Former Ash Pond at Powerton
Frendt, Richard to: Race, Maria 08/09/2012 05:14 PM

Maria:

I am attaching a boring location plan, and the relevant boring logs for the geotechnical work that was done in the vicinity of the former ash pond at Powerton. Overall, it was essentially what I remembered, with ash being found up to around 10 feet thick in places (though not everywhere). Hope this is helpful
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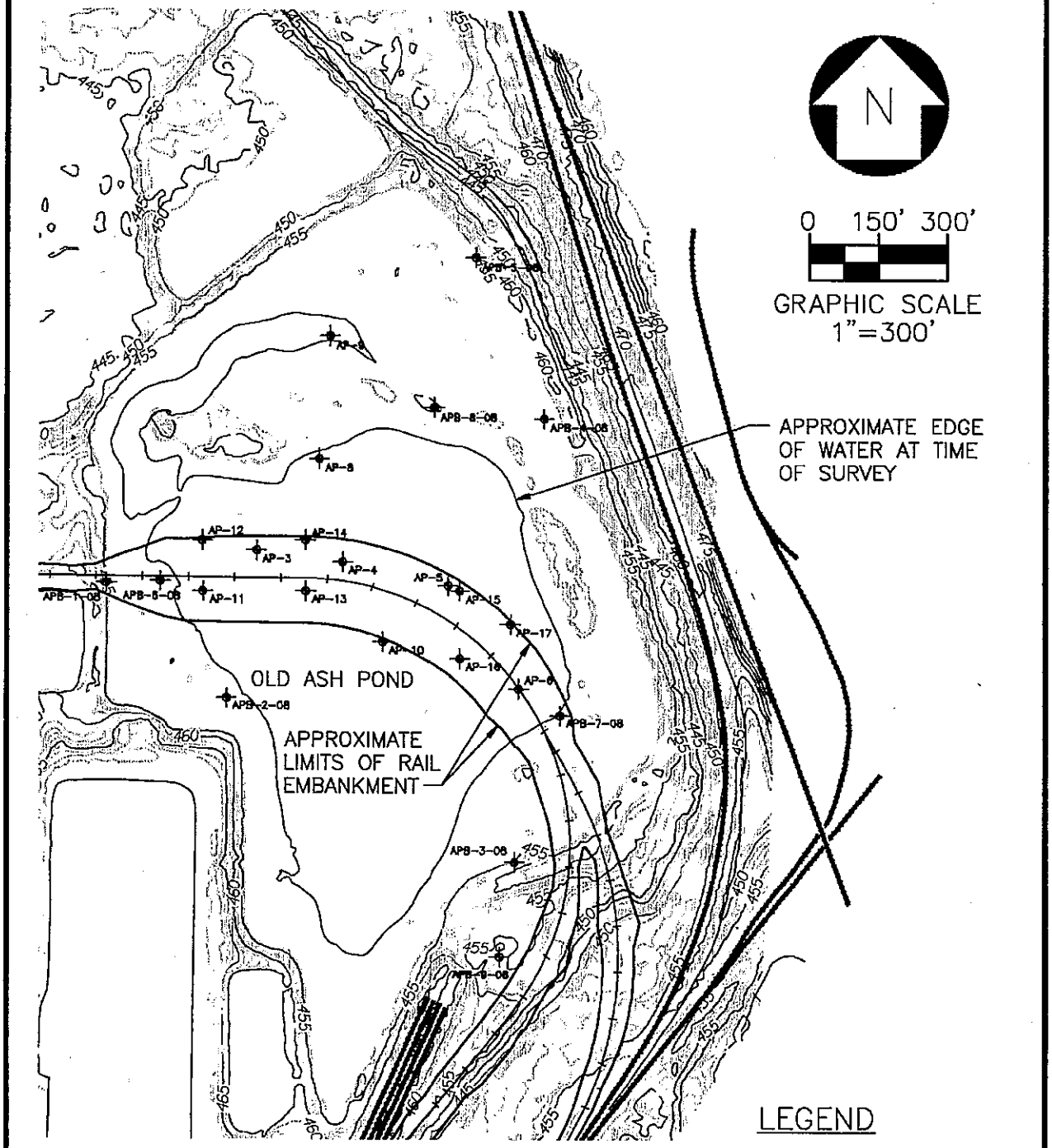
Regards,
Rick

Richard M. Frendt, P.E.
PATRICK ENGINEERING INC.
4970 Varsity Drive
Lisle, Illinois 60532-4101
Tel: 630.795.7464
Cell: 708.359.0806

Old Ash Pond - Location plan and borings.pdf



Lisle\Midwest Generation\21253.022–Powerton–Ash Pond Services–2012\Old Ash Pond Borings\21253.022–Borings

Date: 08/09/12	**MIDWEST GENERATION LLC OLD ASH POND BORINGS**	PATRICK ENGINEERING INC.
Proj No.: 21253.022	**POWERTON STATION PEKIN, ILLINOIS**	4970 Varsity Drive, Lisle, Illinois 60532-4101 TEL. (630) 795-7200 FAX (630) 724-1601
App. By: MDB		PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

MWG13-15_14226

PATRICK ENGINEERING INC.

BORING NUMBER **AP-3** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
435.5	8.5						
434.8	9.3		Dark brown/black organic silt, very soft, saturated, sediment OH				
			Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
432.8	11.3		Dark gray silty clay, trace roots, medium stiff, medium plasticity, saturated CL			○ 3.9	S.G.=3.01 at 11.6'
			Soft				
			Medium stiff				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/23/08** ENDED **7/23/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▽
▼

MWG13-15_14227

PATRICK ENGINEERING INC.

