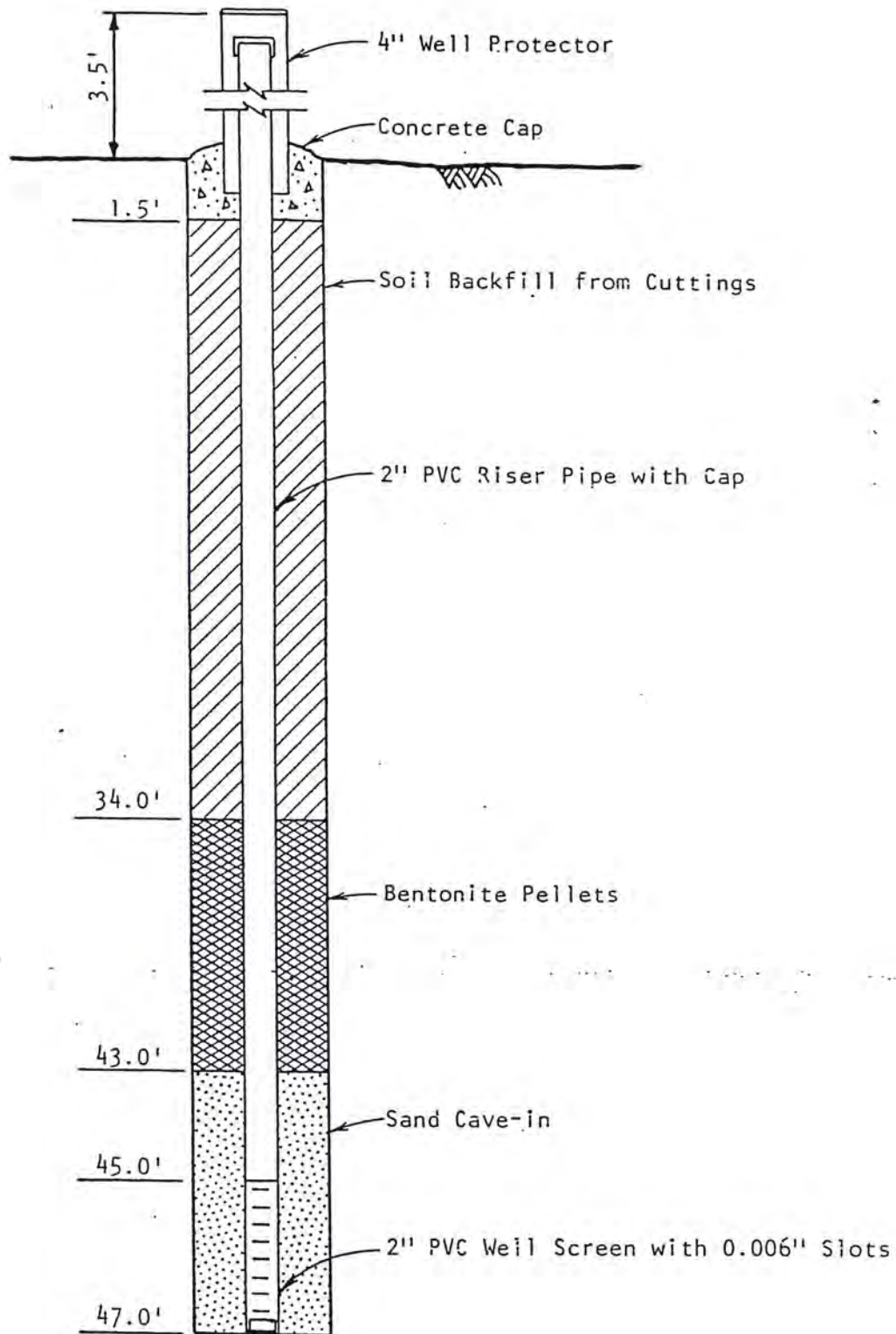
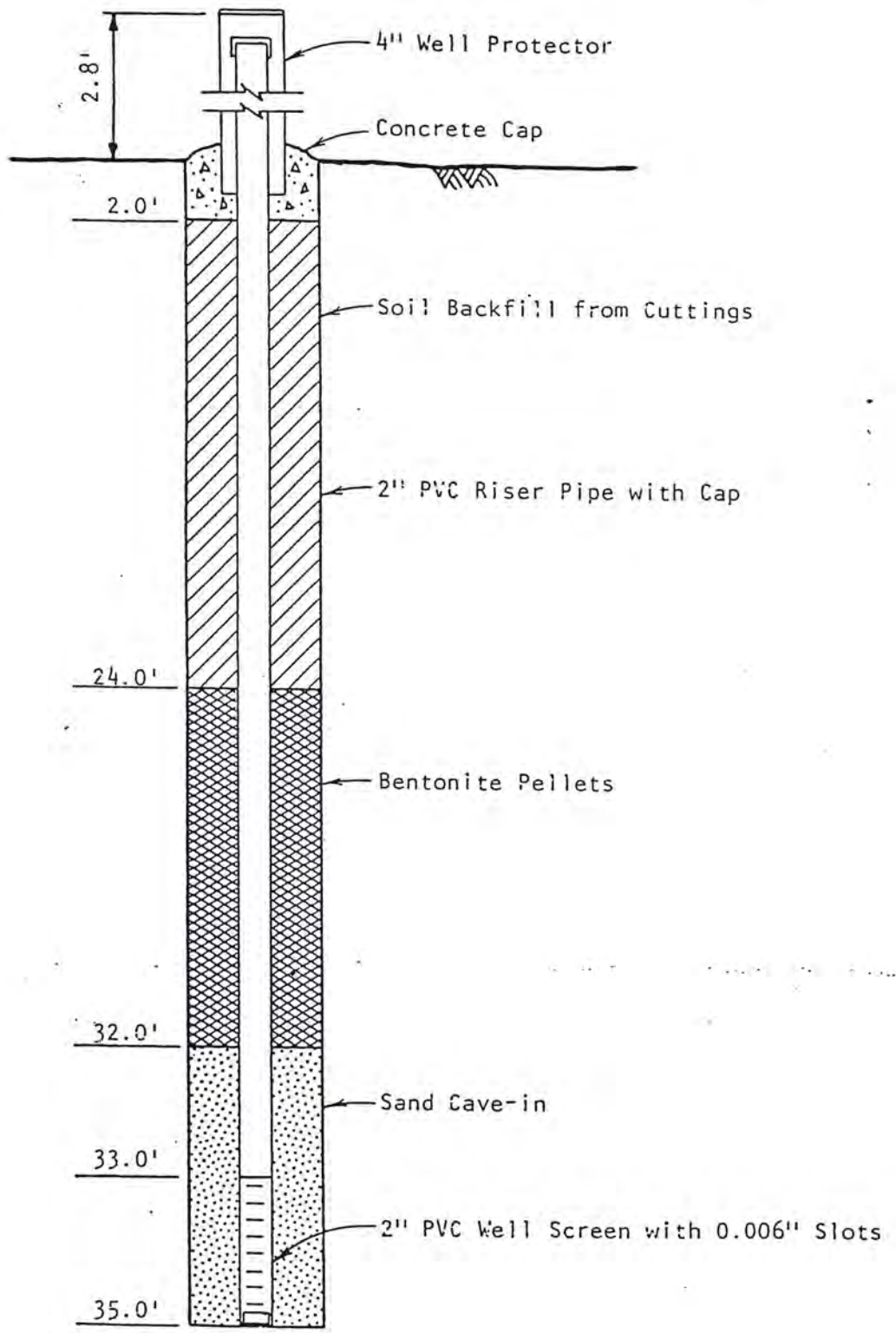


