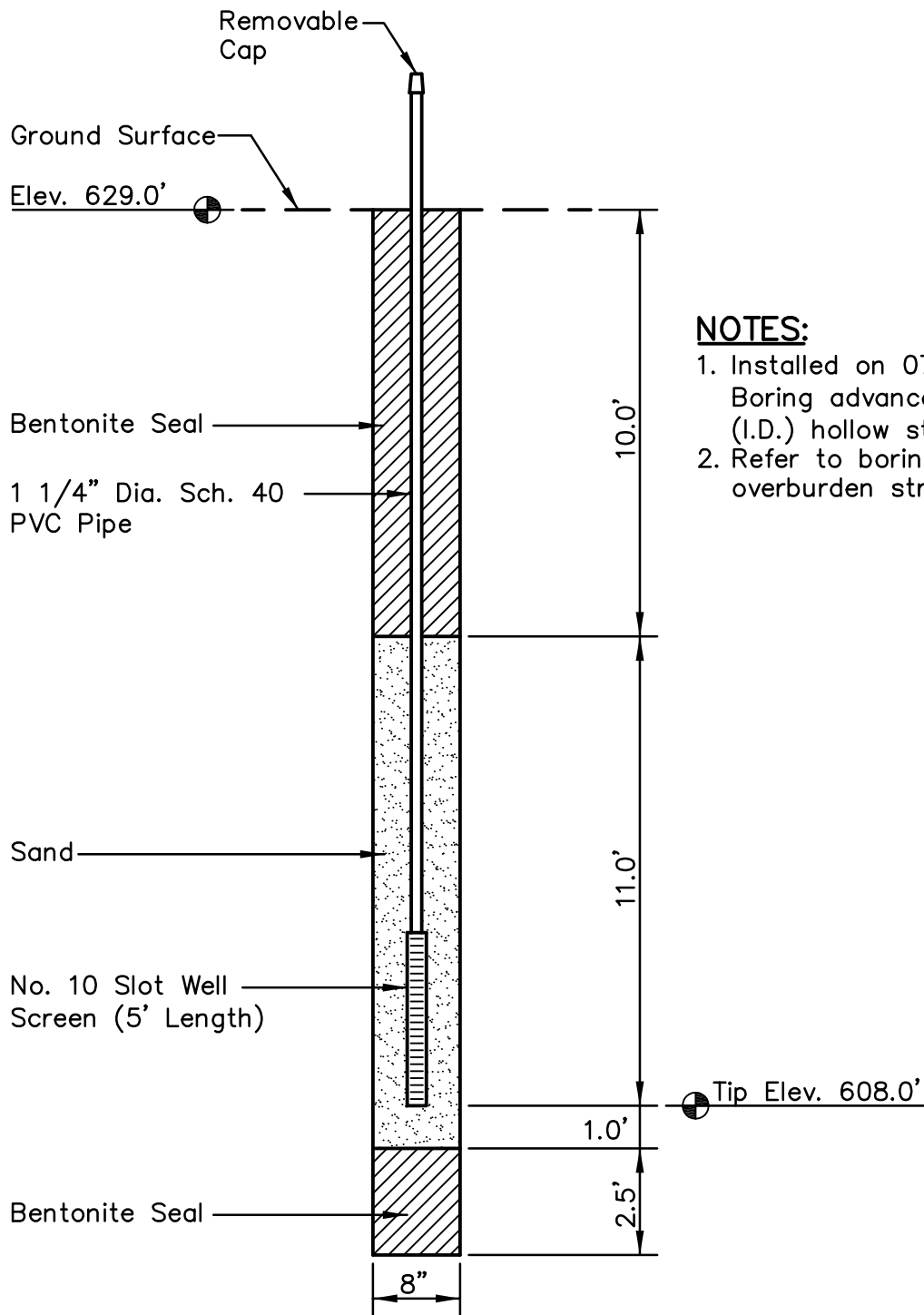
LOCATION:

Northing:
 Easting:
 Ground Elevation: 629.0 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER CPT-10			
GYPSUM STACK DIKE RECOVERY PROJECT			
WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 10/22/2009 USER: FLYNN, RENEE V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-101-PZ10.DWG



NOTES:

1. Installed on 07/30/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

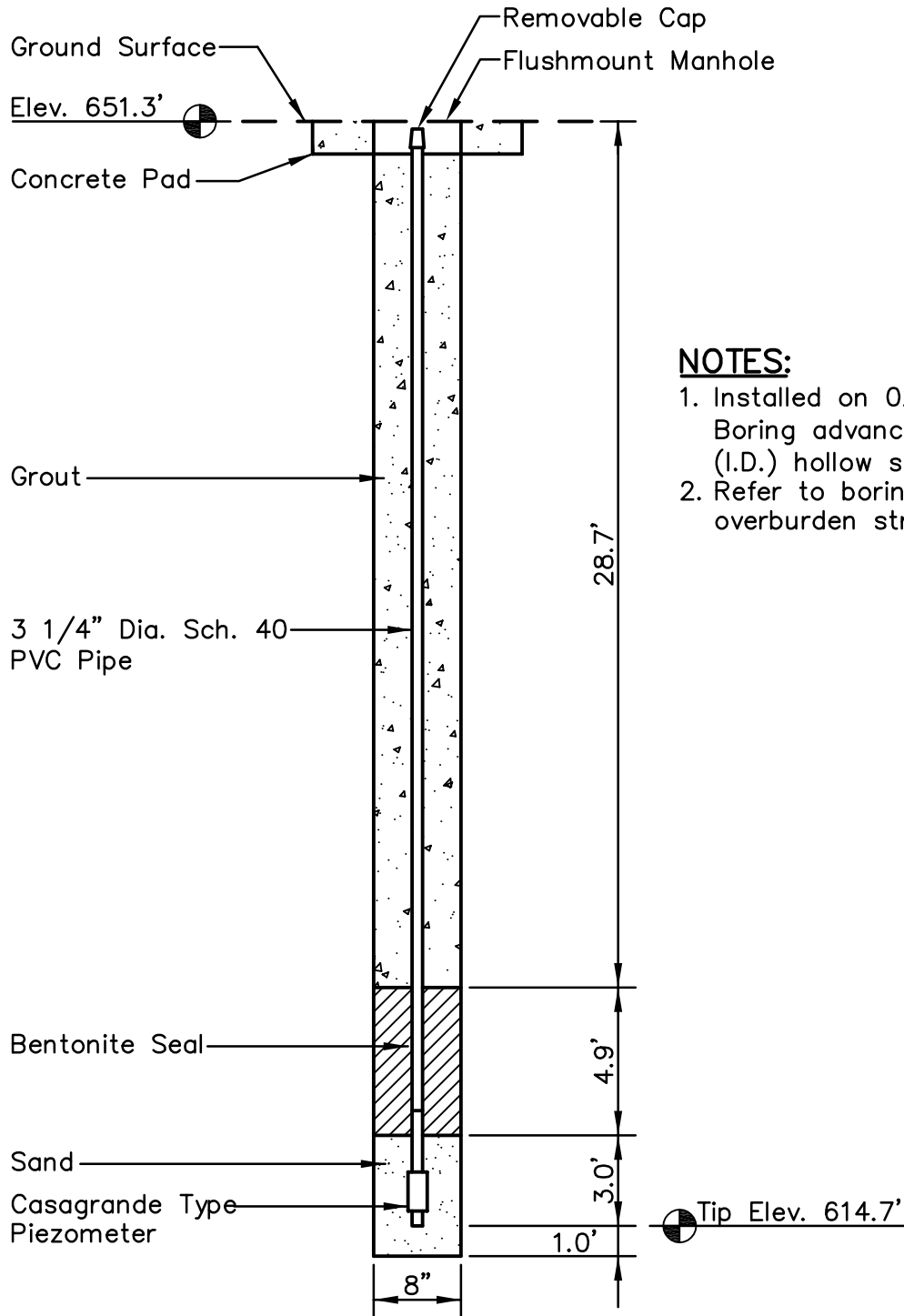
LOCATION:

Northing:
 Easting:
 Ground Elevation: 629.0 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER CPT-12				
GYPSUM STACK DIKE RECOVERY PROJECT				
WIDOWS CREEK FOSSIL PLANT				
<b style="font-size: 2em; vertical-align: middle;">Stantec			Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	REVISED	
CHECKED BY	GKA	PROJ. NO.	1.	3.
CHECKED BY	RDF	SCALE	2.	4.
			1 OF 1	

PLOT DATE: 08/11/2009 USER: FLYNN, RENEE V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-101-PZ12.DWG



NOTES:

1. Installed on 02/10/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE V: \\1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-301-PZ28.DWG

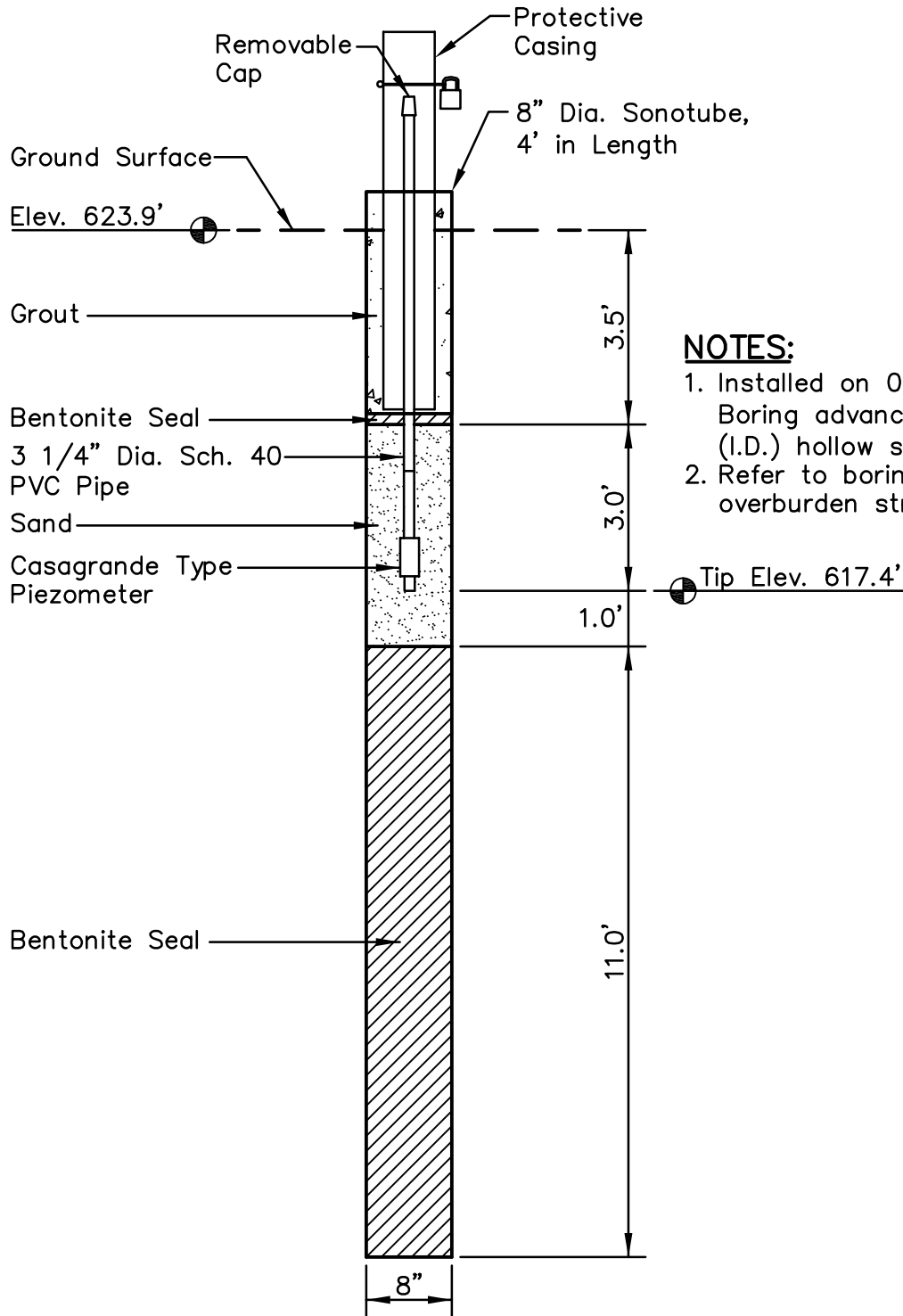
LOCATION:

Northing: 1,600,650.07
 Easting: 527,741.04
 Ground Elevation: 651.3 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-28 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

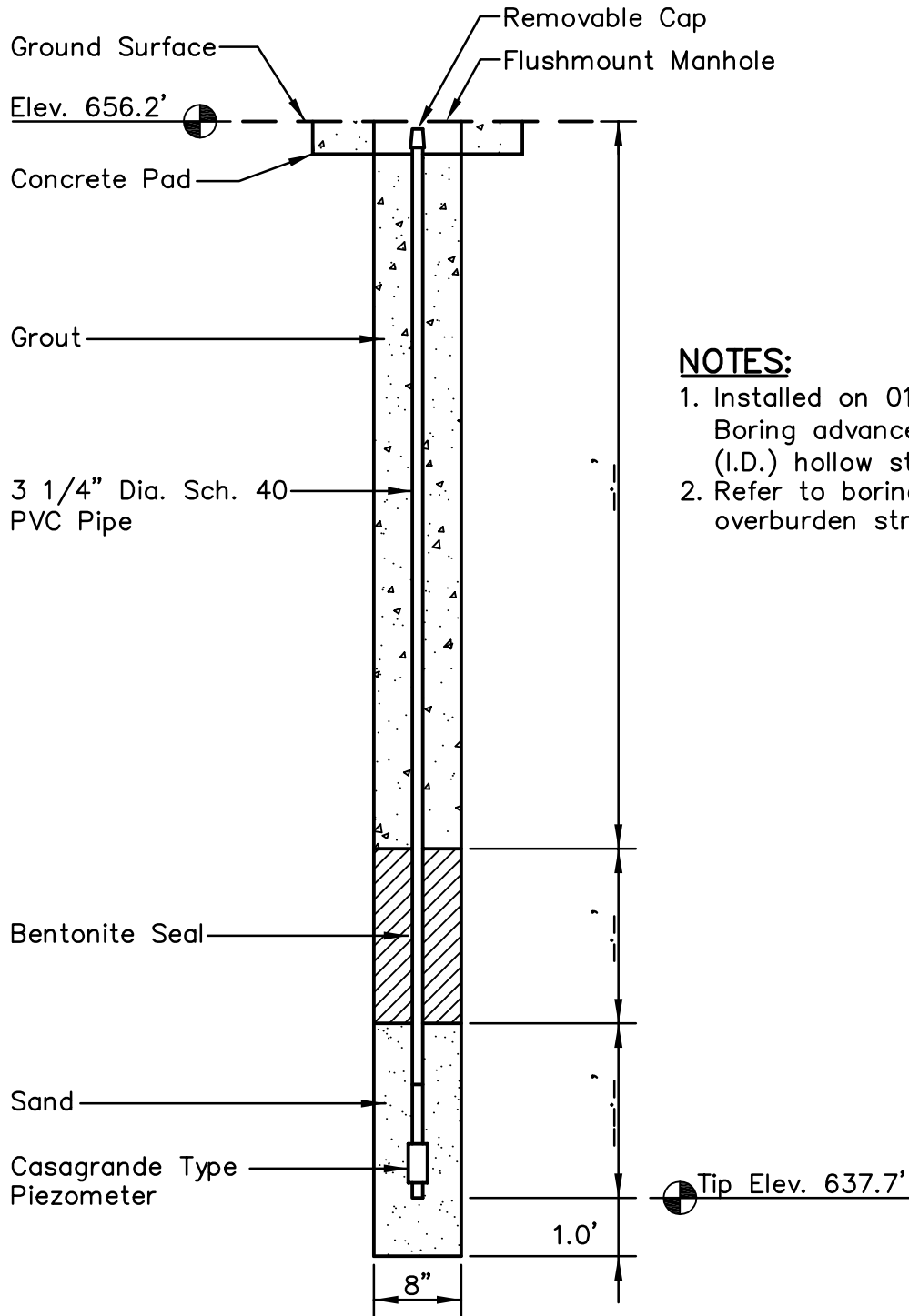
Northing: 1,600,590.07
 Easting: 527,790.42
 Ground Elevation: 623.9 feet

Locations to be provided by TVA, Power Systems Operations, Surveying and Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-29			
GYPSSUM STACK DIKE RECOVERY PROJECT			
WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-302-PZ29.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

