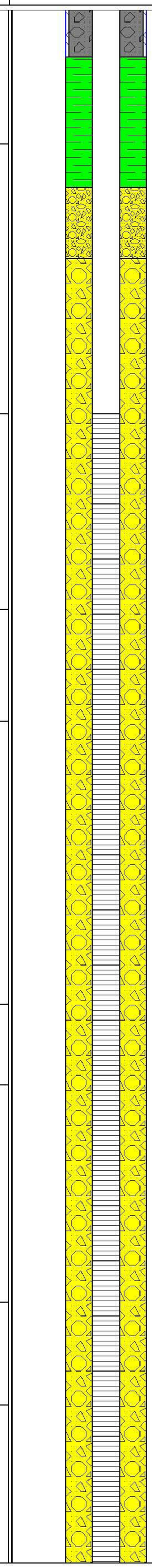
Client	Westinghouse Electric Company	Drilling Method:	Rotary
Location:	Hematite, MO	Surf. Elev.	418.58
Project:	Hematite Remedial Investigation	Northing:	864793.07
Date Started:	05/25/04	Easting:	828603.60
Date Finished:	06/21/04	Total Depth of Boring:	152.8 feet
Geologist:	Todd Calhoun	Top of Casing:	421.72
Drilling Contractor:	Geotechnology	Total Depth of Well:	153.0 feet

Boring: BR-8-RB

Elevation (ft)	Depth (ft)	Core Recovery (Pen/Rec)	RQD	Fracture Frequency	Lithology Description
	100	5.0/5.0	86	1	
315	105	5.0/5.0	94	1	DOLOMITE: gray, hard, sandy, slightly friable to friable in zones very friable and broken 107.5-107.7' friable 111.3-111.6' broken 111.6-111.7'
310	110	5.0/5.0	76	1	
305	115	5.0/5.0	94	1	DOLOMITE: gray, very hard, sandy, w/green shale laminae, cherty broken zone 118.9-119.1'
300	120	5.0/5.0	54	2	DOLOMITE: gray, very hard, micritic, vuggy, crystalline broken zone 1204.4-120.5' vertical fracture 121.4-121.8'
295	125	5.0/5.0	40	2	DOLOMITE: gray, hard to very hard, sandy, vuggy, crystalline broken zone 123.7-123.9' vertical fracture 126.5-126.8' quartz filled vug at 131.6'
290	130	5.0/5.0	86	1	
285	135	5.0/5.0	90	1	DOLOMITE: gray, very hard, silty to sandy, w/shale streaks calcite 132.7-132.8'
280	140	5.0/5.0	44	2	DOLOMITE: very hard, gray, micritic, w/wavy gray shale laminae wavy green shale laminae 139.7-140.6' turbid and cherty 140.7-141.1' cherty 141.1-141.6'
275	145	5.0/5.0	64	1	DOLOMITE: gray, very hard, silty, cherty
270	150				SANDSTONE: gray to tan, hard



Well Construction Desc.

- 0.25" Bentonite Pellets
- Secondary Filter Pack
- Primary Filter Pack
- 2" Sch. 80 PVC Screen, 0.010" Slot

Westinghouse

Westinghouse Electric Company
Hematite Facility
3300 State Road P
Festus, MO 63028

SAIC
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SAIC
8421 St. John Industrial Drive
St. Louis, Missouri

Client:	Westinghouse Electric Company
Project:	Hematite Remedial Investigation
Location:	Hematite, MO
Borehole:	BR-8-RB
Sheet:	3 of 4

Client	Westinghouse Electric Company	Drilling Method:	Rotary
Location:	Hematite, MO	Surf. Elev.	418.58
Project:	Hematite Remedial Investigation	Northing:	864793.07
Date Started:	05/25/04	Easting:	828603.60
Date Finished:	06/21/04	Total Depth of Boring:	152.8 feet
Geologist:	Todd Calhoun	Top of Casing:	421.72
Drilling Contractor:	Geotechnology	Total Depth of Well:	153.0 feet