PIEZOMETER M-7



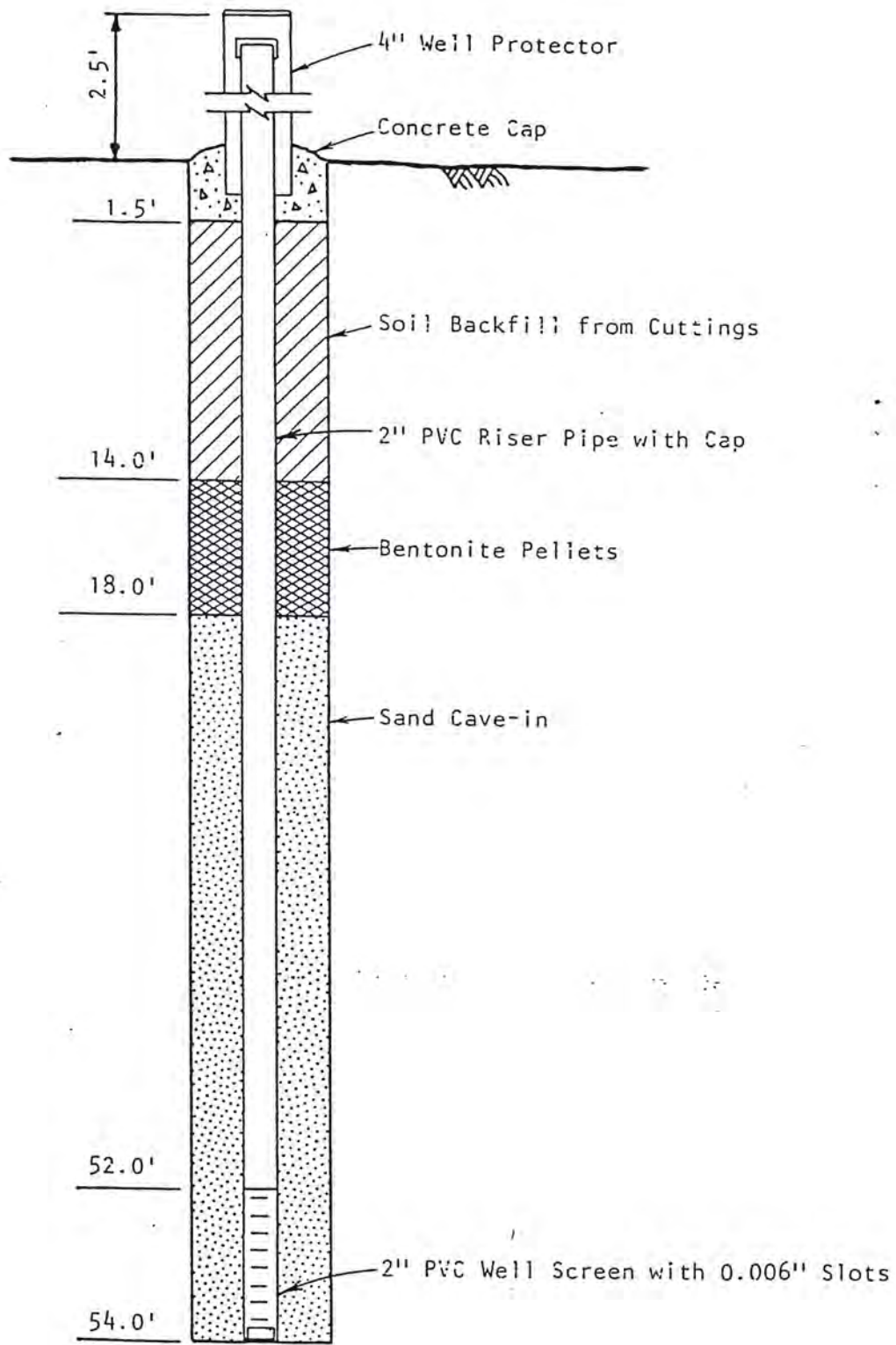
PIEZOMETER M-8

John Mathes & Associates, Inc.