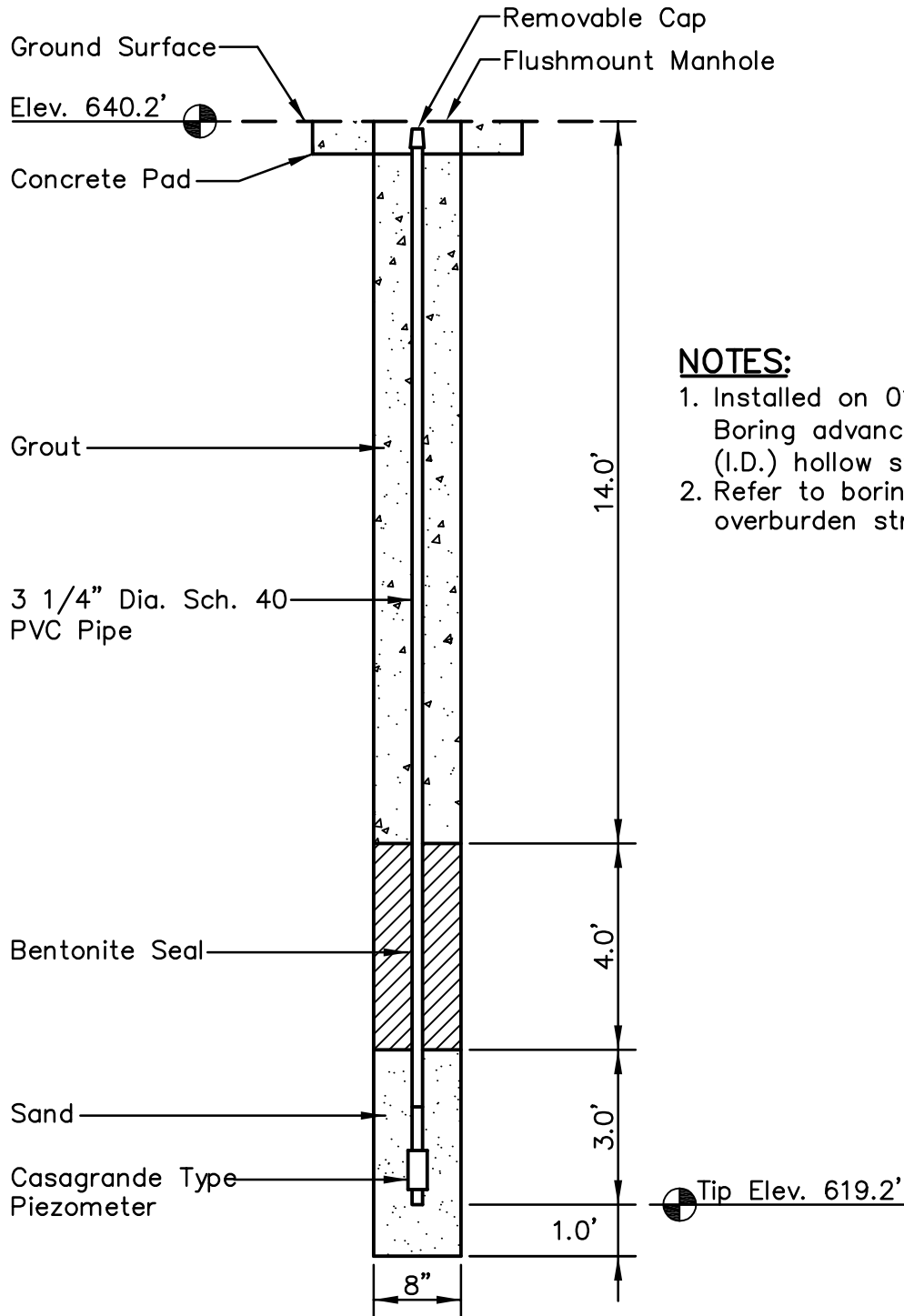
Northing: 1,603,037.12
 Easting: 528,528.53
 Ground Elevation: 656.2 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-32 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
Stantec		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE
 V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-303-P232.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE V: \1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-304-PZ33.DWG

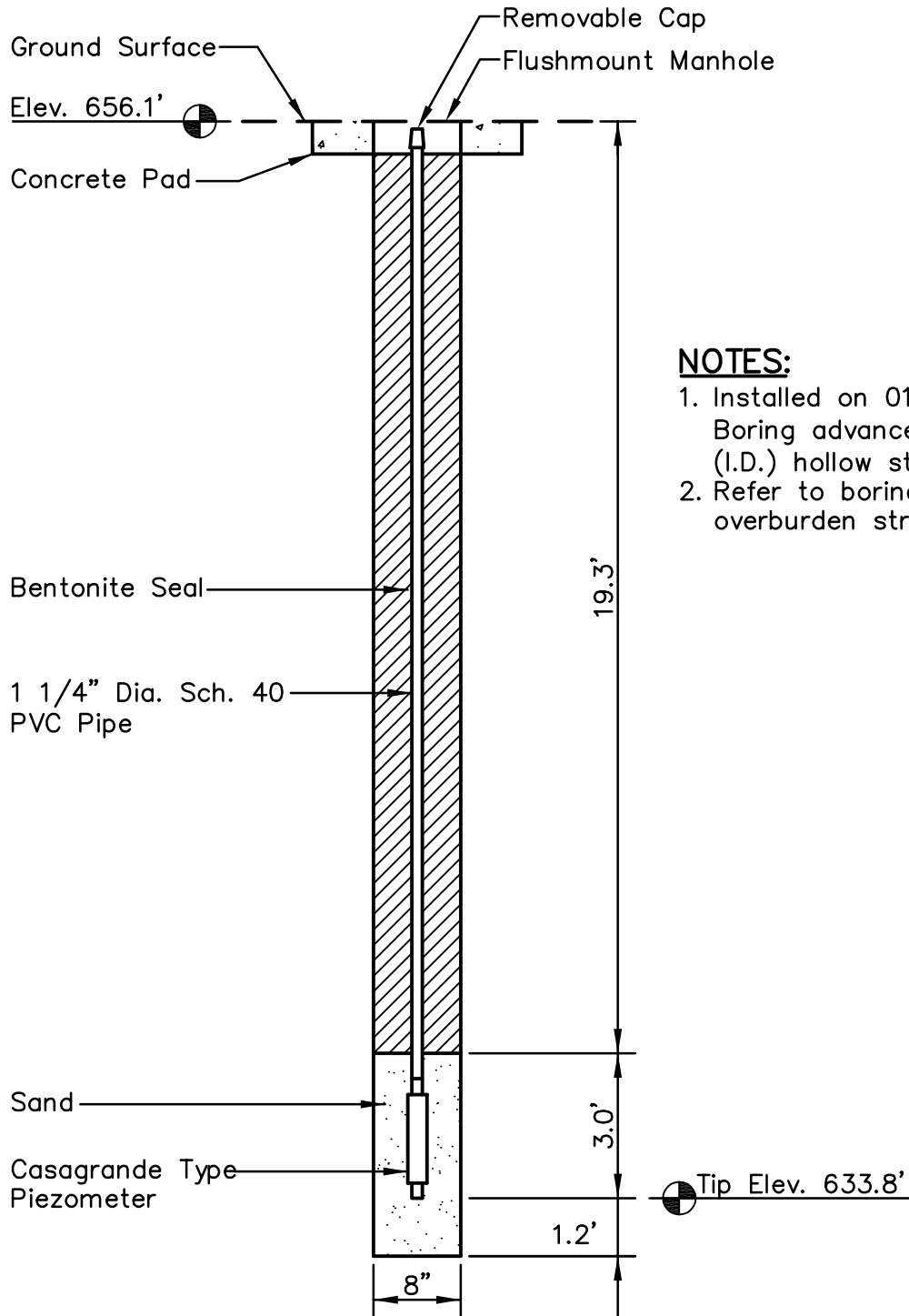
LOCATION:

Northing: 1,602,306.99
 Easting: 528,597.85
 Ground Elevation: 640.2 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-33 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

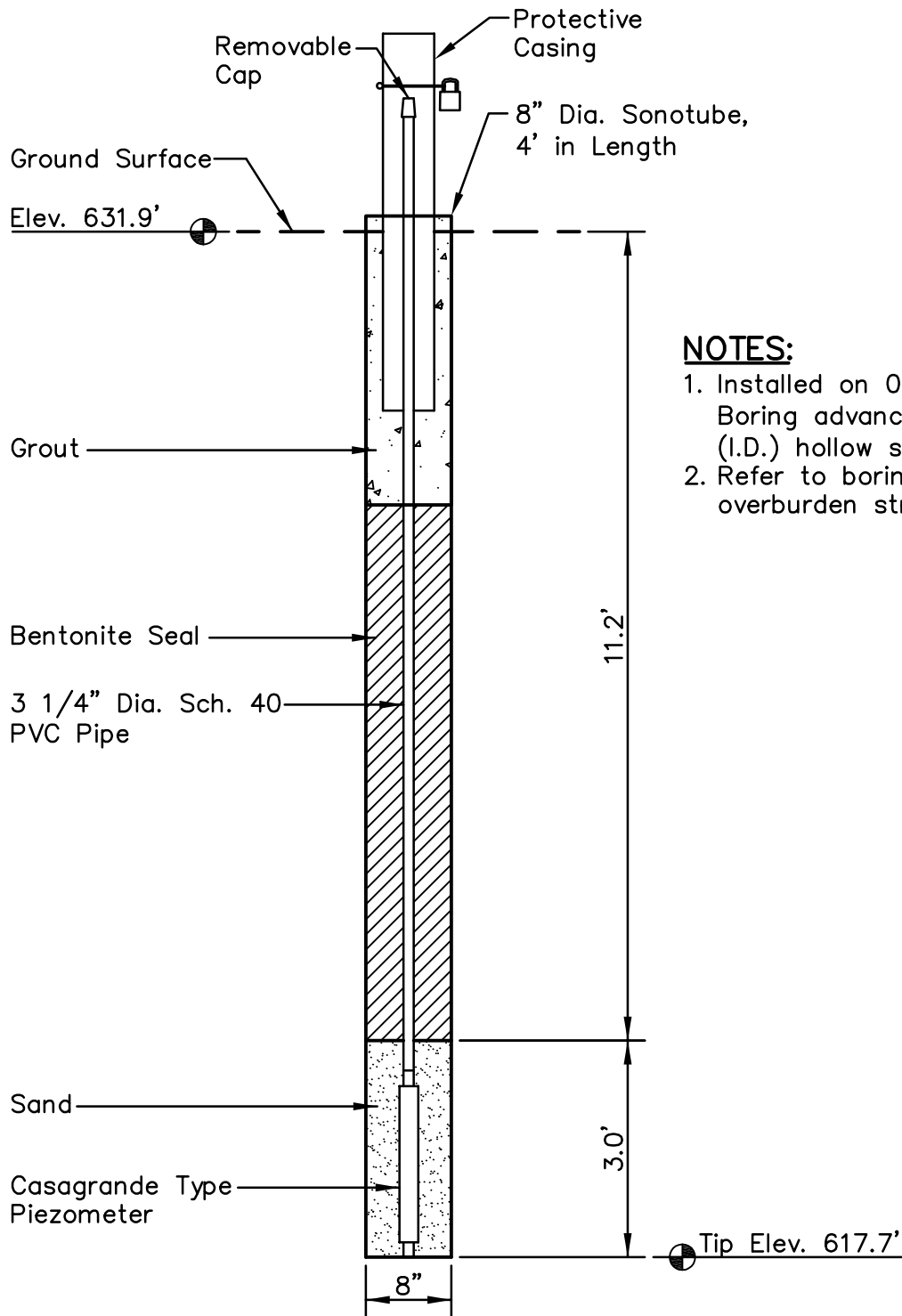
LOCATION:

Northing: 1,603,831.02
 Easting: 528,927.71
 Ground Elevation: 656.1 feet

Locations to be provided by TVA, Power Systems Operations, Surveying and Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-35				
GYPSUM STACK DIKE RECOVERY PROJECT				
WIDOWS CREEK FOSSIL PLANT				
<b style="font-size: 2em; vertical-align: middle;">Stantec			Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009	
CHECKED BY	GKA	PROJ. NO.	175569039	
CHECKED BY	RDF	SCALE	NTS	
			REVISED	SHEET
			1.	3.
			2.	4.
				1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE
 V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-305-PZ35.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

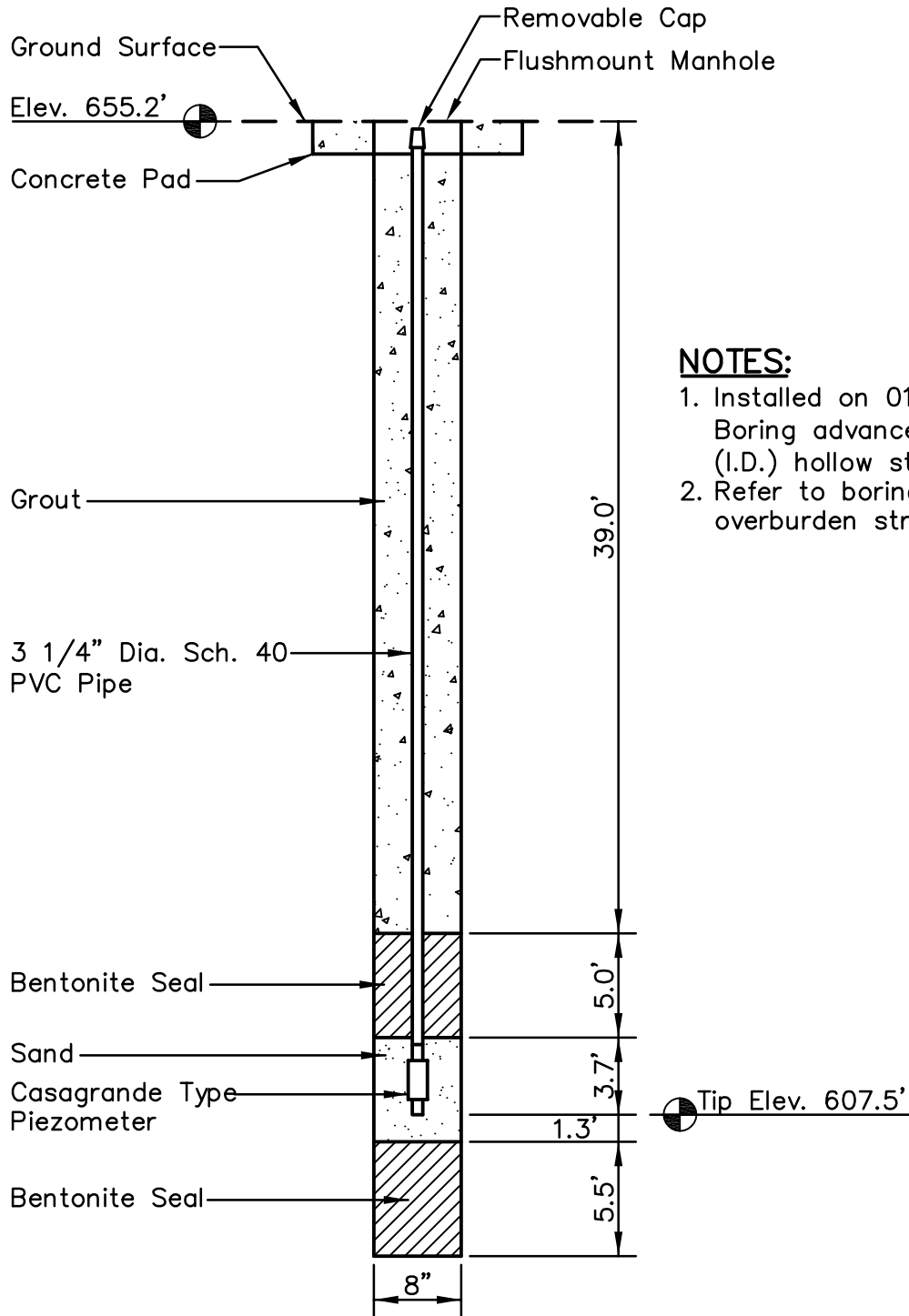
Northing: 1,603,833.76
 Easting: 529,007.11
 Ground Elevation: 631.9 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-36 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE
 V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-306-P236.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