Boring: BR-8-RB

Elevation (ft)	Depth (ft)	Core Recovery (Pen/Rec)	RQD	Fracture Frequency	Lithology	Lithology Description	Well Construction	Well Construction Desc.
	150	5.0/5.0	66	1		DOLOMITE: gray very hard, micritic w/green wavy shale stringers		
265						Bottom of Hole 152.8'	Bottom of Well 153.0'	
	155							
260								
	160							
255								
	165							
250								
	170							
245								
	175							
240								
	180							
235								
	185							
230								
	190							
225								
	195							
220								
	200							

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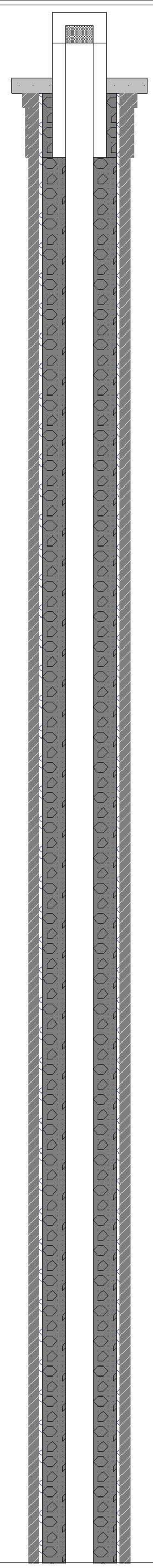
Client:	Westinghouse Electric Company
Project:	Hematite Remedial Investigation
Location:	Hematite, MO
Borehole:	BR-8-RB
Sheet:	4 of 4

Client	Westinghouse Electric Company	Drilling Method:	Rotary
Location:	Hematite, MO	Surf. Elev.	418.80
Project:	Hematite Remedial Investigation	Northing:	864343.18
Date Started:	08/25/04	Easting:	828681.05
Date Finished:	09/03/04	Total Depth of Boring:	130.0 feet
Geologist:	J. Upcraft	Top of Casing:	421.906
Drilling Contractor:	Geotechnology	Total Depth of Well:	130.7 feet

Boring: BR-10-RB

Elevation (ft)	Depth (ft)	Core Recovery (Pen/Rec)	RQD	Fracture Frequency	Lithology	Lithology Description	Well Construction	Well Construction Desc.
420	0							Protective Casing (4")
								2.0' x 2.0' x 0.5' Concrete Pad
						OVERBURDEN: Drilled without sampling		
								2" Sch 80 PVC Riser
415	5							
410	10							6" Steel Isolation Casing
405	15							Portland Cement
400	20							
395	25					Top of Bedrock 26.0'		High Solids Bentonite Grout (Tremied)
		4.0/2.6	22	NO DATA		DOLOMITE: gray, slightly weathered, crystalline, hard		
390	30					DOLOMITE: brown, hard, sandy, crystalline, slightly weathered and broken to 30.0', sandy to 28.7'		
385	35	10.0/10.0	89			DOLOMITE: gray, very hard w/black to gray shale laminae		
380	40					DOLOMITE: gray/brown, hard, slighly weathered to 37.7' styolitic 36.7-37.1' gray shale laminae 37.9-40.7' weathered 40.5-41.0'42.1-42.5'		
						SANDSTONE: brown, hard, slightly weathered, crystalline, calcareous		
375	45	10.0/9.7	55			DOLOMITE: gray, very hard, fine grained wavy green/gray shale laminae 45.4-48.0' sandy and pitted 49.5-50.1'		
370	50							



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Client:	Westinghouse Electric Company
Project:	Hematite Remedial Investigation
Location:	Hematite, MO
Borehole:	BR-10-RB
Sheet:	1 of 3

Client	Westinghouse Electric Company	Drilling Method:	Rotary
Location:	Hematite, MO	Surf. Elev.	418.80
Project:	Hematite Remedial Investigation	Northing:	864343.18
Date Started:	08/25/04	Easting:	828681.05
Date Finished:	09/03/04	Total Depth of Boring:	130.0 feet
Geologist:	J. Upcraft	Top of Casing:	421.906
Drilling Contractor:	Geotechnology	Total Depth of Well:	130.7 feet