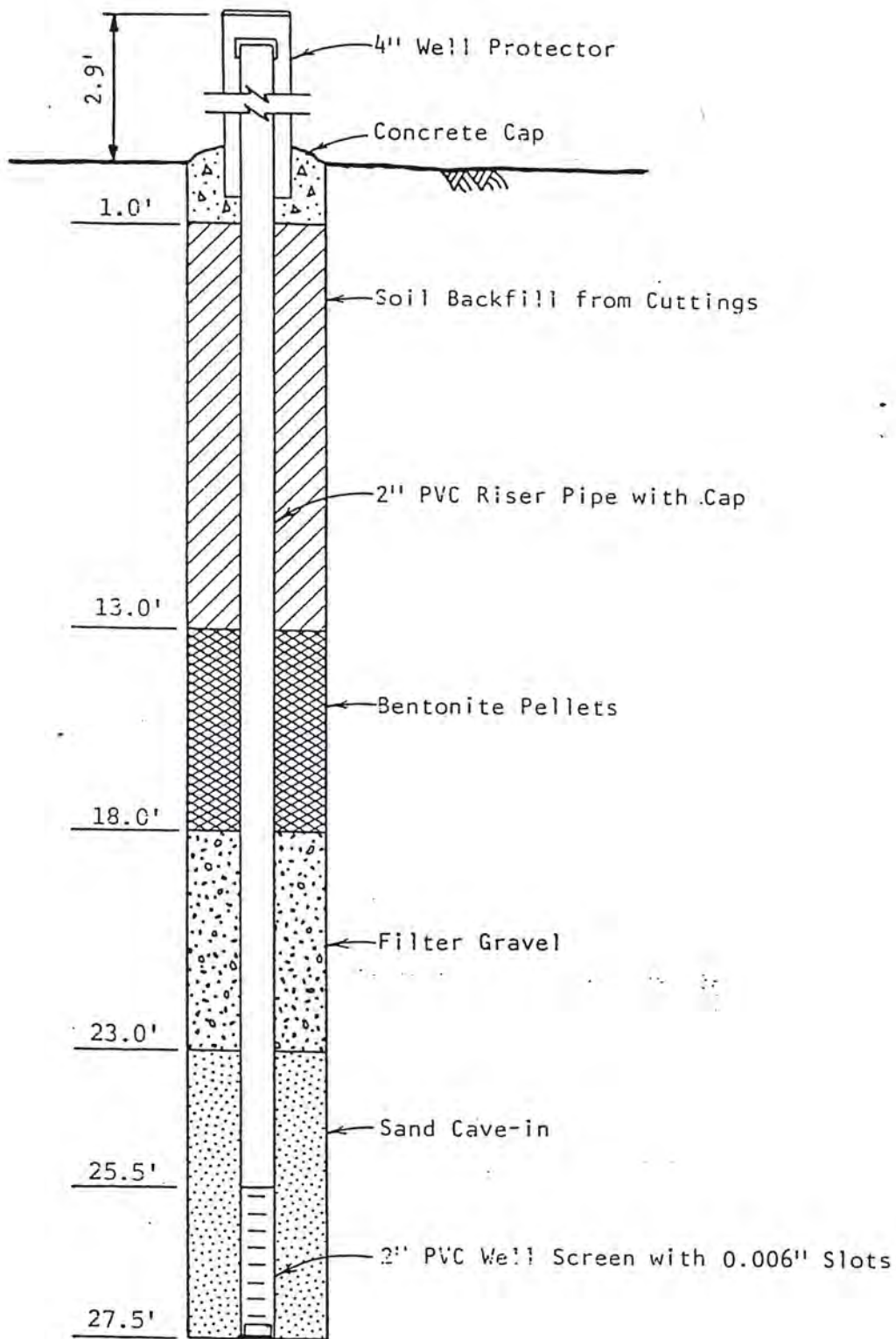
PIEZOMETER M-9

John Mathes & Associates, Inc.



PIEZOMETER M-10

John Mathes & Associates, Inc.



PIEZOMETER M-11

John Mathes & Associates, Inc.

B-2: Kelron Environmental: 1994-1995 Boring and
Well Logs (Kelron, 1995)

Geologic Field Observations

Serial No. _____ Borehole, Monitoring Well, or Test Pit No. B-26

(Record this location on the Group List) Group List Number _____

Location Type: Borehole Test Pit Other 8.25" OD/4.25" ID Auger Page 1 of 1

Site Name Illinois Power Company - Wood River Project No. 950100 Phase/Task _____

Date 06-02-95 Start Time 1135 Logged by (print name) Stu Cravens

Depth (feet)	Sample No.	Sampler Type	Sample Depth (feet)		Sample Recovery (inches)	Field Description of Material, Comments, and Observations	Pocket Penetrometer	USCS Symbol	Air Monitoring		
			Top	Bottom					Borehole	Breathing Zone	Sample
0						Silty clay loam, organic					
1						Silty CLAY, med br, moist		CL			
	1	SS	5	7	16	*(2/2/3/2)					
5						Silty CLAY, dk br, saturated					
6						lt br to lt gray					
	2	SS	10	12	19	*(2/3/2/3) Silty CLAY					
	3	SS	15	17	22	*(2/2/3/3)					
15						Silty CLAY, med br, saturated					
16						CLAY, med gray, very moist					
	4	SS	20	22	24	*(2/3/3/4) CLAY, same as above					
31						END BOREHOLE					