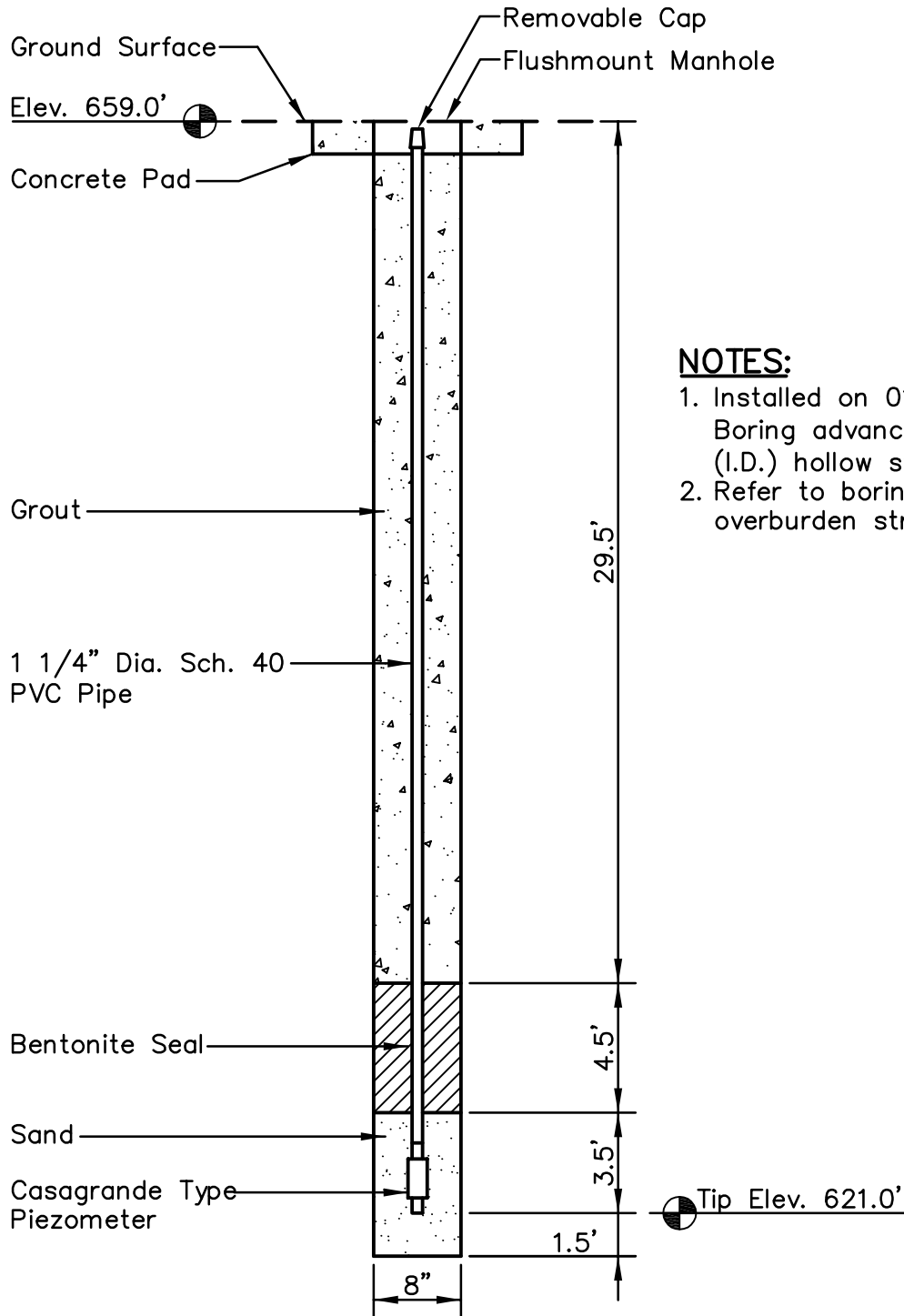
Northing: 1,602,374.54
 Easting: 526,839.70
 Ground Elevation: 655.2 feet

Locations to be provided by TVA, Power Systems Operations, Surveying and Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-39			
GYPSUM STACK DIKE RECOVERY PROJECT			
WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE
 V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-307-P239.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

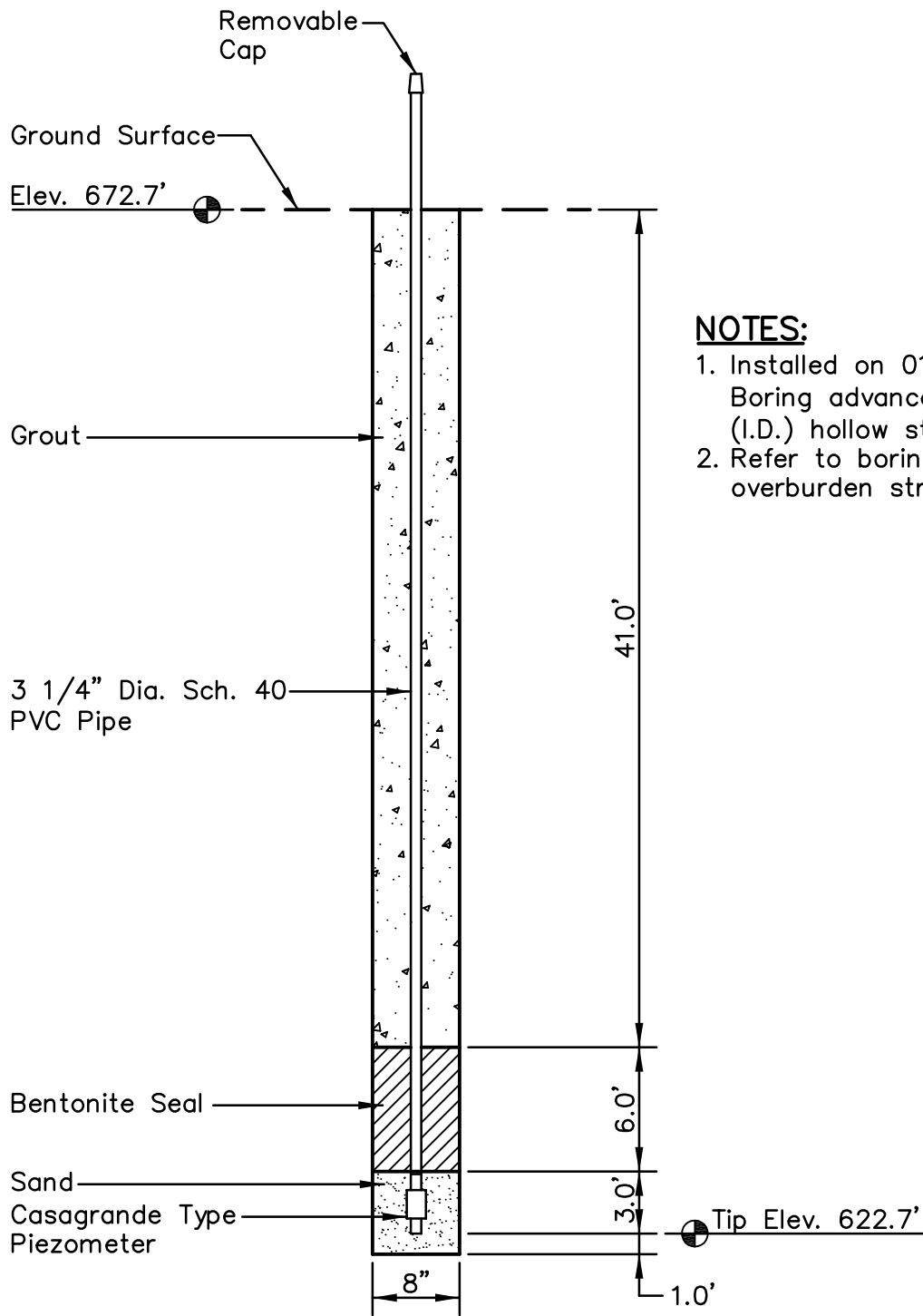
Northing: 1,601,813.42
 Easting: 527,067.02
 Ground Elevation: 659.0 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-42 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
Stantec		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE
 V: \1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-308-PZ42.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

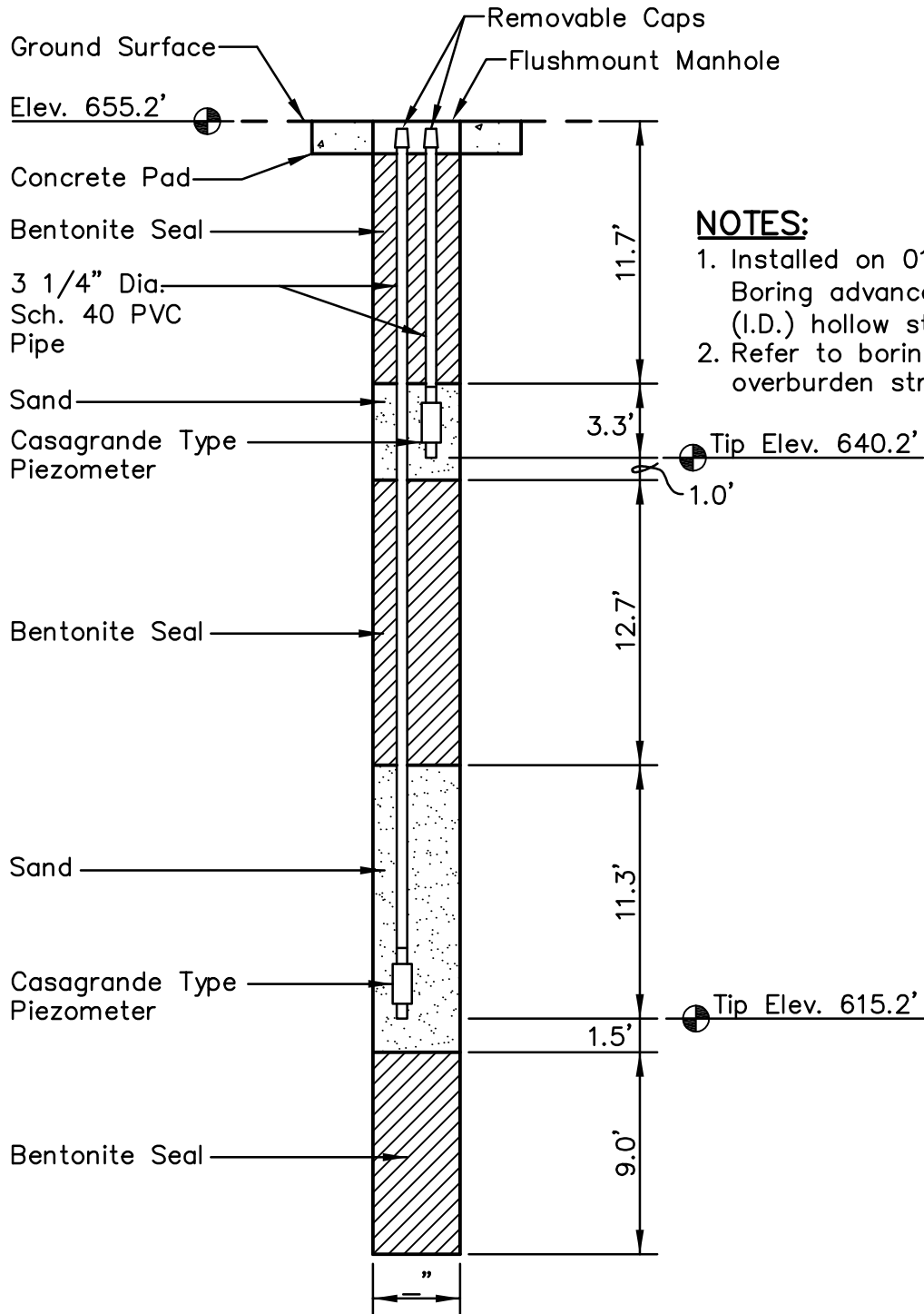
PLOT DATE: 08/12/2009 USER: FLYNN, RENEE V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-309-PZ43.DWG

LOCATION:

Northing: 1,601,979.19
 Easting: 527,240.00
 Ground Elevation: 672.7 feet

Locations to be provided by TVA, Power Systems Operations, Surveying and Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-43			
GYPSUM STACK DIKE RECOVERY PROJECT			
WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	
		1.	3.
		2.	4.
			SHEET
			1 OF 1



NOTES:

1. Installed on 01/13/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

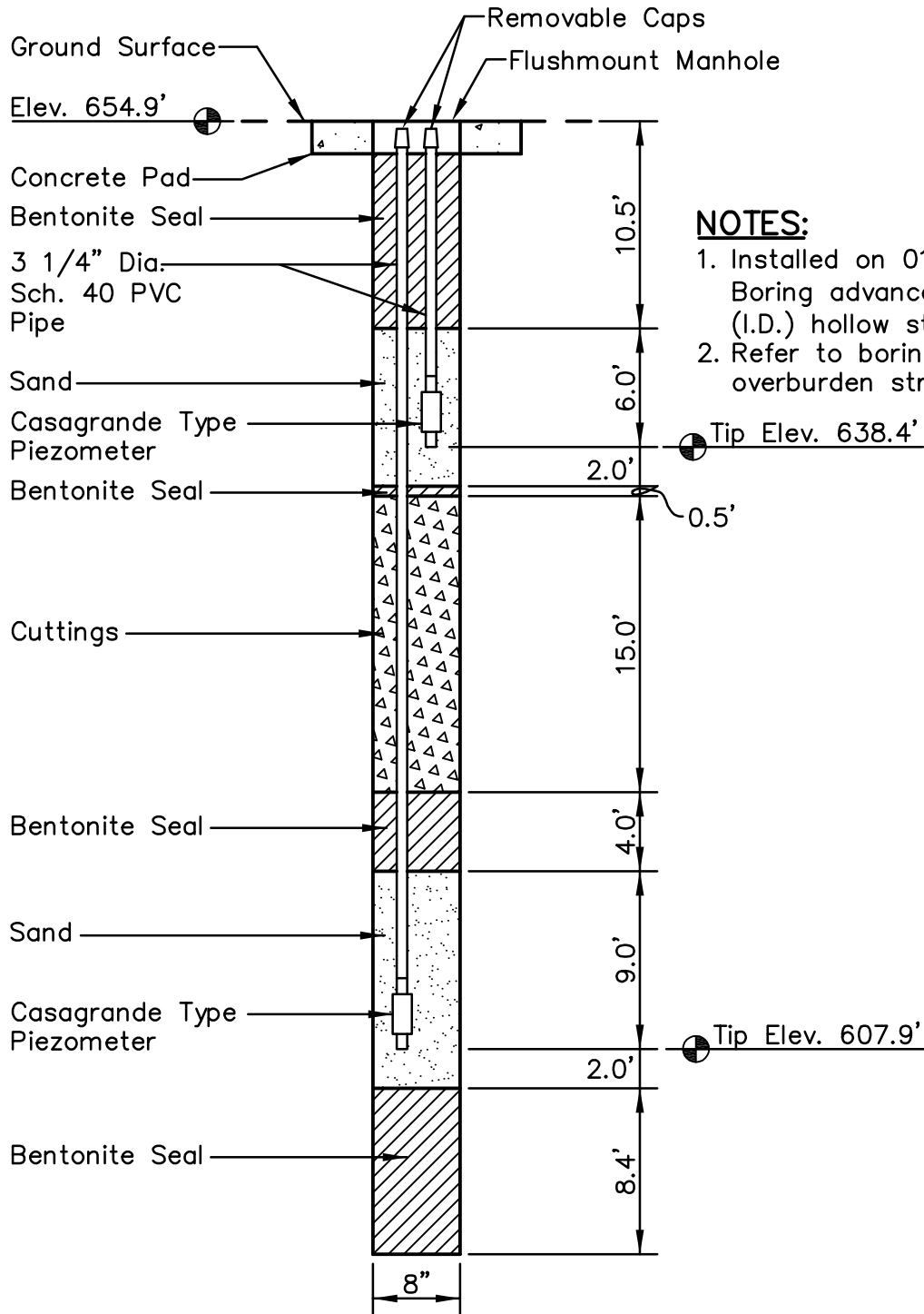
Northing: 1,601,630.60
 Easting: 527,063.04
 Ground Elevation: 655.2 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-45 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
Stantec		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE
 V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-310-PZ45.DWG



NOTES:

1. Installed on 01/12/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

LOCATION:

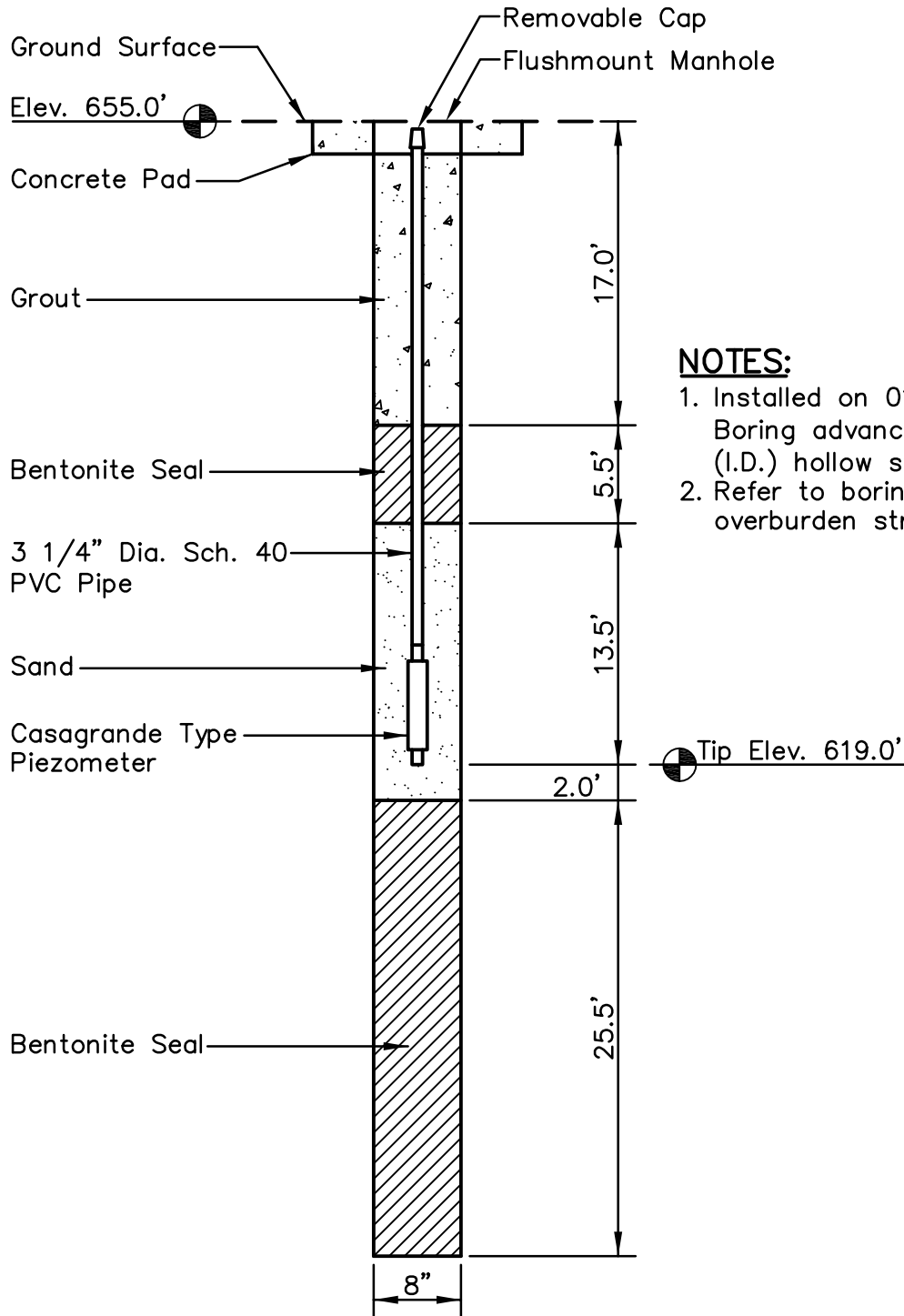
Northing: 1,601,416.03
 Easting: 527,060.84
 Ground Elevation: 654.9 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-48 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
<b style="font-size: 2em; vertical-align: middle;">Stantec		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENE V:\1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-311-PZ48.DWG



NOTES:

1. Installed on 01/20/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

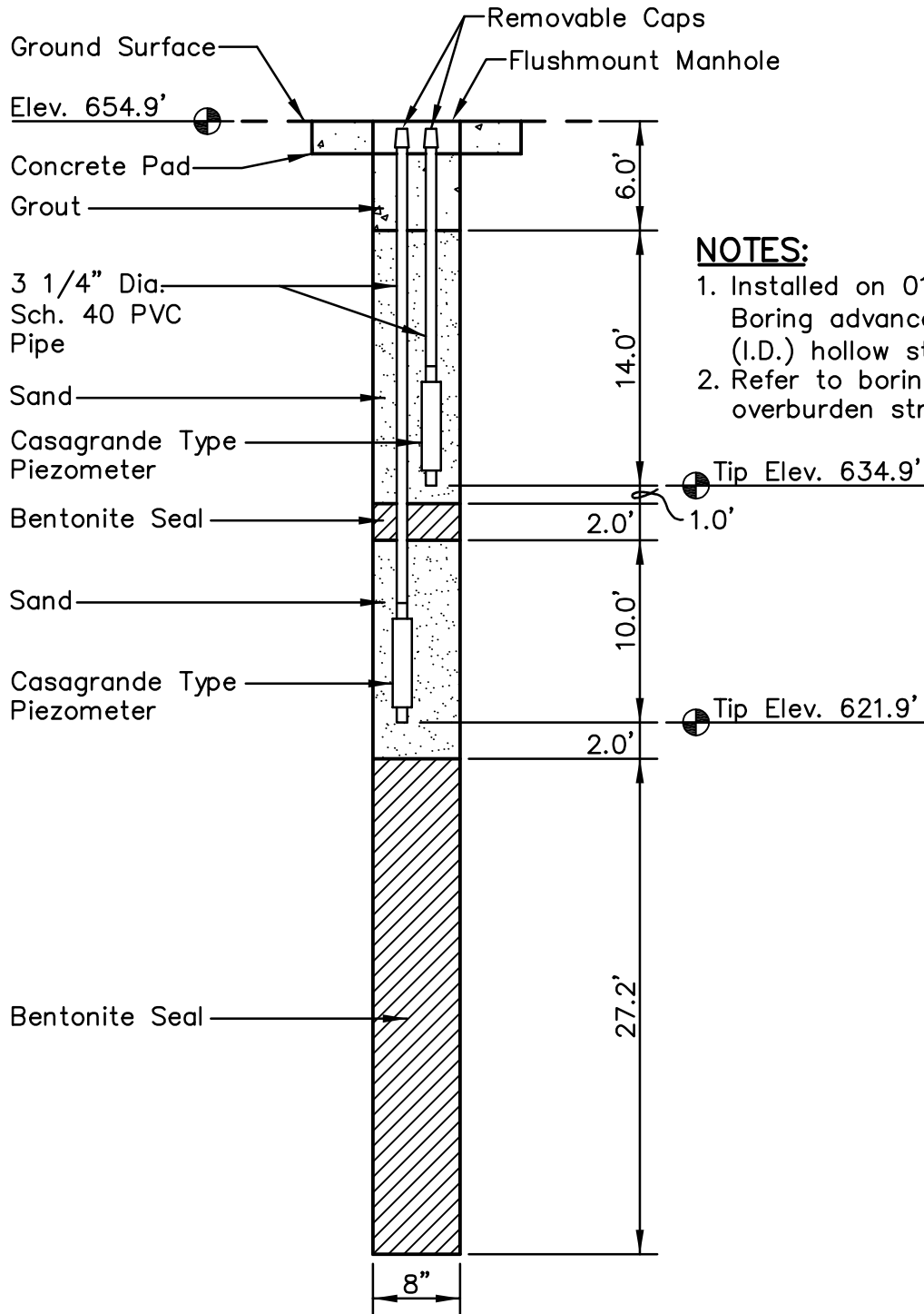
PLOT DATE: 08/12/2009 USER: FLYNN, RENEE V: \1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-312-PZ49.DWG

LOCATION:

Northing: 1,601,258.38
 Easting: 527,058.78
 Ground Elevation: 655.0 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-49 GYPSUM STACK DIKE RECOVERY PROJECT WIDOWS CREEK FOSSIL PLANT			
		Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009
CHECKED BY	GKA	PROJ. NO.	175569039
CHECKED BY	RDF	SCALE	NTS
		REVISED	SHEET
		1.	3.
		2.	4.
			1 OF 1



NOTES:

1. Installed on 01/21/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden stratigraphy.

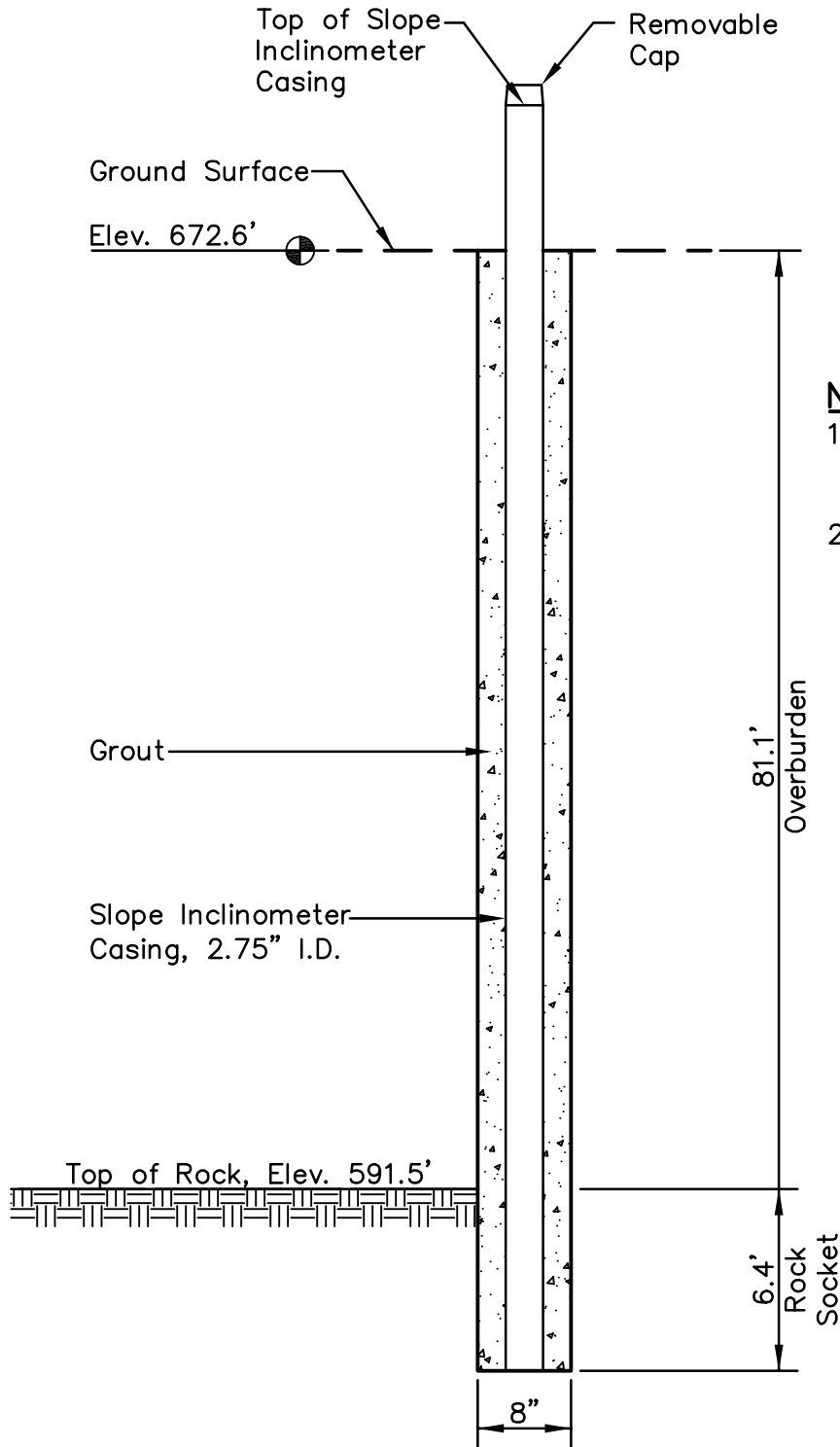
LOCATION:

Northing: 1,601,244.06
 Easting: 527,059.01
 Ground Elevation: 654.9 feet

Locations to be provided by TVA, Power Systems Operations, Surveying and Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

PIEZOMETER STN-50				
GYPSUM STACK DIKE RECOVERY PROJECT				
WIDOWS CREEK FOSSIL PLANT				
<b style="font-size: 2em; vertical-align: middle;">Stantec			Stantec Consulting Services Inc. 1409 N. Forbes Rd. Lexington, Kentucky 40511-2050 859-422-3000 www.stantec.com	
DRAWN BY	PJB	DATE	AUG., 2009	
CHECKED BY	GKA	PROJ. NO.	175569039	
CHECKED BY	RDF	SCALE	NTS	
			REVISED	SHEET
			1.	3.
			2.	4.
				1 OF 1

PLOT DATE: 08/12/2009 USER: FLYNN, RENEE V: 1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-313-PZ50.DWG



NOTES:

1. Installed on 02/19/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden and rock stratigraphy.

LOCATION:

Northing: 1,601,984.66
 Easting: 527,265.25
 Ground Elevation: 672.6 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

SLOPE INCLINOMETER STN-31
GYPSSUM STACK DIKE RECOVERY PROJECT
WIDOWS CREEK FOSSIL PLANT



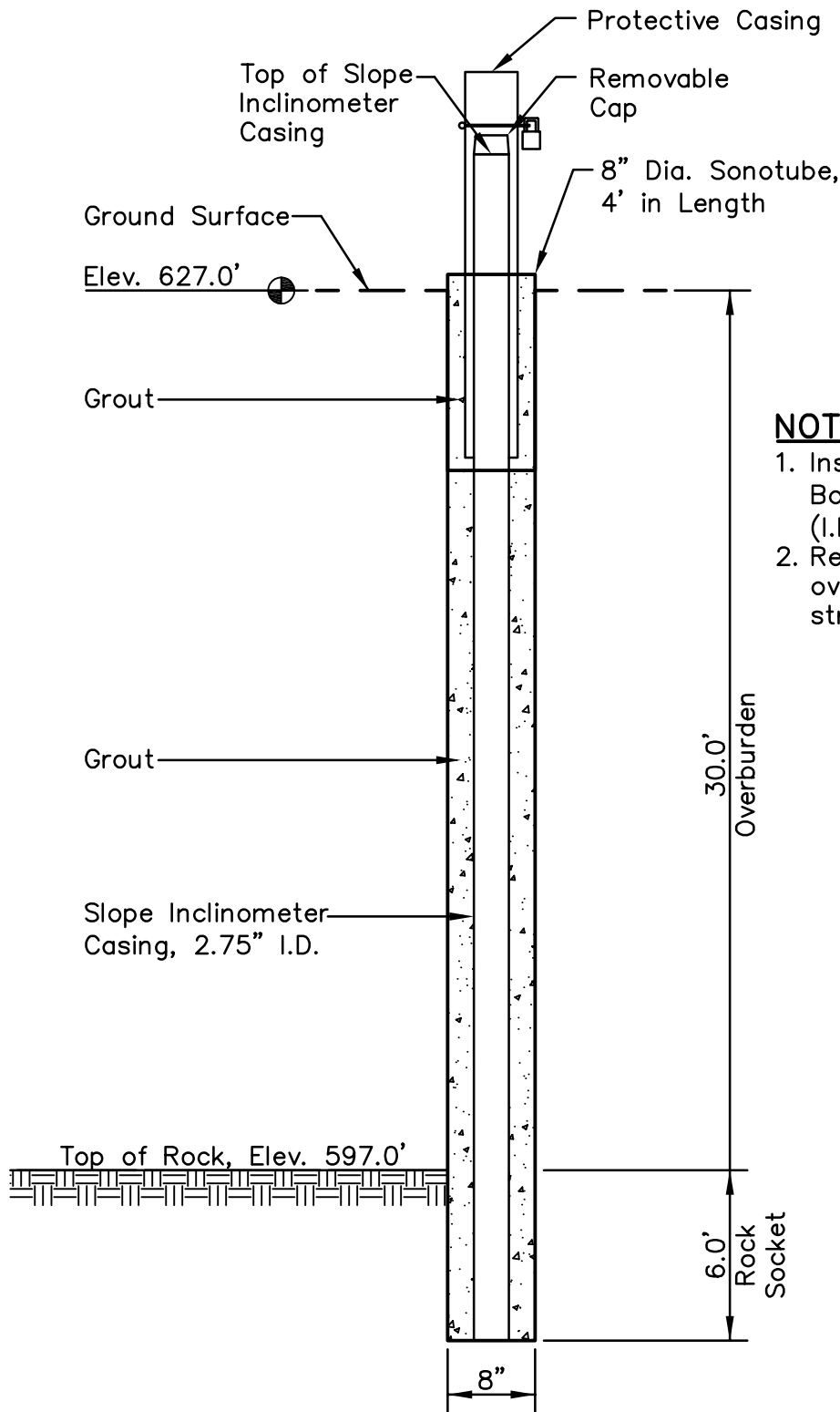
Stantec Consulting
 Services Inc.
 1409 N. Forbes Rd.
 Lexington, Kentucky
 40511-2050
 859-422-3000
 www.stantec.com

DRAWN BY	PJB	DATE	AUG., 2009	REVISED	
CHECKED BY	GKA	PROJ. NO.	175569039	1.	3.
CHECKED BY	RDF	SCALE	NTS	2.	4.