Boring: BR-10-RB

Elevation (ft)	Depth (ft)	Core Recovery (Pen/Rec)	RQD	Fracture Frequency	Lithology	Lithology Description	Well Construction	Well Construction Desc.
	50							
365	55	10.0/10.0	86			DOLOMITE: gray, hard, sandy, pitted		
360	60					DOLOMITE: gray, very hard, fine-grained green shale 61.0-61.2'		High Solids Bentonite Grout (Tremied)
355	65	10.0/10.0	83			DOLOMITE: gray, very hard, fine grained, burrowed (wavy)		
350	70					DOLOMITE: gray, very hard, fine-grained vertical fractures 68.5-69.0' gray/black wavy shale laminae 70.6-71.8'		
345	75	5.0/4.6	82			DOLOMITE: gray, very hard, sandy, slightly pitted vertical fractures 75.9-76.3'		
340	80	5.0/5.0	96			DOLOMITE: gray, very hard, micritic		
335	85	10.0/10.0	98			DOLOMITE: gray, very hard, sandy, crystalline, pitted		High Solids Bentonite Grout (Tremied)
330	90					DOLOMITE: gray, hard, w/wavy green shale laminae		
325	95	10.0/9.4	89			DOLOMITE: gray, very hard, crystalline vertical fractures 98.1-99.4'		
320	100							

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Borehole:	BR-10-RB
Sheet:	2 of 3

Client	Westinghouse Electric Company	Drilling Method:	Rotary
Location:	Hematite, MO	Surf. Elev.	418.80
Project:	Hematite Remedial Investigation	Northing:	864343.18
Date Started:	08/25/04	Easting:	828681.05
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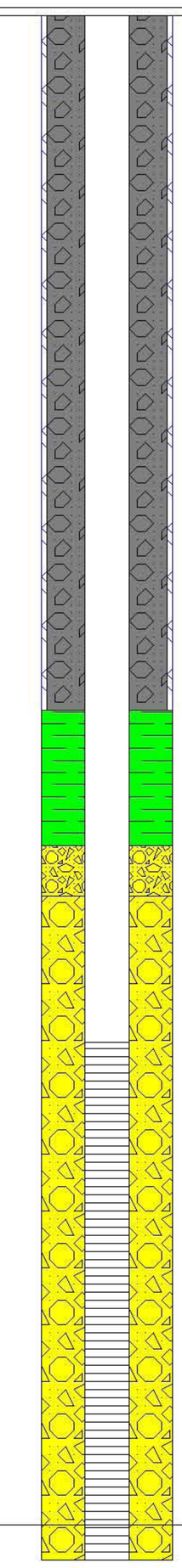
Drilling Contractor:	Geotechnology	Total Depth of Well:	130.7 feet

Boring: BR-10-RB

Elevation (ft)	Depth (ft)	Core Recovery (Pen/Rec)	RQD	Fracture Frequency	Lithology	Lithology Description	Well Construction	Well Construction Desc.
	100					DOLOMITE: gray, hard, sandy, crystalline, cherty w/high angle fractures throughout		
315	105	10.0/10.0	88			DOLOMITE: gray, hard, sandy, pitted		
310	110					DOLOMITE: gray, hard, silty to sandy		High Solids Bentonite Grout (Tremied)
305	115	10.0/10.0	89					0.25" Bentonite Pellets
								Secondary Filter Pack (100 Mesh)
300	120					DOLOMITE: gray, very hard, turbid and cherty		
						DOLOMITE: gray, very hard, sandy		Primary Filter Pack (10/20 Mesh)
295	125	10.0/10.0	91			SANDSTONE: gray/buff, medium grained, crystalline		2" Sch. 80 PVC Screen, 0.010" Slot
290	130					DOLOMITE: gray, very hard Bottom of Hole 130.0'	Bottom of Well 130.7'	
285	135							
280	140							
275	145							
270	150							



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