Drilling Fluids None

Type water

Amount Lost all

Source East Alton Municipal

Groundwater Measurements Groundwater Not Encountered

Date	<u>6/2/95</u>		
Time	<u>1445</u>		
Depth (feet)	<u>+0.15'(als)</u>		

Comments Whitney and Associates, Inc.; Driller - Tim Fehl, Asst - James Bowman
ATV Auger Rig, CME-450. *Split-Spoon Blow Counts: 24", 2" diam, 140# hammer

Geologist's Signature _____ Date 6/2/95 Reviewer _____ Date _____

TELEPHONE
309 673-2131

TESTS
DESIGN
REPORTS
ANALYSIS
INSPECTION
CONSULTATION
INVESTIGATIONS

Winslow
INSTALLED BY



WHITNEY & ASSOCIATES
INCORPORATED

2406 West Nebraska Avenue
PEORIA, ILLINOIS 61604

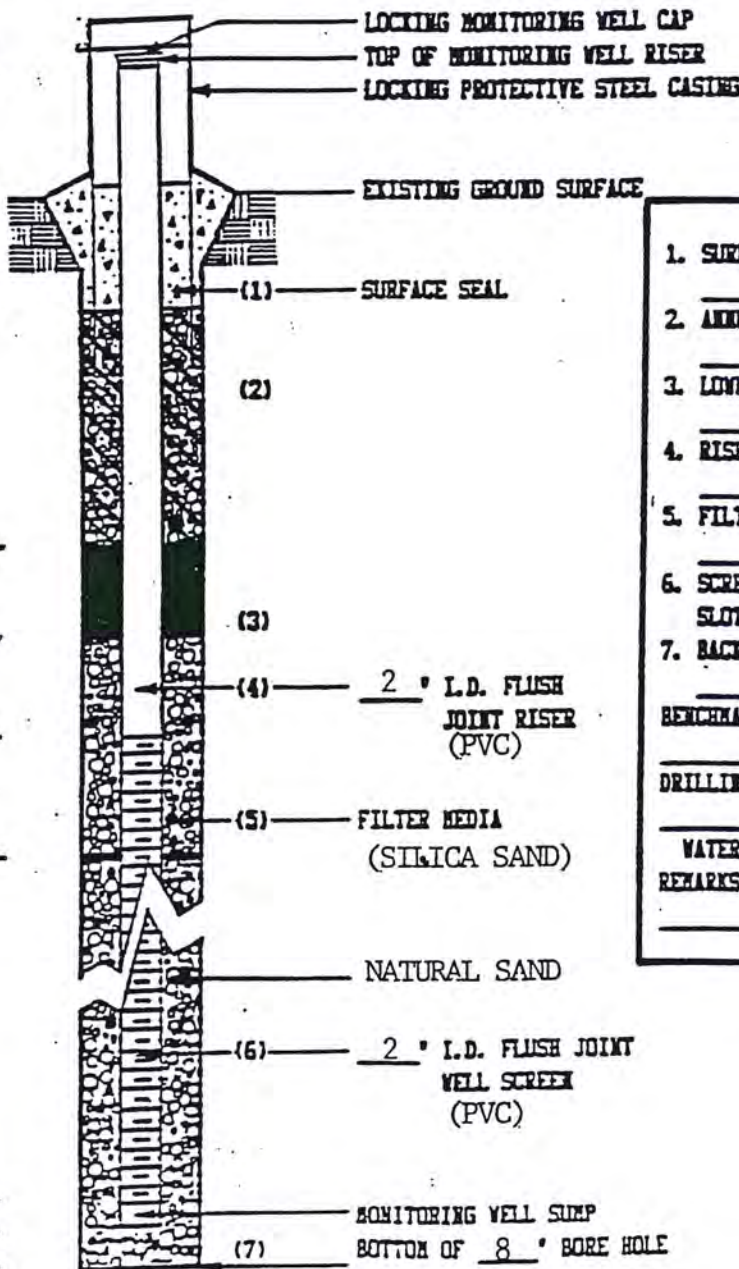
SPECIALISTS IN
SOILS - PORTLAND CEMENT CONCRETE
STEEL - BITUMINOUS CONCRETE
CONSTRUCTION MATERIALS
AGGREGATES - ASPHALT - POZ-O-PAC
SOILS AND GRAVEL SURVEYS
MATERIALS QUALITY CONTROL
SOIL MECHANICS AND
FOUNDATION ENGINEERING
DRILLING - CORING - TESTING

11-28-94
DATE

TYPICAL MONITORING WELL DIAGRAM

PROJECT Illinois Power - Wood River Station MONITORING WELL NO. MW-20
 LOCATION Wood River, Illinois INSTALLATION DATE 11-16-94
 MONITORING WELL LOCATION See Environmental Engineer's Site Plan

ELEVATION	DEPTH
	⊕ 2.4'
	0.0
	⊖ 4.0'
	⊖ 9.7'
	⊖ 13.5'
	⊖ 17.8'
	⊖ 22.0'
	⊖ 38.2'
	⊖ 39.0'
	⊖ 40.0'



1. SURFACE SEAL	Concrete Encasement
2. ANNUAL BACKFILL	Cement/Bentonite Grout
3. LOWER SEAL	Bentonite Pellets
4. RISER TYPE	Schedule 40 PVC
5. FILTER MEDIA	4.0 Flint Shot Silica Sand
6. SCREEN TYPE	Schedule 40 PVC SLOT SIZE 0.010" LENGTH 20.4'
7. BACKFILL TYPE	Natural Sand
BENCHMARK _____	
DRILLING METHOD 4.25" I.D. Hollow Stem Augers	
WATER LEVEL @ 24+ HOURS ⊖ 21.0'	
REMARKS _____	

TELEPHONE
309 673-2131

TESTS
DESIGN
REPORTS
ANALYSIS
INSPECTION
CONSULTATION
INVESTIGATIONS



WHITNEY & ASSOCIATES

INCORPORATED

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SPECIALISTS IN
SOILS - PORTLAND CEMENT CONCRETE
STEEL - BITUMINOUS CONCRETE
CONSTRUCTION MATERIALS
AGGREGATES - ASPHALT - POZ-O-PAC