SHEET

1 OF 1

PLOT DATE: 08/11/2009 USER: FLYNN, RENEE
 V: \1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-314-SI31.DWG



NOTES:

1. Installed on 02/18/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden and rock stratigraphy.

PLOT DATE: 08/11/2009 USER: FLYNN, RENEE V: \1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-315-SI37.DWG

LOCATION:

Northing: 1,603,319.91
 Easting: 527,464.91
 Ground Elevation: 627.0 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.
 Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

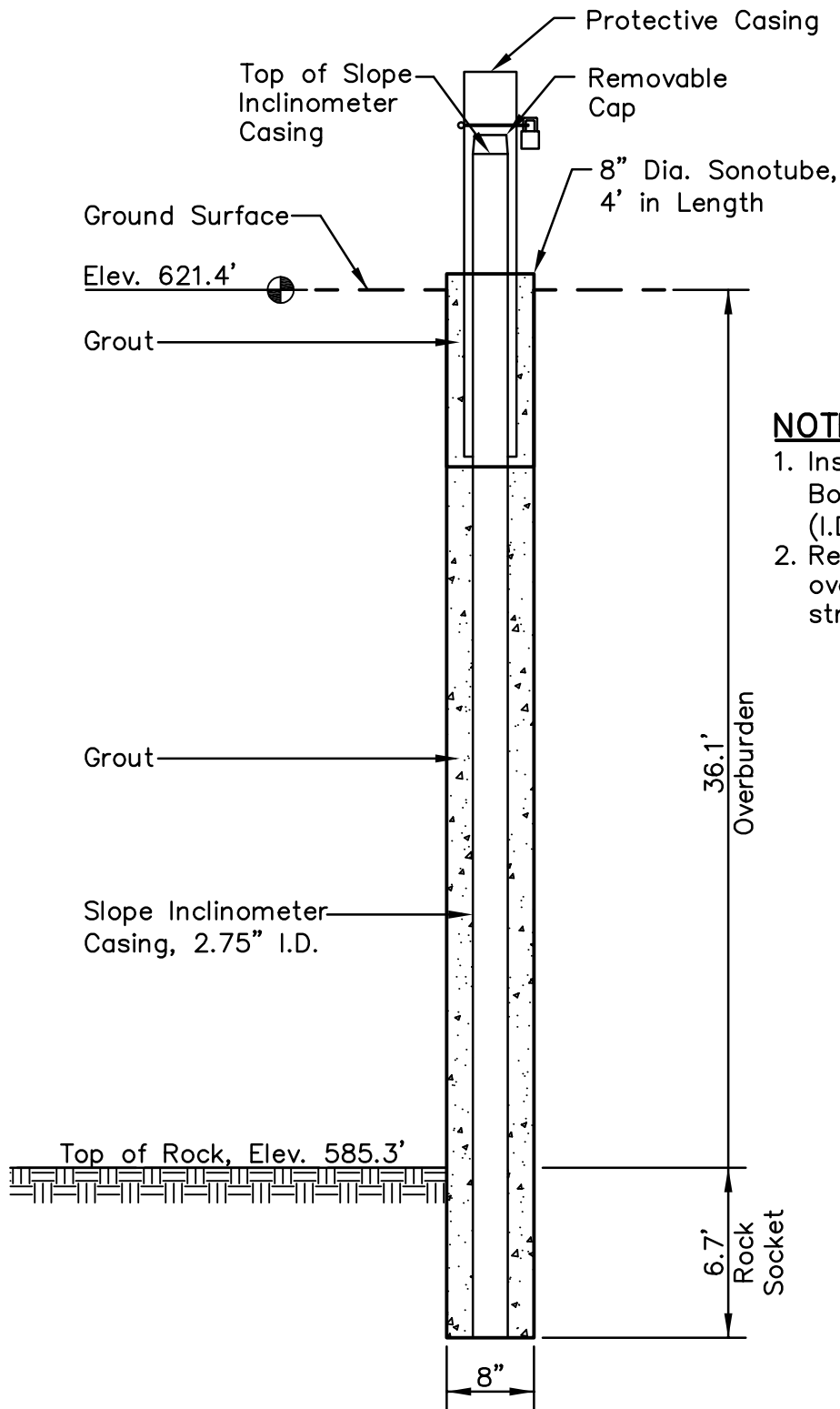
SLOPE INCLINOMETER STN-37
GYPSSUM STACK DIKE RECOVERY PROJECT
WIDOWS CREEK FOSSIL PLANT



Stantec Consulting
 Services Inc.
 1409 N. Forbes Rd.
 Lexington, Kentucky
 40511-2050
 859-422-3000
 www.stantec.com

DRAWN BY	PJB	DATE	AUG., 2009	REVISED	
CHECKED BY	GKA	PROJ. NO.	175569039	1.	3.
CHECKED BY	RDF	SCALE	NTS	2.	4.

SHEET
1 OF 1



NOTES:

1. Installed on 02/18/2009. Boring advanced with 4.25" (I.D.) hollow stem augers.
2. Refer to boring log for overburden and rock stratigraphy.

LOCATION:

Northing: 1,602,379.22
 Easting: 526,749.96
 Ground Elevation: 621.4 feet

Locations to be provided by
 TVA, Power Systems
 Operations, Surveying and
 Project Services.

Horizontal Datum: NAD 27
 Vertical Datum: NGVD29

SLOPE INCLINOMETER STN-40
GYPSSUM STACK DIKE RECOVERY PROJECT
WIDOWS CREEK FOSSIL PLANT



Stantec Consulting
 Services Inc.
 1409 N. Forbes Rd.
 Lexington, Kentucky
 40511-2050
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 www.stantec.com

DRAWN BY	PJB	DATE	AUG., 2009	REVISED	
CHECKED BY	GKA	PROJ. NO.	175569039	1.	3.
CHECKED BY	RDF	SCALE	NTS	2.	4.

SHEET
1 OF 1

PLOT DATE: 08/11/2009 USER: FLYNN, RENEE
 V: \1755\ACTIVE\175569039\GEO\TECHNICAL\DRAWING\INSTRUMENT\69039C-WCF-316-SI40.DWG

Project No. <u>175569039</u>		Location <u>N 1600650.07, E 527741.04</u>	
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-28</u>	Total Depth <u>58.8 ft</u>
Location <u>Jackson County, AL</u>		Surface Elevation <u>651.3 ft.</u>	
Project Type <u>Geotechnical Exploration</u>		Date Started <u>2/10/09</u>	Completed <u>2/10/09</u>
Supervisor <u>Russ Mehnert</u> Driller <u>G. Thompson</u>		Depth to Water <u>33.5 ft</u>	Date/Time <u>2/10/09</u>
Logged By <u>Russ Mehnert</u>		Depth to Water <u>N/A</u>	Date/Time <u>N/A</u>

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
651.3'	0.0'	Top of Hole							
649.8'	1.5'	Lean Clay, tan to gray, moist, very soft to soft		SPT-1	0.0 - 1.5	1.2	2-3-5	22	Boring backfilled with bentonite grout
		Silt (cast Gypsum - Flyash), light gray to dark gray, wet, soft		SPT-2	1.5 - 3.0	1.3	9-9-9	15	
				SPT-3	3.0 - 4.5	1.5	4-7-9	21	
				SPT-4	4.5 - 6.0	1.5	6-4-5	19	
645.3'	6.0'	Silt (sedimented Gypsum - Flyash), light gray to black, moist to wet, stiff to very stiff		SPT-5	6.0 - 7.5	1.4	3-2-1	25	
				SPT-6	7.5 - 9.0	1.5	4-7-8	20	
				SPT-7	9.0 - 10.5	1.5	4-1-2	25	
				ST-1	10.5 - 12.5	1.4		--	
				SPT-8	12.5 - 14.0	1.3	8-30-50+	17	
				SPT-9	14.0 - 15.5	1.5	20-32-49	22	
				SPT-10	15.5 - 17.0	1.5	13-26-30	18	
				SPT-11	17.0 - 18.5	1.5	28-44-50+	19	
				SPT-12	18.5 - 20.0	1.4	7-25-38	18	
				SPT-13	20.0 - 21.5	1.5	8-28-31	17	

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (sedimented Gypsum - Flyash), light gray to black, moist to wet, stiff to very stiff <i>(Continued)</i>		SPT-14	21.5 - 23.0	1.5	28-35-50+	18	
			SPT-15	23.0 - 24.5	1.5	7-20-30	17		
			SPT-16	24.5 - 26.0	1.5	12-32-45	16		
			SPT-17	26.0 - 27.5	1.5	21-36-50+	19		
			SPT-18	27.5 - 29.0	1.5	19-18-16	22		
			SPT-19	29.0 - 30.5	1.5	16-32-50+	23		
			SPT-20	30.5 - 32.0	1.5	9-27-32	20		
			SPT-21	32.0 - 33.5	1.5	22-32-48	21		
			SPT-22	33.5 - 35.0	1.5	7-11-13	26		
			SPT-23	35.0 - 36.5	1.5	8-13-14	28		
			SPT-24	36.5 - 38.0	1.5	9-21-32	23		
			SPT-25	38.0 - 39.5	1.5	2-5-7	29		
			ST-2	39.5 - 41.5	2.0		--		
			SPT-26	41.5 - 43.0	1.5	11-17-10	27		
			SPT-27	43.0 - 44.5	1.5	2-9-5	27		
		SPT-28	44.5 - 46.0	1.5	2-9-5	25			

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
601.6'	49.7'	Silt (sedimented Gypsum - Flyash), light gray to black, moist to wet, stiff to very stiff (Continued)		SPT-29	46.0 - 47.5	1.5	4-11-35	24	SPT-31 sample split
				SPT-30	47.5 - 49.0	1.5	7-10-9	29	
				SPT-31	49.0 - 50.5	0.7	2-2-4	27	
597.3'	54.0'	Fat Clay, tan to red, moist, soft, with chert fragments							No sample between 50.5 ft to 54.0 ft
596.3'	55.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, medium stiff		SPT-32	54.0 - 55.5	1.5	14-18-16	28	SPT-32 sample split
592.5'	58.8'	Fat Clay, tan to red, moist, medium stiff, with chert fragments							No sample between 55.5 ft to 58.8 ft
<p>Auger Refusal / Bottom of Hole</p> <p>Top of Rock = 58.8' Elevation (592.5')</p> <p>Casagrande Piezometer Installed (24" in length) Bottom Tip 36.6' See Attached Sketch</p>									

Project No.	175569039	Location	N 1600590.07, E 527790.42	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-29	Total Depth 18.5 ft
Location	Jackson County, AL	Surface Elevation	623.9 ft.	
Project Type	Geotechnical Exploration	Date Started	2/10/09	Completed 2/10/09
Supervisor	Russ Mehnert	Driller	G. Thompson	Depth to Water 4.5 ft
Logged By	Russ Mehnert	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
623.9'	0.0'	Top of Hole							
622.2'	1.7'	Silt (sedimented Gypsum - Flyash), gray to black, wet, very soft							Boring backfilled with bentonite grout No sample between 0.0 ft to 4.5 ft
		Fat Clay, tan to red, wet, soft							
619.4'	4.5'	Silt (cast Gypsum - Flyash), gray, wet, soft		ST-1	4.5 - 6.5	1.5		--	
614.4'	9.5'	Silt (sedimented Gypsum - Flyash), gray, wet, soft		SPT-1	9.0 - 10.5	1.5	13-16-22	21	7.5 ft to 12.5 ft - perched water
609.9'	14.0'	Fat Clay, tan with gray modeling, wet, soft to medium stiff, with chert fragments		SPT-2	15.5 - 17.0	1.3	6-10-9	22	
605.4'	18.5'			SPT-3	17.0 - 18.5	1.5	6-5-9	24	

No Refusal /
Bottom of Hole

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 6.5'
See Attached Sketch

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SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1601984.66, E 527265.25				
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-31	Total Depth	91.8 ft		
Location	Jackson County, AL	Surface Elevation	672.6 ft.				
Project Type	Geotechnical Exploration	Date Started	2/19/09	Completed	2/19/09		
Supervisor	Russ Mehnert	Driller	G. Thompson	Depth to Water	23.0 ft	Date/Time	2/20/09
Logged By	Russ Mehnert	Depth to Water	N/A	Date/Time	N/A		

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois. Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
672.6'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, damp to moist, medium stiff							Boring backfilled with bentonite grout

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Project No.	175569039	Location	N 1601984.66, E 527265.25		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-31	Total Depth	91.8 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (cast Gypsum - Flyash), gray, damp to moist, medium stiff <i>(Continued)</i>		ST-1	25.0 - 27.0	2.0		--	
628.6'	44.0'								
		Silt (sedimented Gypsum - Flyash), dark gray, wet, very soft		ST-2	44.5 - 46.5	1.2		--	Wet/soft at 44.5'

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Project No. <u>175569039</u>		Location <u>N 1601984.66, E 527265.25</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-31</u> Total Depth <u>91.8 ft</u>							
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (sedimented Gypsum - Flyash), dark gray, wet, very soft <i>(Continued)</i>							
611.2'	61.4'	Fat Clay, tan with gray modeling, damp, medium stiff, with chert fragments Below 80' encountered weathered rock zone		SPT-1	64.5 - 66.0	1.5	6-8-10	19	

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Fat Clay, tan with gray modeling, damp, medium stiff, with chert fragments							
		Below 80' encountered weathered rock zone (Continued)							
591.5'	81.1'								Began Core
				0%	0.7	0.5	71	81.8	
		Limestone (dolomite), gray, micro-crystalline, thin to medium bedded, with occasional dolomitic zones							Inclinometer set at 87.5'
580.8'	91.8'			53%	10.0	10.0	100	91.8	
Bottom of Hole Base of Weathered Rock = 81.5' Top of Rock = 81.1' Elevation (591.5')									

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Project No.	175569039	Location	N 1602037.12, E 528528.53		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-32	Total Depth	60.3 ft
Location	Jackson County, AL	Surface Elevation	656.2 ft.		
Project Type	Geotechnical Exploration	Date Started	2/8/09	Completed	2/8/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water	10.5 ft
Logged By	Russ Mehnert	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks	
Elevation	Depth		Rock Core							RQD
656.2'	0.0'	Top of Hole								
654.7'	1.5'	Fat Clay, tan, moist, medium stiff, with chert fragments		SPT-1	0.0 - 1.5	1.2	3-5-9	23	Boring backfilled with bentonite grout	
653.2'	3.0'	Silt (cast Gypsum - Flyash), gray, moist, stiff		SPT-2	1.5 - 3.0	1.3	9-6-5	12		
651.7'	4.5'	Fat Clay, tan, moist, stiff, with chert fragments		SPT-3	3.0 - 4.5	1.4	3-5-7	24		
		Silt (cast Gypsum - Flyash), gray, moist, stiff		SPT-4	4.5 - 6.0	1.5	9-8-7	14		
				SPT-5	6.0 - 7.5	1.5	7-8-11	17		
				SPT-6	7.5 - 9.0	1.5	8-13-13	19		
645.7'	10.5'			SPT-7	9.0 - 10.5	1.5	10-11-7	22		
		Silt (sedimented Gypsum - Flyash), gray to dark gray, moist to wet, soft to stiff		SPT-8	10.5 - 12.0	1.5	13-18-18	19		
				SPT-9	12.0 - 13.5	1.5	23-18-22	19		
				SPT-10	13.5 - 15.0	1.5	5-10-13	18		
				SPT-11	15.0 - 16.5	1.5	3-6-12	20		SPT - 11 contains an ammonia odor
				SPT-12	16.5 - 18.0	1.5	10-12-18	22		
				SPT-13	18.0 - 19.5	1.5	5-9-9	21		
				ST-1	19.5 - 21.5	2.0		--		

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Project No. <u>175569039</u>		Location <u>N 1602037.12, E 528528.53</u>						
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-32</u> Total Depth <u>60.3 ft</u>						
Lithology		Overburden Rock Core	Sample # RQD	Depth Run	Rec. Ft. Rec. Ft.	Blows Rec. %	Mois.Cont. % Run Depth	Remarks
Elevation	Depth							
628.7'	27.5'	Silt (sedimented Gypsum - Flyash), gray to dark gray, moist to wet, soft to stiff <i>(Continued)</i>	SPT-14	21.5 - 23.0	1.5	13-21-37	20	
			SPT-15	23.0 - 24.5	1.5	7-11-11	26	
			SPT-16	24.5 - 26.0	1.5	5-7-15	23	
			SPT-17	26.0 - 27.5	1.5	9-16-22	20	
624.2'	32.0'	Fat Clay With Silt, tan to gray, moist, stiff to very stiff, with chert fragments	SPT-18	27.5 - 29.0	1.5	3-7-10	21	
			SPT-19	29.0 - 30.5	1.5	6-30-42	22	
			SPT-20	30.5 - 32.0	1.5	16-8-9	24	
622.7'	33.5'	Silt (sedimented Gypsum - Flyash), gray to dark gray, moist to wet, soft to stiff	SPT-21	32.0 - 33.5	1.5	4-6-14	27	
		Fat Clay, tan to red with gray modeling, moist, soft, with chert fragments and silty zones	SPT-22	33.5 - 35.0	1.5	2-4-5	31	
			ST-2	35.0 - 37.0	2.0		29	
			SPT-23	37.0 - 38.5	1.5	4-8-8	31	
			SPT-24	39.5 - 41.0	1.5	2-5-8	28	
			SPT-25	44.5 - 46.0	1.3	4-6-8	34	

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Project No.	175569039	Location	N 1602037.12, E 528528.53	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-32	Total Depth 60.3 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Fat Clay, tan to red with gray modeling, moist, soft, with chert fragments and silty zones <i>(Continued)</i>							
597.0'	59.2'								
595.9'	60.3'	Limestone (augered)		SPT-26	59.5 - 59.7	0.2	50+0.2	40	
		Auger Refusal / Bottom of Hole							
		Top of Rock = 59.2' Elevation (597.0')							
		Casagrande Piezometer Installed (24" in length) Bottom of Tip 18.5' See Attached Sketch							

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Project No.	175569039	Location	N 1602036.99, E 528597.85	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-33	Total Depth 26.3 ft
Location	Jackson County, AL	Surface Elevation	640.2 ft.	
Project Type	Geotechnical Exploration	Date Started	2/9/09	Completed 2/9/09
Supervisor	Kip Anderson Driller G. Thompson	Depth to Water	18.0 ft	Date/Time 2/9/09
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
640.2'	0.0'	Top of Hole							
638.7'	1.5'	Crushed Stone							Boring backfilled with bentonite grout
637.2'	3.0'	Fat Clay, dark brown to tan, moist, stiff, silty with chert fragments							
634.7'	5.5'	Silt (cast Gypsum - Flyash), gray to dark gray, moist, stiff		SPT-1	4.0 - 5.5	1.5	8-9-10	14	
		Silt (sedimented Gypsum - Flyash), dark gray, moist to wet, stiff to medium stiff		SPT-2	5.5 - 7.0	1.0	5-3-2	13	
				ST-1	7.0 - 9.0	0.0		--	
				SPT-3	12.0 - 13.5	1.5	5-14-15	22	
				SPT-4	13.5 - 15.0	1.2	5-5-5	23	
				ST-2	15.0 - 17.0	2.0		--	
619.7'	20.5'	Silt (cast Gypsum - Flyash), light gray, moist, stiff		SPT-5	19.0 - 20.5	1.5	2-6-10	27	
				ST-3	20.5 - 22.5	2.0		--	

 Perched water table
13.5' - 17.0'

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Project No. <u>175569039</u>	Location <u>N 1602036.99, E 528597.85</u>
Project Name <u>Widows Creek Fossil Plant -- TVA</u>	Boring No. <u>STN-33</u> Total Depth <u>26.3 ft</u>

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
617.7'	22.5'	Fat Clay, tan with gray modeling, moist, stiff, silty with chert fragments							
			SPT-6	24.0 - 25.5	0.8	13-6-9	21		
613.9'	26.3'								

Auger Refusal /
Bottom of Hole

Top of Rock = 26.3'
Elevation (613.9')

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 21.0'
See Attached Sketch



SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1603809.72, E 528724.07	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-34	Total Depth 53.0 ft
Location	Jackson County, AL	Surface Elevation	674.1 ft.	
Project Type	Geotechnical Exploration	Date Started	2/19/09	Completed 2/19/09
Supervisor	R. Snyder	Driller	G. Thompson	Depth to Water 13.0 ft
Logged By	R. Snyder	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
674.1'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, moist, stiff							Boring backfilled with bentonite grout Descriptions noted from observing auger cuttings
				ST-1	15.0 - 17.0	2.0		--	

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
646.6'	27.5'	Silt (cast Gypsum - Flyash), gray, moist, stiff <i>(Continued)</i>		SPT-1	25.0 - 26.5	1.5	2-2-3	22	
				SPT-2	30.0 - 31.5	1.5	3-4-4	25	
		Silt (sedimented Gypsum - Flyash), dark gray to black, wet, soft		ST-2	32.5 - 34.5	2.0	--	--	Note: Tube hit obstruction at 33' and was bent.
			SPT-3	35.0 - 36.5	1.5	3-3-5	22		
			SPT-4	40.0 - 41.5	1.5	4-2-3	23		
				SPT-5	45.0 - 46.5	1.5	5-13-13	22	

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Project No.	175569039	Location	N 1603809.72, E 528724.07	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-34	Total Depth 53.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
624.3'	49.8'	Silt (sedimented Gypsum - Flyash), dark gray to black, wet, soft <i>(Continued)</i>							
		Fat Clay, tan, wet, stiff to very stiff, with chert fragments		SPT-6	50.0 - 51.5	0.7	5-7-9	27	
		Below 52' gray, modeling with weathered rock fragments		SPT-7	51.5 - 53.0	0.8	5-32-15	35	
621.1'	53.0'								

No Refusal /
Bottom of Hole



SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1603831.02, E 528927.71		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-35	Total Depth	37.2 ft
Location	Jackson County, AL	Surface Elevation	656.1 ft.		
Project Type	Geotechnical Exploration	Date Started	2/7/09	Completed	2/7/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water	10.5 ft
Logged By	Russ Mehnert	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
656.1'	0.0'	Top of Hole							
655.2'	0.9'	Lean Clay, brown to tan, moist, medium stiff, with chert fragments		SPT-1	0.0 - 1.5	1.1	2-5-5	17	Boring backfilled with bentonite grout
		Silt (cast Gypsum - Flyash), gray to dark gray, moist, medium stiff		SPT-2	1.5 - 3.0	1.5	5-8-8	16	
653.1'	3.0'	Lean Clay, brown to tan, moist, stiff, zones silty, with chert fragments		SPT-3	3.0 - 4.5	1.5	6-10-7	24	
651.6'	4.5'	Silt (cast Gypsum - Flyash), gray to dark gray, moist to wet, stiff to very stiff		SPT-4	4.5 - 6.0	1.5	10-19-17	17	
				SPT-5	6.0 - 7.5	1.2	14-36-33	16	
				SPT-6	7.5 - 9.0	1.5	12-19-16	16	
				SPT-7	9.0 - 10.5	1.5	16-20-2	20	
				SPT-8	10.5 - 12.0	1.5	8-15-15	20	
				SPT-9	12.0 - 13.5	1.5	17-23-24	22	
				SPT-10	13.5 - 15.0	1.5	8-14-16	21	
				SPT-11	15.0 - 16.5	1.5	8-12-14	24	
				SPT-12	16.5 - 18.0	1.5	10-16-19	20	
				SPT-13	18.0 - 19.5	1.5	2-11-14	23	
				SPT-14	19.5 - 21.0	1.5	10-14-14	23	
635.1'	21.0'	Silt (sedimented Gypsum - Flyash), dark gray to black, wet, soft		SPT-15	21.0 - 22.5	1.5	16-24-30	20	
									Perched water table, 21.0' - 25.5'

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Project No.	175569039	Location	N 1603831.02, E 528927.71	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-35	Total Depth 37.2 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
631.1'	25.0'	Silt (sedimented Gypsum - Flyash), dark gray to black, wet, soft <i>(Continued)</i>		SPT-16	22.5 - 24.0	1.5	10-11-12	22	
				SPT-17	24.0 - 25.5	1.5	5-6-8	24	
618.9'	37.2'	Fat Clay, tan with gray modeling, moist, medium stiff to stiff, with chert fragments		ST-1	25.5 - 27.5	1.2		--	
				SPT-18	27.5 - 29.0	1.5	6-12-13	31	
				SPT-19	29.0 - 30.5	1.3	6-10-14	25	
				SPT-20	34.0 - 35.5	1.5	4-8-12	30	SPT-20 soft and wet

Auger Refusal /
Bottom of Hole

Top of Rock = 37.2'
Elevation (618.9')

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 22.3'
See Attached Sketch

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Project No.	175569039	Location	N 1603833.76, E 529007.11	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-36	Total Depth 14.2 ft
Location	Jackson County, AL	Surface Elevation	631.9 ft.	
Project Type	Geotechnical Exploration	Date Started	2/17/09	Completed 2/17/09
Supervisor	R. Snyder	Driller	G. Thompson	Depth to Water 14.0 ft
Logged By	R. Snyder	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
631.9'	0.0'	Top of Hole							
		Silt (sedimented Gypsum - Flyash), light gray, moist							Boring backfilled with bentonite grout
627.9'	4.0'	Fat Clay, tan with gray modeling, moist, stiff, with chert fragments		SPT-1	4.0 - 5.5	0.7	3-2-4	26	Boring moved ~ 3' towards Stilling Pond
				SPT-2	9.0 - 10.5	1.5	4-4-7	29	Limestone fragments in top of SPT-2
617.7'	14.2'			SPT-3	14.0 - 14.2	0.2	50+/-0.2	28	

Auger Refusal /
Bottom of Hole

Top of Rock = 14.2'
Elevation (617.7')

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 14.2'
See Attached Sketch

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Project No.	175569039	Location	N 1603319.91, E 527464.91		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-37	Total Depth	40.6 ft
Location	Jackson County, AL	Surface Elevation	627.0 ft.		
Project Type	Geotechnical Exploration	Date Started	2/17/09	Completed	2/18/09
Supervisor	R. Snyder	Driller	G. Thompson	Depth to Water	18.0 ft
Logged By	R. Snyder	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
627.0'	0.0'	Top of Hole							
626.0'	1.0'	Silt (sedimented Gypsum - Flyash), gray, damp, coarse grained, loose							Boring backfilled with bentonite grout
		Fat Clay, tan, moist, medium stiff, with chert fragments							
623.0'	4.0'	Silt (cast Gypsum - Flyash), gray, moist, loose		ST-1	5.0 - 7.0	1.9	--		
				ST-2	10.0 - 11.6	1.6	--		Perched water at 9' to 10'
610.9'	16.1'	Below 15.5', gray to dark gray, medium stiff		SPT-1	15.0 - 16.5	1.1	3-5-6	17	
		Fat Clay, tan, moist to wet, medium stiff, zones organic		SPT-2	20.0 - 21.5	1.1	3-6-11	25	

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
598.0'	29.0'	Fat Clay, tan, moist to wet, medium stiff, zones organic <i>(Continued)</i>		SPT-3	25.0 - 26.5	1.5	3-6-9	27	
597.0'	30.0'	Weathered zone of limestone remnants							Began Core
		Limestone, gray to dark gray, fine to micro-crystalline, thin bedded, zones argillaceous, dolomitic							Base of weathered rock at 30.4'
				39%	4.4	4.4	100	34.6	
									Slope Inclinator set at 36' below ground surface
586.4'	40.6'			8%	5.9	6.0	102	40.5	
Bottom of Hole									

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SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1602372.34, E 526925.23		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-38	Total Depth	90.2 ft
Location	Jackson County, AL	Surface Elevation	675.5 ft.		
Project Type	Geotechnical Exploration	Date Started	2/9/09	Completed	2/9/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water	24.5 ft
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
675.5'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, moist, medium stiff to stiff		SPT-1	0.0 - 1.5	1.1	13-22-21	15	Boring backfilled with bentonite grout
				SPT-2	1.5 - 3.0	1.2	14-10-9	19	
				SPT-3	3.0 - 4.5	1.1	21-11-12	15	
671.0'	4.5'								
670.8'	4.7'	Fat Clay, tan to red, moist, medium stiff, with chert fragments		SPT-4	4.5 - 6.0	0.9	16-8-8	17	
		Silt (cast Gypsum - Flyash), gray to dark gray, moist, medium stiff to very stiff		SPT-5	6.0 - 7.5	1.2	6-7-5	18	
				SPT-6	7.5 - 9.0	1.4	9-21-33	15	
				SPT-7	9.0 - 10.5	1.2	22-31-35	17	
				SPT-8	10.5 - 12.0	1.5	22-24-27	21	
				ST-1	12.0 - 13.7	1.7		--	
				SPT-9	14.0 - 15.5	1.5	6-10-13	25	
				SPT-10	15.5 - 17.0	1.5	9-10-10	27	
				SPT-11	17.0 - 18.5	1.5	4-7-8	25	
				SPT-12	18.5 - 20.0	1.5	4-2-5	32	
				SPT-13	20.0 - 21.5	1.5	7-4-5	29	
654.0'	21.5'								15.5' - 17.0' perched water table
									21.5' - 23.0' perched water table

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Project No. <u>175569039</u>		Location <u>N 1602372.34, E 526925.23</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-38</u> Total Depth <u>90.2 ft</u>							
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
649.5'	26.0'	Silt (weak Sedimented Gypsum - Flyash), dark gray to black, moist to wet, very soft to soft <i>(Continued)</i>		SPT-14	21.5 - 23.0	1.5	5-3-2	31	
				SPT-15	23.0 - 24.5	1.5	WOH- WOH-2	37	
				SPT-16	24.5 - 26.0	1.5	2-2-1	36	
		Silt (sedimented Gypsum - Flyash), dark gray to black, moist to wet, very soft to soft		ST-2	32.0 - 34.0	2.0		--	

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Project No.	175569039	Location	N 1602372.34, E 526925.23	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-38	Total Depth 90.2 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (sedimented Gypsum - Flyash), dark gray to black, moist to wet, very soft to soft (Continued)							
				SPT-17	59.5 - 61.0	1.5	5-12-24	21	
				SPT-18	64.5 - 66.0	1.5	14-8-9	30	
				SPT-19	69.5 - 71.0	1.5	WOH-9-8	31	

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Project No. <u>175569039</u>		Location <u>N 1602372.34, E 526925.23</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-38</u> Total Depth <u>90.2 ft</u>							
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (sedimented Gypsum - Flyash), dark gray to black, moist to wet, very soft to soft (Continued)		ST-3	71.0 - 73.0	2.0		--	
				ST-4	74.5 - 76.5	2.0		--	
				ST-5	82.8 - 84.8	2.0		--	
590.5'	85.0'	Fat Clay, tan with gray modeling, moist, silty, with chert fragments							
585.3'	90.2'			SPT-20	89.5 - 90.2	0.7	17-50+0.2	15	
		Auger Refusal / Bottom of Hole Top of Rock = 90.0' Elevation (585.5')							

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Project No.	175569039	Location	N 1602374.54, E 526839.70	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-39	Total Depth 54.5 ft
Location	Jackson County, AL	Surface Elevation	655.2 ft.	
Project Type	Geotechnical Exploration	Date Started	2/6/09	Completed 2/6/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water 20.0 ft
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
655.2'	0.0'	Top of Hole							
654.7'	0.5'	Lean Clay, brown to tan, moist, medium stiff							Boring backfilled with bentonite grout
		Silt (cast Gypsum - Flyash), gray, moist to wet, stiff to very stiff							
				SPT-1	5.0 - 6.5	1.2	6-5-5	14	
				SPT-2	6.5 - 8.0	1.0	4-1-2	14	
				SPT-3	8.0 - 9.5	1.4	7-10-14	15	
				SPT-4	9.5 - 11.0	1.4	14-16-18	15	
				SPT-5	11.0 - 12.5	1.3	7-14-14	21	
				SPT-6	12.5 - 14.0	1.5	11-18-17	16	
				SPT-7	14.0 - 15.5	0.5	11-14-13	16	
				SPT-8	15.5 - 17.0	0.5	10-12-13	14	
				SPT-9	17.0 - 18.5	1.0	10-12-12	20	
				SPT-10	18.5 - 20.0	1.4	8-8-8	19	
				SPT-11	20.0 - 21.5	1.0	8-12-17	20	
633.7'	21.5'								

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (sedimented Gypsum - Flyash), dark gray, wet, very soft <i>(Continued)</i>		SPT-12	21.5 - 23.0	1.5	11-17-24	19	
			SPT-13	23.0 - 24.5	1.5	7-16-14	23		
			SPT-14	24.5 - 26.0	1.5	8-14-18	21		
			SPT-15	26.0 - 27.5	1.5	3-7-13	22		
			ST-1	27.5 - 29.5	1.8		--		
			SPT-16	29.5 - 31.0	1.5	5-8-21	21		
			SPT-17	31.0 - 32.5	1.5	13-16-20	22		
			SPT-18	32.5 - 34.0	1.5	9-12-16	24		
			SPT-19	34.0 - 35.5	1.5	10-10-10	19		
			SPT-20	35.5 - 37.0	1.5	4-3-3	18		
			ST-2	37.0 - 39.0	2.0		--		
			SPT-21	39.0 - 40.5	1.2	6-13-17	22		
			SPT-22	40.5 - 42.0	1.5	13-16-21	21		
			SPT-23	42.0 - 43.5	1.3	6-8-8	18		
			SPT-24	43.5 - 45.0	1.5	8-20-30	21		
			SPT-25	45.0 - 46.5	1.5	6-8-10	28		

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Project No.	175569039	Location	N 1602374.54, E 526839.70	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-39	Total Depth 54.5 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
607.2'	48.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, very soft <i>(Continued)</i>		SPT-26	46.5 - 48.0	1.5	5-5-9	28	
				SPT-27	48.0 - 49.5	1.5	WOH- WOH-WOH	44	
602.8'	52.4'	Silt (weak Sedimented Gypsum - Flyash), dark gray, wet, very soft		ST-3	49.5 - 51.5	2.0		--	
				SPT-28	51.5 - 53.0	1.3	3-3-5	33	
600.7'	54.5'	Fat Clay, tan with gray modeling, moist, medium stiff to stiff, with chert fragments		SPT-29	53.0 - 54.5	1.5	3-3-3	22	