SOILS AND GRAVEL SURVEYS
MATERIALS QUALITY CONTROL
SOIL MECHANICS AND
FOUNDATION ENGINEERING
DRILLING - CORING - TESTING

Fehl

INSTALLED BY

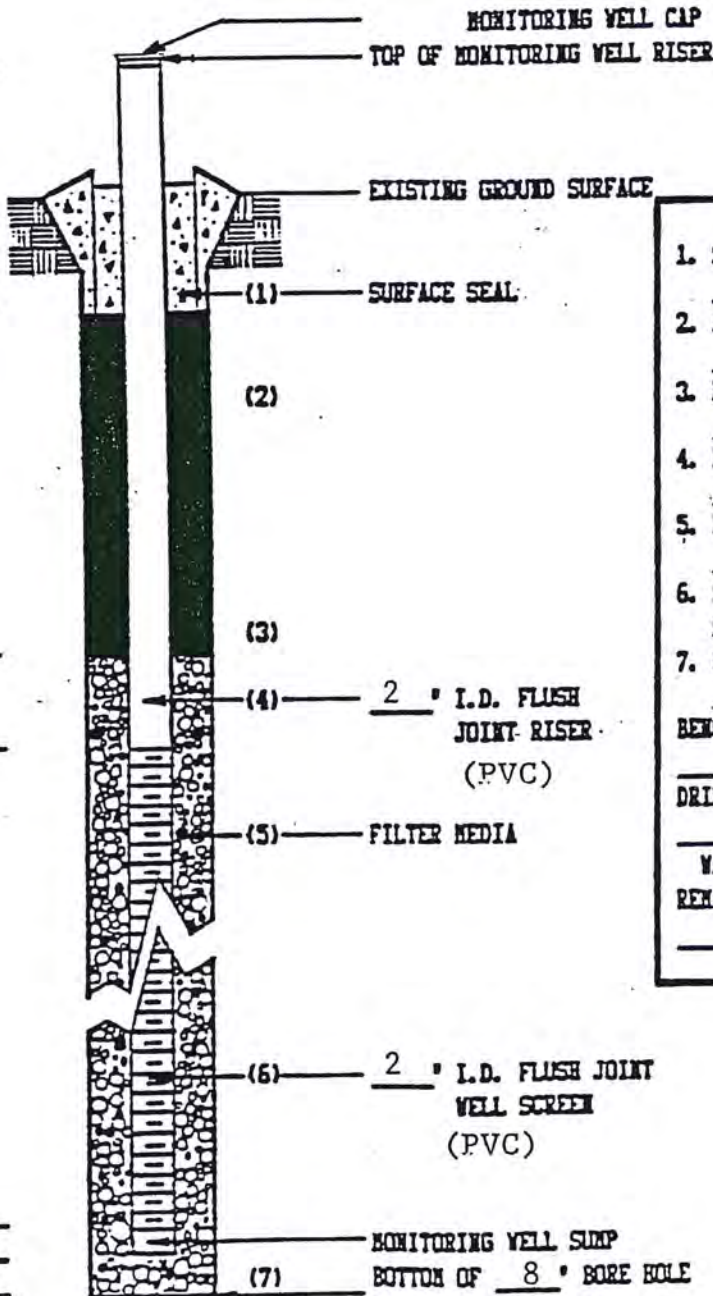
6-30-95

DATE

TYPICAL MONITORING WELL DIAGRAM

PROJECT Illinois Power - Wood River Station MONITORING WELL NO. TMW-26
LOCATION Wood River, Illinois INSTALLATION DATE 6-02-95
MONITORING WELL LOCATION See Environmental Engineer's Site Plan

ELEVATION	DEPTH
⊕ 2.3'	
0.0	
⊖ 1.0'	
⊖ 6.0'	
⊖ 11.7'	
⊖ 26.7'	
⊖ 27.0'	
⊖ 31.0'	



1. SURFACE SEAL	<u>Auger Cuttings</u>
2. ANNULAR BACKFILL	<u>Bentonite Pellets</u>
3. LOWER SEAL	<u>Bentonite Pellets</u>
4. RISER TYPE	<u>Schedule 40 PVC</u>
5. FILTER MEDIA	<u>#12 Flint Shot Silica Sand</u>
6. SCREEN TYPE	<u>Schedule 40 PVC</u> SLOT SIZE <u>0.006"</u> LENGTH <u>15.0'</u>
7. BACKFILL TYPE	<u>Natural Sand</u>
BENCHMARK	
DRILLING METHOD	<u>4.25" I.D. Hollow Stem Auger</u>
WATER LEVEL @	<u>3 HOURS</u> ⊕ <u>0.2'</u>
REMARKS	

TELEPHONE
309 673-2131

TESTS
DESIGN
REPORTS
ANALYSIS
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INVESTIGATIONS

Fehl

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SPECIALISTS IN
SOILS - PORTLAND CEMENT CONCRETE
STEEL - BITUMINOUS CONCRETE
CONSTRUCTION MATERIALS
AGGREGATES - ASPHALT - POZ-O-PAC

SOILS AND GRAVEL SURVEYS
MATERIALS QUALITY CONTROL
SOIL MECHANICS AND
FOUNDATION ENGINEERING
DRILLING - CORING - TESTING

6-30-95

DATE

TYPICAL MONITORING WELL DIAGRAM

PROJECT Illinois Power - Wood River Station MONITORING WELL NO. TMW-27
 LOCATION Wood River, Illinois INSTALLATION DATE 6-02-95
 MONITORING WELL LOCATION See Environmental Engineer's Site Plan

ELEVATION DEPTH

⊕ 2.7'

0.0

⊖ 1.0'

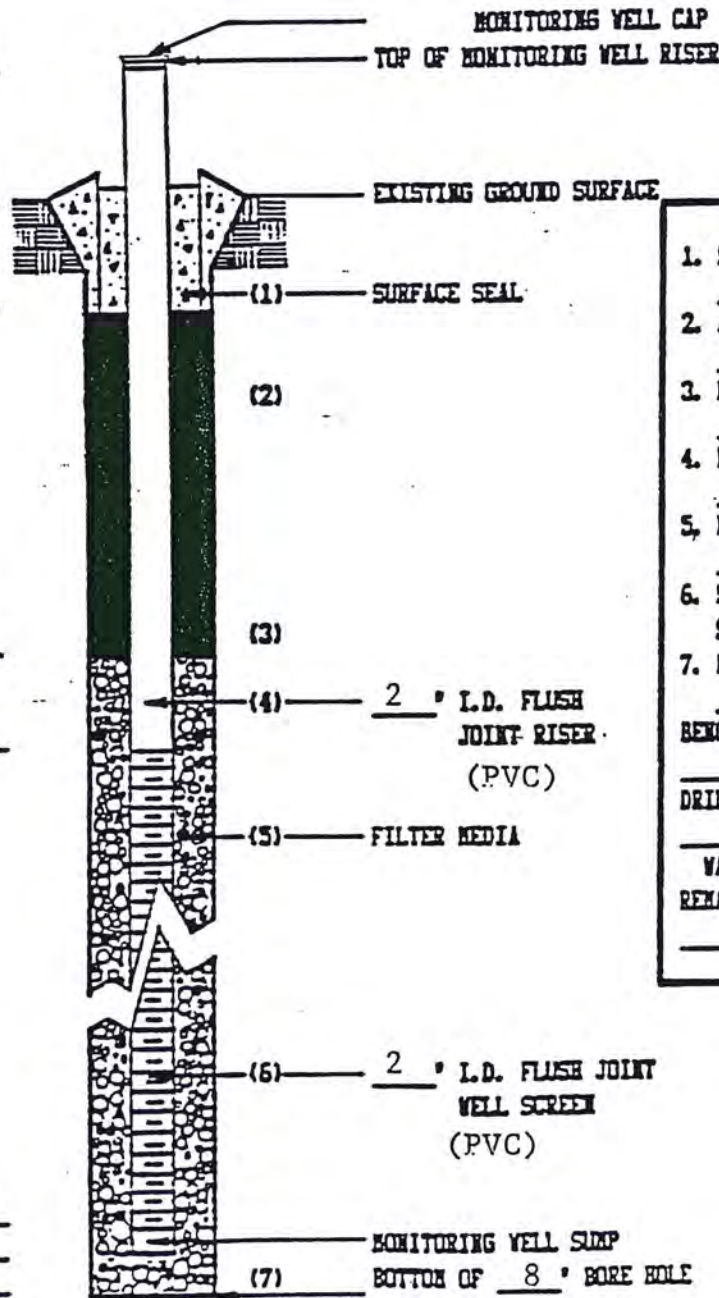
⊖ 9.6'

⊖ 15.2'

⊖ 30.2'

⊖ 30.5'

⊖ 32.0'



1. SURFACE SEAL	<u>Auger Cuttings</u>
2. ANGULAR BACKFILL	<u>Bentonite Pellets</u>
3. LOWER SEAL	<u>Bentonite Pellets</u>
4. RISER TYPE	<u>Schedule 40 PVC</u>
5. FILTER MEDIA	<u>Natural Sand</u>
6. SCREEN TYPE	<u>Schedule 40 PVC</u>
	SLOT SIZE <u>0.006"</u> LENGTH <u>15.0'</u>
7. BACKFILL TYPE	<u>Natural Sand</u>
BENCHMARK	
DRILLING METHOD	<u>4.25" I.D. Hollow Stem Auger</u>
WATER LEVEL @	<u>1.5 HOURS</u> ⊖ <u>9.7'</u>
REMARKS	






B-3: Natural Resource Technology: 1999 Boring
and Well Log (NRT, 2000)

Project Name/No. Illinois Power - Wood River Plant 135-1.4	Boring No. 35	Start Date 1/5/99	Page 1
--	-------------------------	-----------------------------	------------------

Driller Boart-Longyear, Schofield, WI	Logged by: Steve Mueller/STMI	End Date 1/5/99	Depth to Water ~6 Feet
---	---	---------------------------	----------------------------------

Boring Depth 28 Feet	Boring Diameter 8 Inches	Surface Elevation Feet	Drill Method 4 1/4-in. ID HSA	Northing
--------------------------------	------------------------------------	----------------------------------	---	-----------------

Well Depth 28 Feet	Well Diameter 2-in I.D.	TOC Elev. Feet	Sample Method 2-ft. split-spoon	Easting
------------------------------	-----------------------------------	--------------------------	---	----------------

Sample	Blows/6 inches	Sample Depth (ft)	Recovery (%)	Graphic Log	Classification	Description	Well Completion	Comments
						SILTY CLAY, dark topsoil with marsh grass 0-1/2 ft., slightly plastic, soft, grayish brown, saturated below 6 ft.		
	1, 1	5	100		CL			7-ft by 6-in O.D. steel stick-up casing to 3 ft below grade.
	1, 1	10	100		CL			Bentonite chips 0-20 ft.
	1, 1, 2, 2	15	100		CL	CLAY, trace fine sand, medium plastic, soft, brownish gray, moist.		Sch. 40 PVC* casing flush-threaded to 5-ft section of 0.01-in factory-slotted PVC screen.
	1, 2, 3, 5	20	50		ML	SILT, medium stiff, dark gray, saturated.		Fine silica sand 20-20.5 ft; Red Flint #30 silica sand pack 20.5-28 ft.
	1, 1, 1, 6	25	25		SP	SAND, well sorted/rounded, fine- to medium-grained, predominantly quartz, loose, gray (salt & pepper), saturated.		*For datalogger installation, a 4-ft section of 4-in ID casing (above ground) was coupled to 2-in ID casing (below ground) using a rubber boot and hose clamps.
						END OF BORING - 28.0 feet		
		30						