No Refusal /
Bottom of Hole

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 47.7'
See Attached Sketch

Project No.	175569039	Location	N 1602379.22, E 526749.96	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-40	Total Depth 46.1 ft
Location	Jackson County, AL	Surface Elevation	621.4 ft.	
Project Type	Geotechnical Exploration	Date Started	2/18/09	Completed 2/18/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water 4.0 ft
Logged By	R. Snyder	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois. Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
621.4'	0.0'	Top of Hole							
619.7'	1.7'	Silt (sedimented Gypsum - Flyash), gray to dark gray, damp, coarse grained, loose							Boring backfilled with bentonite grout
		Silt (cast Gypsum - Flyash), gray, wet, loose							
		SPT-1	4.0 - 5.5	1.2	2-3-1	22			
			ST-1	7.5 - 9.5	2.0		--		
			SPT-2	9.5 - 11.0	1.2	8-8-5	22		
608.9'	12.5'	Fat Clay, tan to dark brown, wet, medium stiff to stiff, with chert fragments							
			SPT-3	14.0 - 15.5	1.1	2-2-4	27		
			SPT-4	19.0 - 20.5	1.1	2-3-4	26		

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Fat Clay, tan to dark brown, wet, medium stiff to stiff, with chert fragments <i>(Continued)</i>		SPT-5	24.0 - 25.5	1.5	4-5-8	21	
			SPT-6	29.0 - 30.5	1.3	3-4-5	24		
586.9'	34.5'		SPT-7	34.0 - 35.5	8-11-13	47			
585.3'	36.1'	Alluvial, Silt, gray, medium stiff to stiff, with weathered rock fragments							Began Core
		Limestone (dolomitic), gray, thin to medium bedded, fine to micro-crystalline grained, with shale stringers and zones dolomitic							37.5' to 41.0' vertical quartz vane
575.3'	46.1'		12%	10.0	10.0	100	46.1	Slope Inclinator Set at 42.8' below ground surface	
Bottom of Hole									

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Project No.	<u>175569039</u>	Location	<u>N 1602379.22, E 526749.96</u>	
Project Name	<u>Widows Creek Fossil Plant -- TVA</u>	Boring No.	STN-40	Total Depth <u>46.1 ft</u>

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		<p>Base of Weathered Rock = 36.1'</p> <p>Top of Rock = 36.1'</p> <p>Elevation (585.3')</p>							

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SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1601812.53, E 527159.75		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-41	Total Depth	54.0 ft
Location	Jackson County, AL	Surface Elevation	657.8 ft.		
Project Type	Geotechnical Exploration	Date Started	2/5/09	Completed	2/5/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water	18.0 ft
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
657.8'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, moist to wet, medium stiff							Boring backfilled with bentonite grout
									Moved 3' towards B-42

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Project No.	175569039	Location	N 1601812.53, E 527159.75	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-41	Total Depth 54.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (cast Gypsum - Flyash), gray, moist to wet, medium stiff (Continued)		ST-1	22.0 - 24.0	2.0		--	
				ST-2	37.0 - 39.0	1.9		--	

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Project No.	175569039	Location	N 1601812.53, E 527159.75	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-41	Total Depth 54.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
603.8'	54.0'	Silt (cast Gypsum - Flyash), gray, moist to wet, medium stiff <i>(Continued)</i>		ST-3	52.0 - 54.0	1.5		--	

No Refusal /
Bottom of Hole



SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1601813.42, E 527067.02	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-42	Total Depth 59.5 ft
Location	Jackson County, AL	Surface Elevation	659.0 ft.	
Project Type	Geotechnical Exploration	Date Started	2/4/09	Completed 2/4/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water 34.0 ft
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
659.0'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, moist, medium stiff							Boring backfilled with bentonite grout
				SPT-1	10.0 - 11.5	1.0	8-22-25	19	
				SPT-2	15.0 - 16.5	1.3	8-22-29	19	
				SPT-3	16.5 - 18.0	1.5	34-44-45	19	
				SPT-4	18.0 - 19.5	1.5	10-18-38	20	
				SPT-5	19.5 - 21.0	1.5	16-25-34	19	
				SPT-6	21.0 - 22.5	0.5	22-39-50+	20	

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
633.5'	25.5'	Silt (cast Gypsum - Flyash), gray, moist, medium stiff (Continued)		SPT-7	22.5 - 24.0	1.5	17-24-24	18	
				SPT-8	24.0 - 25.5	1.5	11-17-24	19	
622.5'	36.5'	Silt (sedimented Gypsum - Flyash), dark gray to black, moist to wet, soft		SPT-9	25.5 - 27.0	1.5	12-16-16	18	
				SPT-10	27.0 - 28.5	1.5	8-10-11	16	
				ST-1	28.5 - 29.9	1.4	--	--	ST-1 Refused at 29.9'
				ST-2	30.5 - 32.5	1.2	--	--	Very soft at 32.5
				ST-3	32.5 - 34.5	1.9	--	--	
				ST-4	34.5 - 36.5	1.8	--	--	
				ST-5	36.5 - 38.5	0.0	--	--	ST-5 sample fell out during recovery
				SPT-11	40.5 - 42.0	1.0	5-3-2	39	ST-6 Refused at 40.5'
				ST-7	42.0 - 44.0	1.9	--	--	
				ST-8	44.0 - 46.0	1.9	--	--	

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Project No.	175569039	Location	N 1601813.42, E 527067.02		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-42	Total Depth	59.5 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
602.5'	56.5'	Silt (weak Sedimented Gypsum - Flyash), dark gray to black, moist to wet, soft <i>(Continued)</i>		ST-9	46.0 - 48.0	1.9		--	ST-10 Refused at 49.0'
				ST-10	48.0 - 49.0	1.0		--	
				SPT-12	49.0 - 50.5	1.5	10-18-18	21	
				SPT-13	50.5 - 52.0	1.5	10-9-7	34	
				SPT-14	52.0 - 53.5	1.5	WOH-2-3	36	
				SPT-15	53.5 - 55.0	1.5	WOH-2-2	40	
				SPT-16	55.0 - 56.5	1.5	WOH- WOH-WOH	31	
599.5'	59.5'	Fat Clay, tan with gray modeling, moist, medium stiff to stiff, with chert fragments		SPT-17	56.5 - 58.0	1.5	5-9-14	28	
				SPT-18	58.0 - 59.5	1.0	4-7-10	26	

No Refusal /
Bottom of Hole

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 37.5'
See Attached Sketch

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Project No.	175569039	Location	N 1601979.19, E 527240.00	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-43	Total Depth 51.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
621.7'	51.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, soft to very soft <i>(Continued)</i>							

No Refusal /
Bottom of Hole

Casagrande Piezometer Installed (24" in length)
Bottom of Tip 50.0
See Attached Sketch



SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1601640.65, E 527161.79	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-44	Total Depth 54.0 ft
Location	Jackson County, AL	Surface Elevation	655.8 ft.	
Project Type	Geotechnical Exploration	Date Started	2/5/09	Completed 2/5/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water 18.0 ft
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
655.8'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, moist to wet, medium stiff							Boring backfilled with bentonite grout

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Project No.	175569039	Location	N 1601640.65, E 527161.79		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-44	Total Depth	54.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (cast Gypsum - Flyash), gray, moist to wet, medium stiff <i>(Continued)</i>		ST-1	22.0 - 24.0	1.0		--	
				ST-2	37.0 - 39.0	2.0		38	
610.8'	45.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, very soft							

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Project No.	175569039	Location	N 1601640.65, E 527161.79	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-44	Total Depth 54.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
601.8'	54.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, very soft <i>(Continued)</i>		ST-3	52.0 - 54.0	1.9		--	

No Refusal /
Bottom of Hole

Project No.	175569039	Location	N 1601630.60, E 527063.04		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-45	Total Depth	51.0 ft
Location	Jackson County, AL	Surface Elevation	655.2 ft.		
Project Type	Geotechnical Exploration	Date Started	1/13/09	Completed	1/13/09
Supervisor	Craig Barnett	Driller	Kent Clements	Depth to Water	23.1 ft
Logged By	Craig Barnett	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois. Cont. %	Remarks
Elevation	Depth		Rock Core						
655.2'	0.0'	Top of Hole							
654.5'	0.7'	Silt (Cast Gypsum - Flyash), gray, moist, soft		SPT-1	0.0 - 1.5	1.1	1-2-7	17	Boring backfilled with bentonite grout
653.7'	1.5'	Lean Clay, brown, moist, stiff							
		Silt (cast Gypsum - Flyash), gray to dark gray, moist, stiff to very stiff		SPT-2	1.5 - 3.0	1.1	9-9-11	15	Becomes very stiff at 4.5'
				SPT-3	3.0 - 4.5	1.5	9-9-17	16	
				SPT-4	4.5 - 6.0	1.5	11-15-19	16	Ammonia smell consistent throughout hole
				SPT-5	6.0 - 7.5	1.5	2-16-18	20	
				SPT-6	7.5 - 9.0	1.5	21-33-41	17	
				SPT-7	9.0 - 10.5	1.5	16-22-22	20	Dark gray at 10.5'
				SPT-8	10.5 - 12.0	1.5	11-23-26	20	Perched table from 11.8 to 14.5
				SPT-9	12.0 - 13.5	1.5	25-28-38	21	
				SPT-10	13.5 - 15.0	1.5	20-27-36	20	
				SPT-11	15.0 - 16.5	1.5	13-16-19	22	Perched table from 14.3 to 19.5
				SPT-12	16.5 - 18.0	1.5	30-46-49	20	
				SPT-13	18.0 - 19.5	1.5	26-33-50	20	
				SPT-14	19.5 - 21.0	1.5	30-30-34	19	
				SPT-15	21.0 - 22.5	1.5	9-13-15	20	Dark gray at 18.0'

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Project No. <u>175569039</u>		Location <u>N 1601630.60, E 527063.04</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-45</u> Total Depth <u>51.0 ft</u>							
Lithology		Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks	
Elevation	Depth	Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth		
623.7'	31.5'		Silt (cast Gypsum - Flyash), gray to dark gray, moist, stiff to very stiff <i>(Continued)</i>	SPT-16	22.5 - 24.0	1.5	13-18-22	24	Soft, wet, and dark gray at 24.8'
				SPT-17	24.0 - 25.5	1.5	9-11-8	24	
				SPT-18	25.5 - 27.0	1.5	3-5-8	23	
				SPT-19	27.0 - 28.5	1.5	6-9-13	22	
				SPT-20	28.5 - 30.0	1.5	7-7-8	23	
				SPT-21	30.0 - 31.5	1.5	8-12-14	24	
				SPT-22	31.5 - 33.0	1.5	6-5-7	22	
613.9'	41.3'		Silt (weak Sedimented Gypsum - Flyash), dark gray, wet, very soft	SPT-23	33.0 - 34.5	1.5	1-0-1	32	
				SPT-24	34.5 - 36.0	1.5	8-10-12	30	
				SPT-25	36.0 - 37.5	1.5	9-7-4	29	
				SPT-26	37.5 - 39.0	1.5	0-0-1	29	
				SPT-27	39.0 - 40.5	1.5	2-2-2	31	
				SPT-28	40.5 - 42.0	0.8	2-1-2	45	
				SPT-29	42.0 - 43.5	1.3	3-4-5	21	
			Fat Clay, brown and gray, moist, stiff, (cast gypsum - flyash), brown and gray, moist, stiff	SPT-30	43.5 - 45.0	1.5	3-4-4	21	
				SPT-31	45.0 - 46.5	0.5	3-5-5	19	

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Project No.	175569039	Location	N 1601630.60, E 527063.04	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-45	Total Depth 51.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
604.2'	51.0'	Fat Clay, brown and gray, moist, stiff, (cast gypsum - flyash), brown and gray, moist, stiff (Continued)		SPT-32	46.5 - 48.0	0.4	0-2-3	20	
				SPT-33	48.0 - 49.5	1.2	3-4-9	22	

No Refusal /
Bottom of Hole

Nested Casagrande Piezometers Installed. (24" in length)
Bottom of Upper Tip 15.0'
Bottom of Lower Tip 40.0'
See Attached Sketch

Project No.	175569039	Location	N 1601239.70, E 527133.06		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-46	Total Depth	59.8 ft
Location	Jackson County, AL	Surface Elevation	654.7 ft.		
Project Type	Geotechnical Exploration	Date Started	2/21/09	Completed	2/21/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water	7.0 ft
Logged By	Russ Mehnert	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
654.7'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), gray, damp, very soft							Boring backfilled with bentonite grout Top 10' constructed in January 2009 after event. Auger pushed down crest towards pond.
649.7'	5.0'	Silt (cast Gypsum - Flyash), gray, wet, soft							
635.7'	19.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, soft to stiff, with zones of fat clay and gravel							

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Project No. <u>175569039</u>		Location <u>N 1601239.70, E 527133.06</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-46</u> Total Depth <u>59.8 ft</u>							
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
622.2'	32.5'	Silt (sedimented Gypsum - Flyash), dark gray, wet, soft to stiff, with zones of fat clay and gravel <i>(Continued)</i>		SPT-1	23.5 - 25.0	1.5	9-21-26	14	
				SPT-2	25.0 - 26.5	1.5	7-20-30	16	
				SPT-3	26.5 - 28.0	1.5	17-21-30	17	
				SPT-4	28.0 - 29.5	1.5	2-6-8	21	Very soft/wet at 28.0'
				SPT-5	29.5 - 31.0	1.5	3-14-22	18	Fat clay zone from 29.2' to 30.0'
				SPT-6	31.0 - 32.5	1.5	9-16-22	18	Possible top of starter dike, gravel at 32.5' to 32.5'
			Fat Clay, tan with gray modeling, wet to damp, soft to stiff, with maganese concretions, chert fragments and organics (pieces of wood)	SPT-7	32.5 - 34.0	1.5	3-5-8	26	
				SPT-8	34.0 - 35.5	0.4	7-9-11	26	
				SPT-9	35.5 - 37.0	1.3	3-3-4	31	
				SPT-10	37.0 - 38.5	1.5	3-5-7	32	
				SPT-11	38.5 - 40.0	1.0	WOH-2-5	31	
				SPT-12	40.0 - 41.5	1.5	3-6-9	26	
				SPT-13	41.5 - 43.0	1.3	9-8-9	24	
				SPT-14	43.0 - 44.5	1.5	2-4-5	30	
				SPT-15	44.5 - 46.0	1.5	3-4-7	28	

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Project No.	175569039	Location	N 1601239.70, E 527133.06		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-46	Total Depth	59.8 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Fat Clay, tan with gray modeling, wet to damp, soft to stiff, with maganese concretions, chert fragments and organics (pieces of wood) <i>(Continued)</i>		SPT-16	46.0 - 47.5	1.5	7-9-10	20	
			SPT-17	47.5 - 49.0	1.5	2-6-7	25		
			SPT-18	49.0 - 50.5	1.5	7-11-12	23		
			SPT-19	50.5 - 52.0	1.5	4-3-7	21		
			SPT-20	52.0 - 53.5	1.5	9-10-11	22		
			SPT-21	53.5 - 55.0	1.5	3-6-8	22		
			SPT-22	55.0 - 56.5	1.5	5-6-10	24		SPT-22 chert fragments
			SPT-23	56.5 - 58.0	1.2	8-10-13	27		
			SPT-24	58.0 - 59.5	1.5	4-6-5	26		
594.9'	59.8'				SPT-25	59.5 - 59.8	0.3	50+	15

Auger Refusal /
Bottom of Hole

Top of Rock = 59.8'
Elevation (594.9')

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Project No.	175569039	Location	N 1601297.44, E 527118.94		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-47	Total Depth	70.0 ft
Location	Jackson County, AL	Surface Elevation	655.5 ft.		
Project Type	Geotechnical Exploration	Date Started	2/11/09	Completed	2/12/09
Supervisor	Kip Anderson	Driller	G. Thompson	Depth to Water	14.0 ft
Logged By	Craig Millhollin	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
655.5'	0.0'	Top of Hole							
		Silt (cast Gypsum - Flyash), light gray, moist to wet, medium stiff to soft							Boring backfilled with bentonite grout
									Hole relocated, ~ 18' towards stilling pond

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Project No.	175569039	Location	N 1601297.44, E 527118.94		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-47	Total Depth	70.0 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Silt (cast Gypsum - Flyash), light gray, moist to wet, medium stiff to soft <i>(Continued)</i>		ST-1	22.0 - 24.0	2.0		--	
				ST-2	35.0 - 37.0	2.0		--	
610.5'	45.0'	Silt (sedimented Gypsum - Flyash), dark gray, wet, soft							