New East Ash Pond: Replacement Well MW35R
Wood River Power Station
Dynegy Midwest Generation, Inc.
Location: Twp 5N, Rng 9W, 19 NE/NE/SE

Date Started/Finished : 11/13/2008
Hole Diameter : 8.5 inches
Drilling Method : Hollow-Stem
Sampling Method : Split-Spoon
Drilling Company : Philip Services Corp.

Driller : Jerry Bignall
Geologist : Stuart Cravens (Kelron)
Land Surface Elevation: 422.56
Top of Casing Elevation 425.56
X,Y Coordinates : 509084, 801955

Depth in Feet	DESCRIPTION	Surf. Elev. 422.56	Samples	Recovery inches	Blow Count	Qp TSF	USCS	GRAPHIC	Well: MW35R - Elev.: 425.56	
									Cover	
0	SILTY CLAY, grayish brown.	422							Concrete	
5	Replacement for Destroyed Well MW35 (drilled 1/5/99 / sealed 11/13/08); see boring log from MW35 for full description of lithology.	417					CL		Bentonite Chips	
10		412							Riser (Sch 40 PVC)	
15	CLAY, trace fine sand, brownish gray	407					CL		Filter Pack (Fine Sand 20-20.5)	
20	SILT, dark gray.	402					ML		Filter Pack (Crse Sand 20.5-28)	
25	SAND, well sorted/rounded, fine to medium-grained, loose, gray, saturated.	397	1	14			SP		Screen (Sch 40 PVC)	
30	END BOREHOLE AT 28 FEET BLS								Sump	

12-04-2008 c:\powerp-1\woodr-1\hydro-1\drilling\boring-1\wr_mw35R.BOR

B-4: Shively Geotechnical: 2003 Boring Logs for
Dynergy Rail Loop (Shively, 2003)

APPENDIX B: BORING LOGS

Boring Logs
General Notes
Notations used on Boring Logs
Unified Soil Classification

LOG OF BORING B - 01

Project Name: Dynege Rail Loop
 Project Location: Wood River, Illinois
 Project Number: SG9-2554
 Elevation: 433 Feet (Approximate)

Date Drilled: 3/27/03
 Drilling Contractor: Meyer Drilling, Inc.
 Drilling Method: HSA and Mud Rotary
 Logged By: Meyer/Kinsella

Elevation/ Depth (feet)	Graphic Log Sampler Symbols and SPT Blows	Rec. (in./in.)	USCS	Description	DD (pcf)	UCS (tsf)	MC (%)	Remarks	
0				SLAG and Base ROCK, FILL					
		2 11 11	17/18		Dark Gray Silty CLAY and Crushed LIMESTONE, FILL			3	
430		2 2 2	17/18	CL	Dark Gray-Brown Silty CLAY, Possible FILL		0.5 Qp	41	
5		1 4 5	17/18	SC	Brown Clayey SAND, Possible FILL		2.0 Qp	14	
425		3 3 4	18/18					13	Began Mud Rotary at 9.5 Feet
10		3 4 4	15/18		-Dark Gray-Brown below 12.0 feet			15	
420		0 1 2	9/18	CL	Dark Gray Silty CLAY			27	
15		1 3 3	14/18	CH	Dark Gray-Brown CLAY		1.6 Qp	31	
415		10 14 18	17/18	SP	Dark Gray-Brown Fine SAND				
20				SP					
410									
25									
405									
30									

(continued)

Notes:

GROUNDWATER ▽ First Observed During Drilling - N/A
 ⊕ At Completion - N/A

Piezometer Installed: No



Missouri (314) 770-1001
 Illinois (618) 398-1414

BORING LOG 2554GINTFILE.GPJ SHIVELY.GDT 4/24/03

LOG OF BORING B - 01 (Cont.)

Project Name: Dynegy Rail Loop
 Project Location: Wood River, Illinois
 Project Number: SG9-2554
 Elevation: 433 Feet (Approximate)

Date Drilled: 3/27/03
 Drilling Contractor: Meyer Drilling, Inc.
 Drilling Method: HSA and Mud Rotary
 Logged By: Meyer/Kinsella

Elevation/ Depth (feet)	Graphic Log Sampler Symbols and SPT Blows	Rec. (in./in.)	USCS	Description	DD (pcf)	UCS (tsf)	MC (%)	Remarks
		<p>15/18</p> <p>14/18</p> <p>12/18</p>	<p>Dark Gray-Brown Fine SAND <i>(continued)</i></p> <p>-Gray below 37.0 Feet</p> <p>-Fine to Medium Grained below 42.0 Feet</p>	<p>TD - 45.0 Feet</p>				

Notes:

GROUNDWATER

- ▽ First Observed During Drilling - N/A
- ▼ At Completion - N/A

Piezometer Installed: No



Missouri (314) 770-1001
 Illinois (618) 398-1414

BORING LOG 2554GINTFILE.GPJ SHIVELY.GOT 4/24/03

LOG OF BORING B - 02

Project Name: Dynegy Rail Loop
 Project Location: Wood River, Illinois
 Project Number: SG9-2554
 Elevation: 433 Feet (Approximate)

Date Drilled: 3/27/03
 Drilling Contractor: Meyer Drilling, Inc.
 Drilling Method: HSA and Mud Rotary
 Logged By: Meyer/Kinsella