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
603.0'	52.5'	Silt (sedimented Gypsum - Flyash), dark gray, wet, soft (Continued)		ST-3	50.0 - 52.0	1.7		--	
595.3'	60.2'	Fat Clay, light brown, wet, medium stiff, silty with chert fragments							Began Core
585.5'	70.0'	Limestone, gray, fine to micro-crystalline, thin to medium bedded, zones argillaceous with minor clay seams and dolomitic zones		10%	2.2	2.2	100	62.4	80° to near vertical fracture from 61.3' to 61.5'
									Weathered and water stained from 62.2' to 62.4'
				9%	4.3	4.0	93	66.7	
				25%	3.3	3.3	100	70.0	
Bottom of Hole									
Base of Weathered Rock = 60.2'									

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Project No.	175569039	Location	N 1601416.03, E 527060.84		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-48	Total Depth	57.4 ft
Location	Jackson County, AL	Surface Elevation	654.9 ft.		
Project Type	Geotechnical Exploration	Date Started	1/11/09	Completed	1/12/09
Supervisor	Ben Halada	Driller	Kent Clements	Depth to Water	11.0 ft
Logged By	Ben Halada	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois. Cont. %	Remarks
Elevation	Depth		Rock Core						
654.9'	0.0'	Top of Hole							
		Dozer access pad (gypsum and clay)		SPT-1	0.0 - 1.5	1.0	2-3-9	17	Boring backfilled with bentonite grout
652.4'	2.5'			SPT-2	1.5 - 3.0	1.1	5-10-12	15	
		Silt, (Cast Gypsum - Flyash), gray, saturated, stiff to very stiff		SPT-3	3.0 - 4.5	1.2	7-13-18	15	
			SPT-4	4.5 - 6.0	1.2	13-16-10	14		
			SPT-5	6.0 - 7.5	1.2	9-15-22	16		
			SPT-6	7.5 - 9.0	1.2	10-16-19	17		
			SPT-7	9.0 - 10.5	1.3	19-22-18	17		
			SPT-8	10.5 - 12.0	1.3	21-30-38	20		
			SPT-9	12.0 - 13.5	1.2	16-32-43	21		
			SPT-10	13.5 - 15.0	1.3	25-30-40	20		
			SPT-11	15.0 - 16.5	1.3	12-20-35	21		
			SPT-12	16.5 - 17.3	0.7	46-50+0.3	20		
			SPT-13	18.0 - 18.9	0.8	37-50+0.4	19		
			SPT-14	19.5 - 21.0	1.2	12-25-32	20		
			SPT-15	21.0 - 22.5	1.2	14-16-22	23		

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
620.4'	34.5'	Silt, (Cast Gypsum - Flyash), gray, saturated, stiff to very stiff (Continued)		SPT-16	22.5 - 24.0	1.1	7-15-17	22	
				SPT-17	24.0 - 25.5	1.3	25-30-30	21	
				SPT-18	25.5 - 27.0	1.2	20-15-16	22	
				SPT-19	27.0 - 28.5	1.2	13-16-26	21	
				SPT-20	28.5 - 30.0	1.4	8-13-13	22	
				SPT-21	30.0 - 31.5	1.1	18-31-36	21	
				SPT-22	31.5 - 33.0	1.3	21-36-42	19	
				SPT-23	33.0 - 34.5	1.1	5-8-7	34	
			613.4'	41.5'	Silt, (Weak Sedimented Gypsum -Flyash), gray, saturated, soft		SPT-24	34.5 - 36.0	1.3
	SPT-25	36.0 - 37.5				1.3	2-5-9	36	
	SPT-26	37.5 - 39.0				1.1	1-1-2	46	
	SPT-27	39.0 - 40.5				1.2	2-1-3	42	
	SPT-28	40.5 - 42.0				1.2	0-1-1	45	
		Silt, (Cast Gypsum - Flyash), gray, saturated, stiff to very stiff		SPT-29	42.0 - 43.5	1.4	0-1-8	51	
				SPT-30	43.5 - 45.0	1.0	5-10-12	25	
				SPT-31	45.0 - 46.5	1.3	15-16-22	22	

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Project No.	175569039	Location	N 1601416.03, E 527060.84	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-48	Total Depth 57.4 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
603.9'	51.0'	Silt, (Cast Gypsum - Flyash), gray, saturated, stiff to very stiff <i>(Continued)</i>		SPT-32	46.5 - 48.0	1.0	15-22-28	23	
				SPT-33	48.0 - 49.5	1.0	4-5-9	22	
				SPT-34	49.5 - 51.0	1.3	2-3-3	29	
597.5'	57.4'	Fat Clay, light red brown, moist, stiff to very stiff, with chert		SPT-35	51.0 - 52.5	1.0	6-7-9	31	
				SPT-36	52.5 - 54.0	0.7	6-6-9	30	
				SPT-37	54.0 - 55.5	0.5	4-6-8	24	
				SPT-38	55.5 - 57.0	1.5	32-31-44	25	
				SPT-39	57.0 - 57.4	0.3	50+/0.40	13	

No Refusal /
Bottom of Hole

Nested Casagrande Piezometers Installed. (24" in length)
Bottom of Upper Tip 16.5'
Bottom of Lower Tip 47.0'
See Attached Sketch

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Project No.	175569039	Location	N 1601258.38, E 527058.78		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-49	Total Depth	63.5 ft
Location	Jackson County, AL	Surface Elevation	655.0 ft.		
Project Type	Geotechnical Exploration	Date Started	1/19/09	Completed	1/20/09
Supervisor	Craig Barnett	Driller	Kent Clements	Depth to Water	18.0 ft
Logged By	Craig Barnett	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
655.0'	0.0'	Top of Hole							
		Silt, (Cast Gypsum - Flyash), gray to dark gray, moist, stiff to very stiff		SPT-1	0.0 - 1.5	0.9	1-5-8	13	Boring backfilled with bentonite grout
				SPT-2	1.5 - 3.0	1.2	12-16-16	14	
				SPT-3	3.0 - 4.5	1.4	23-30-41	16	
				SPT-4	4.5 - 6.0	1.5	16-23-38	17	
				SPT-5	6.0 - 7.5	1.2	8-31-32	17	
				SPT-6	7.5 - 9.0	1.4	40-46-50+0.4	19	
				SPT-7	9.0 - 10.5	1.5	8-21-22	19	
				SPT-8	10.5 - 12.0	1.5	8-21-23	20	
				SPT-9	12.0 - 13.5	1.5	28-27-31	21	
				SPT-10	13.5 - 15.0	1.2	25-30-34	19	
				SPT-11	15.0 - 16.5	1.2	9-12-23	22	
				SPT-12	16.5 - 18.0	1.5	12-13-21	20	
				SPT-13	18.0 - 19.5	1.5	10-16-14	21	
				SPT-14	19.5 - 21.0	1.5	10-8-9	22	
				SPT-15	21.0 - 22.5	1.5	5-5-11	22	

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Project No. <u>175569039</u>		Location <u>N 1601258.38, E 527058.78</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-49</u> Total Depth <u>63.5 ft</u>							
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
625.0'	30.0'	Silt, (Cast Gypsum - Flyash), gray to dark gray, moist, stiff to very stiff <i>(Continued)</i>		SPT-16	22.5 - 24.0	1.5	6-12-7	19	Very soft/wet at SPT-15
				SPT-17	24.0 - 25.5	1.5	3-4-7	19	
				SPT-18	25.5 - 27.0	1.3	6-10-11	19	
				SPT-19	27.0 - 28.5	1.5	6-7-8	23	
				SPT-20	28.5 - 30.0	1.5	6-10-13	20	
616.5'	38.5'	Silt, (Weak Sedimented Gypsum - Flyash), gray to dark gray, wet, very soft		SPT-21	30.0 - 31.5	1.1	1-2-2	24	Organics noted in SPT-25
				SPT-22	31.5 - 33.0	1.5	WH-WH-WH	24	
				SPT-23	33.0 - 34.5	1.5	WH-WH-WH	25	
				SPT-24	34.5 - 36.0	1.5	WH-WH-WH	47	
				SPT-25	36.0 - 37.5	1.5	0-0-1	49	
				SPT-26	37.5 - 39.0	1.5	0-1-1	35	
		Fat Clay, red brown to light brown, moist, very soft, some chert		SPT-27	39.0 - 40.5	1.2	0-1-2	39	
				SPT-28	40.5 - 42.0	1.2	0-1-2	33	
				SPT-29	42.0 - 43.5	0.9	3-5-7	26	
				SPT-30	43.5 - 45.0	0.5	4-4-5	25	
				SPT-31	45.0 - 46.5	1.0	1-2-2	28	

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Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
		Fat Clay, red brown to light brown, moist, very soft, some chert <i>(Continued)</i>		SPT-32	46.5 - 48.0	1.0	3-4-5	26	Limestone rock fragments in SPT-40, SPT-41, and SPT-42
			SPT-33	48.0 - 49.5	1.2	3-5-7	19		
			SPT-34	49.5 - 51.0	1.5	6-6-7	22		
			SPT-35	51.0 - 52.5	1.3	7-9-9	21		
			SPT-36	52.5 - 54.0	1.1	10-12-13	18		
			SPT-37	54.0 - 55.5	0.7	8-8-7	21		
			SPT-38	55.5 - 57.0	1.5	5-7-8	19		
			SPT-39	57.0 - 58.5	1.1	9-11-12	20		
			SPT-40	58.5 - 60.0	1.0	10-21-27	21		
			SPT-41	60.0 - 61.5	1.5	7-19-27	20		
			SPT-42	61.5 - 62.1	0.4	68-50+0.1	14		
591.5'	63.5'		<p>Auger Refusal / Bottom of Hole</p> <p>Top of Rock = 63.5' Elevation (591.5')</p> <p>Nested Casagrande Piezometer Installed. (24" in length) WH - Weight of Hammer Bottom of Tip 36.0' See Attached Sketch</p>						

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Project No.	175569039	Location	N 1601244.06, E 527059.01		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-50	Total Depth	62.2 ft
Location	Jackson County, AL	Surface Elevation	654.9 ft.		
Project Type	Geotechnical Exploration	Date Started	1/20/09	Completed	1/21/09
Supervisor	Craig Barnett	Driller	Kent Clements	Depth to Water	16.4 ft
Logged By	Craig Barnett	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks	
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth		
654.9'	0.0'	Top of Hole								
		Silt, (Cast Gypsum - Flyash), gray to dark gray, moist, stiff to very stiff		SPT-1	0.0 - 1.5	1.5	5-7-8	13	Boring backfilled with bentonite grout	
				SPT-2	1.5 - 3.0	1.5	10-14-16	15		
				SPT-3	3.0 - 4.5	0.6	10-10-11	15		
				SPT-4	4.5 - 6.0	1.5	11-21-23	16		Ammonia odor throughout boring
				SPT-5	6.0 - 7.5	1.5	16-28-31	19		
				SPT-6	7.5 - 9.0	1.5	38-44-40	17		
				SPT-7	9.0 - 10.5	1.5	8-25-22	21		
				SPT-8	10.5 - 12.0	1.5	11-20-20	18		
				SPT-9	12.0 - 13.5	1.5	18-23-28	19		
				SPT-10	13.5 - 15.0	1.5	16-19-21	20		
				SPT-11	15.0 - 16.5	1.5	8-10-13	20		Wet at 16.4'
638.5'	16.4'	Silt, (Sedimented Gypsum - Flyash), gray to dark gray, wet, very soft		SPT-12	16.5 - 18.0	1.5	13-13-13	20		
				SPT-13	18.0 - 19.5	1.5	5-7-9	18		
				SPT-14	19.5 - 21.0	1.5	3-5-6	25		
				SPT-15	21.0 - 22.5	1.5	3-3-4	22		

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Project No. <u>175569039</u>		Location <u>N 1601244.06, E 527059.01</u>						
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-50</u> Total Depth <u>62.2 ft</u>						
Lithology		Overburden Rock Core	Sample # RQD	Depth Run	Rec. Ft. Rec. Ft.	Blows Rec. %	Mois.Cont. % Run Depth	Remarks
Elevation	Depth							
628.4'	26.5'	Silt, (Sedimented Gypsum - Flyash), gray to dark gray, wet, very soft <i>(Continued)</i>	SPT-16	22.5 - 24.0	1.5	3-5-5	20	
			SPT-17	24.0 - 25.5	1.5	3-4-5	18	
			SPT-18	25.5 - 27.0	1.2	3-8-10	20	
619.9'	35.0'	Silt, (Cast Gypsum - Flyash), gray to dark gray, moist, stiff to very stiff	SPT-19	27.0 - 28.5	1.5	13-18-23	16	
			SPT-20	28.5 - 30.0	1.5	30-30-31	15	
			SPT-21	30.0 - 31.5	1.0	9-9-10	23	
			SPT-22	31.5 - 33.0	1.5	10-12-11	17	
			SPT-23	33.0 - 34.5	1.5	11-17-19	12	
			SPT-24	34.5 - 36.0	1.0	3-5-7	23	
			SPT-25	36.0 - 37.5	0.8	7-7-7	26	
619.9'	35.0'	Fat Clay, red brown to light brown, moist, medium stiff to stiff, some chert	SPT-26	37.5 - 39.0	0.8	6-6-6	27	
			SPT-27	39.0 - 40.5	0.8	4-4-5	26	
			SPT-28	40.5 - 42.0	0.8	4-4-4	28	
			SPT-29	42.0 - 43.5	1.5	6-6-7	24	
			SPT-30	43.5 - 45.0	1.0	8-9-11	25	
			SPT-31	45.0 - 46.5	1.5	3-5-6	24	

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Project No. <u>175569039</u>		Location <u>N 1601244.06, E 527059.01</u>							
Project Name <u>Widows Creek Fossil Plant -- TVA</u>		Boring No. <u>STN-50</u> Total Depth <u>62.2 ft</u>							
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
592.7'	62.2'	Fat Clay, red brown to light brown, moist, medium stiff to stiff, some chert (Continued)		SPT-32	46.5 - 48.0	0.8	5-5-6	26	Limestone and shale fragments in SPT-41
				SPT-33	48.0 - 49.5	1.2	7-10-13	15	
				SPT-34	49.5 - 51.0	1.5	5-6-7	22	
				SPT-35	51.0 - 52.5	1.5	7-8-10	21	
				SPT-36	52.5 - 54.0	1.0	10-11-17	18	
				SPT-37	54.0 - 55.5	1.5	6-8-11	25	
				SPT-38	55.5 - 57.0	1.1	6-13-14	21	
				SPT-39	57.0 - 58.5	1.5	13-15-19	18	
				SPT-40	58.5 - 60.0	0.8	13-15-18	23	
				SPT-41	60.0 - 61.5	1.2	18-38-50+0.2	8	
		Auger Refusal / Bottom of Hole Top of Rock = 62.2' Elevation (592.7') Nested Casagrande Piezometers Installed. (24" in length) Bottom of Upper Tip 20.0' Bottom of Lower Tip 33.0' See Attached Sketch							

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SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1601651.67, E 526940.28		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-51	Total Depth	34.5 ft
Location	Jackson County, AL	Surface Elevation	621.1 ft.		
Project Type	Geotechnical Exploration	Date Started	1/19/09	Completed	1/19/09
Supervisor	Craig Barnett	Driller	Kent Clements	Depth to Water	N/A
Logged By	Craig Barnett	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
621.1'	0.0'	Top of Hole							
620.1'	1.0'	Dense Graded Aggregate							Sounding; no sampling performed
		Fat Clay, red-brown, moist, medium stiff, chert fragments							
									Soil description determined from auger cuttings
									Backfilled with auger cuttings

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Project No.		175569039			Location		N 1601651.67, E 526940.28		
Project Name		Widows Creek Fossil Plant -- TVA			Boring No.		STN-51	Total Depth 34.5 ft	
Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
590.1'	31.0'	Fat Clay, red-brown, moist, medium stiff, chert fragments (Continued)							
586.6'	34.5'	Limestone With Shale (augered)							
		Auger Refusal / Bottom of Hole Top of Rock = 34.5' Elevation (586.6')							



SUBSURFACE LOG (DRAFT)

Project No.	175569039	Location	N 1601757.46, E 526939.48		
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-52	Total Depth	33.8 ft
Location	Jackson County, AL	Surface Elevation	621.2 ft.		
Project Type	Geotechnical Exploration	Date Started	1/19/09	Completed	1/19/09
Supervisor	Craig Barnett	Driller	Kent Clements	Depth to Water	N/A
Logged By	Craig Barnett	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
621.2'	0.0'	Top of Hole							
620.2'	1.0'	Dense Graded Aggregate							Sounding; no sampling performed
		Fat Clay, red-brown, moist, medium stiff, chert fragments							
									Soil description determined from auger cuttings
									Backfilled with auger cuttings

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Project No.	175569039	Location	N 1601757.46, E 526939.48	
Project Name	Widows Creek Fossil Plant -- TVA	Boring No.	STN-52	Total Depth 33.8 ft

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
587.4'	33.8'	Fat Clay, red-brown, moist, medium stiff, chert fragments (Continued)							

Auger Refusal /
Bottom of Hole

Top of Rock = 33.8'
Elevation (587.4')