Elevation/ Depth (feet)	Graphic Log Sampler Symbols and SPT Blows .	Rec. (in./in.)	USCS	Description	DD (pcf)	UCS (tsf)	MC (%)	Remarks	
0				SLAG and Base ROCK, FILL					
430		4 16 15	14/18		Dark Gray Silty CLAY and Crushed LIMESTONE, FILL			19	
5		4 7 9	18/18	SC	Gray-Brown Clayey SAND, FILL			6	
425		2 5 5	15/18	CL	Dark Gray-Brown Silty CLAY, FILL		0.8 Qp	24	
420		4 6 8	15/18		Gray-Brown Clayey SAND and Crushed LIMESTONE, FILL		1.3 Qp	11	Began Mud Rotary at 9.5 Feet
15		1	4/18	SP	Dark Gray-Brown Clayey SAND, with Gravel, Possible FILL			26	
415		4 7 8	18/18	CH	Dark Gray-Brown CLAY		1.3 Qp	32	
410		6 12 18	15/18	SP	Gray Fine SAND				
405		5 8 11	12/18	SP	-Gray-Brown 27.0 to 42 Feet				
30					(continued)				

Notes:

GROUNDWATER

- First Observed During Drilling - N/A
- At Completion - N/A

Piezometer Installed: No



Missouri (314) 770-1001
 Illinois (618) 398-1414

BORING LOG 2554\GINT\FILE.GPJ SHIVELY.GDT 4/24/03

LOG OF BORING B - 04

Project Name: Dynegy Rail Loop
 Project Location: Wood River, Illinois
 Project Number: SG9-2554
 Elevation: 424 Feet (Approximate)

Date Drilled: 3/26/03
 Drilling Contractor: Meyer Drilling, Inc.
 Drilling Method: Hollow Stem Auger
 Logged By: Meyer/Kinsella

Elevation/ Depth (feet)	Graphic Log Sampler Symbols and SPT Blows	Rec. (in./in.)	USCS	Description	DD (pcf)	UCS (tsf)	MC (%)	Remarks
0				TOPSOIL				
		16/18	CL	Dark Gray-Brown Silty CLAY, Possible FILL		2.3 Qp	23	
420		12/24	CL	Gray-Brown Silty CLAY	95		26	
415		18/18					27	
410		22/24			94		29	LL = 42 PL = 18 PI = 24 G _s = 2.65
405		18/18	CH	Dark Gray CLAY			34	
400		18/18					60	
395				TD - 20.0 Feet				

Notes:

GROUNDWATER

- First Observed During Drilling - Dry
- At Completion - Not Recorded

Piezometer Installed: No



Missouri (314) 770-1001
 Illinois (618) 398-1414

BORING LOG_2554\GINTFILE.GPJ SHIVELY.GDT 4/24/03

LOG OF BORING B - 05

Project Name: Dynegy Rail Loop
 Project Location: Wood River, Illinois
 Project Number: SG9-2554
 Elevation: 433.5 Feet (Approximate)

Date Drilled: 3/26/03
 Drilling Contractor: Meyer Drilling, Inc.
 Drilling Method: Hollow Stem Auger
 Logged By: Meyer/Kinsella

Elevation/ Depth (feet)	Graphic Log Sampler Symbols and SPT Blows	Rec. (in./ft.)	USCS	Description	DD (pcf)	UCS (tsf)	MC (%)	Remarks
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>0</p> <p>430</p> <p>5</p> <p>425</p> <p>10</p> <p>420</p> <p>15</p> <p>415</p> <p>20</p> <p>410</p> <p>25</p> <p>405</p> <p>30</p> </div> <div style="flex: 1; border-left: 1px solid black; border-right: 1px solid black; padding: 0 5px;"> </div> </div>	<p>13/18</p> <p>15/18</p> <p>13/18</p> <p>15/18</p>	<p>SM</p> <p>CL</p>	<p>Base ROCK, FILL</p> <p>Brown Silty SAND</p> <p>-Gray-Brown below 3.0 Feet</p> <p>Gray Brown Silty CLAY, trace Sand</p> <p>-Very Dark Gray below 8.0 Feet</p> <p>TD - 10.0 Feet</p>	<p></p> <p>3.0 Qp</p> <p>2.6 Qp</p> <p>2.5 Qp</p>	<p>23</p> <p>21</p> <p>20</p> <p>20</p>			

Notes:

GROUNDWATER

- First Observed During Drilling - Dry
- At Completion - Dry

Piezometer Installed: No



Missouri (314) 770-1001
 Illinois (618) 398-1414

LOG OF BORING B - 06

Project Name: Dynegy Rail Loop
 Project Location: Wood River, Illinois
 Project Number: SG9-2554
 Elevation: 431.5 Feet (Approximate)

Date Drilled: 3/26/03
 Drilling Contractor: Meyer Drilling, Inc.
 Drilling Method: Hollow Stem Auger
 Logged By: Meyer/Kinsella

Elevation/Depth (feet)	Graphic Log Sampler Symbols and SPT Blows	Rec. (in./in.)	USCS	Description	DD (pcf)	UCS (tsf)	MC (%)	Remarks
0				Base ROCK, FILL				
430		16/18		Dark Gray-Brown Silty CLAY, with Crushed Limestone, FILL			4	
5		11/18	SM	Brown Silty SAND			24	
425		18/18	SP	Gray-Brown Fine SAND			12	
10		15/18		TD - 10.0 Feet			8	
420								
15								
415								
20								
410								
25								
405								
30								

Notes:

GROUNDWATER

- First Observed During Drilling - Dry
- At Completion - Dry

Piezometer Installed: No



Missouri (314) 770-1001
 Illinois (618) 398-1414

BORING LOG 2554.GINT\FILE.GPJ SHIVELY.GDT 4/21/03