BORING NUMBER **AP-3** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
424.0	20.0		Silt and clay, medium stiff			43	LL=42 PL=20
421.0	23.0		Hand Auger Refusal at 23.0'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/23/08** ENDED **7/23/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▽
▽

MWG13-15_14228

PATRICK ENGINEERING INC.

BORING NUMBER **AP-4** SHEET 1 OF 1
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) * (1 2 3 4 5)	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
434.0	10.0		Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
425.0	19.0						
424.5	19.5		Dark gray/black silty clay, trace roots, soft CL				
			End of Boring at 19.5'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14229

PATRICK ENGINEERING INC.

BORING NUMBER **AP-5** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
434.8	9.3						
434.3	9.8		Gray/black organic silt, very soft, saturated, sediment OH				
			Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
424.5	19.5						

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14230

PATRICK ENGINEERING INC.

BORING NUMBER **AP-5** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
424.5	19.5		Dark gray silty clay, trace roots, soft, medium plasticity, saturated CL			43	
422.0	22.0		No roots				LL=36 PL=21 S.G.=2.65
			End of Boring at 22.0'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▽
▽

MWG13-15_14231

PATRICK ENGINEERING INC.

BORING NUMBER **AP-6** SHEET **1** OF **1**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
435.5	8.5						
435.0	9.0		Gray/black organic silt, very soft, saturated, sediment OH				
			Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
425.0	19.0						
424.5	19.5		Dark gray silty clay, medium plasticity, saturated CL				
			End of Boring at 19.5'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14232

PATRICK ENGINEERING INC.

BORING NUMBER **AP-8** SHEET **1** OF **1**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ ○ △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
438.5	5.5		Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
433.3	10.8					32 ○	
432.5	11.5		Dark gray clayey silt, medium stiff, low plasticity, saturated CL-ML				
			End of Boring at 11.5'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14233

PATRICK ENGINEERING INC.

BORING NUMBER **AP-9** SHEET 1 OF 1
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
442.0	2.0						
441.5	2.5		Gray/black organic silt, very soft, saturated, sediment OH				
			Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
			Black/dark gray silty clay seam				
434.0	10.0		Dark gray/black silty clay, trace roots, soft, medium plasticity, saturated CL				
432.0	12.0		End of Boring at 12.0'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/23/08** ENDED **7/23/08**

REMARKS

WATER LEVEL (ft.)
As noted

MWG13-15_14234

PATRICK ENGINEERING INC.

BORING NUMBER **AP-10** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
444.0	0.0		Water				Borings were completed from a pontoon on the Ash Pond. Soils were logged from hand auger cuttings and piston sampler cores.
435.0	9.0						
434.5	9.5		Gray/black organic silt, very soft, saturated, sediment OH				
			Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
			2" silty clay seam				
425.0	19.0						

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14235

PATRICK ENGINEERING INC.

BORING NUMBER **AP-10** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **MPG**
GROUND ELEVATION **444.0**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
425.0	19.0		Dark gray silty clay, some silt, trace roots, medium stiff, medium plasticity, moist			45 ○	
			No roots				
423.0	21.0		End of Boring at 21.0'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **7/24/08** ENDED **7/24/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14236

PATRICK ENGINEERING INC.

BORING NUMBER **AP-11** SHEET 1 OF 1
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **AFG**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Brown/gray coarse sand and gravel, little fine to medium sand, organic odor, wet SP				Soils were logged from hand auger cuttings.
	5.0		Saturated at approx. 5.0'				
			End of Boring at 5.0'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger**
DRILLING EQUIPMENT **Hand Auger**
DRILLING STARTED **8/12/08** ENDED **8/12/08**

REMARKS

WATER LEVEL (ft.)
▽ **5.0'**
▽
▽

MWG13-15_14237

PATRICK ENGINEERING INC.

BORING NUMBER **AP-12** SHEET **1** OF **1**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Powerton Plant**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
439.2	0.0		Water				Borings were completed from a pontoon boat on Ash Pond. Soils were logged from hand auger cuttings
436.5	2.8		Black medium sand, trace coarse, trace fine, loose, poorly graded, angular, saturated, coal cinders SP				
433.5	5.8		Refusal at 5.8'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/12/08** ENDED **8/12/08**

REMARKS

WATER LEVEL (ft.)
As noted

MWG13-15_14238

PATRICK ENGINEERING INC.

BORING NUMBER **AP-13** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Powerton Plant**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
439.2	0.0		Water				Borings were completed from a pontoon boat on the Ash Pond Soils were logged from hand auger cuttings and piston sampler cores
432.2	7.0		Black medium sand, trace coarse, trace fine, loose poorly graded, angular, saturated, coal cinders SP				
424.2	15.0		Gray silty clay, medium stiff, medium plasticity, saturated CL	PS-1 15.0-15.5			17.0 ft: Vane shear Su=750psf

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/12/08** ENDED **8/12/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14239

PATRICK ENGINEERING INC.

BORING NUMBER **AP-13** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Powerton Plant**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
419.2	20.0		Gray silty clay, medium stiff, medium plasticity, saturated CL	PS-2 20.0-20.5			
				PS-3 24.0-24.5			
414.2	25.0						qu=0.5 (disturbed)
413.7	25.5		Brown coarse to fine sand, trace coarse to fine gravel, trace silt, loose, poorly graded, saturated SP	PS-4 25.0-25.5			Undisturbed soil sampler pounded to 25.5' - tube damaged - refusal confirmed with bailer Hand auger refusal at 25.5'
			End of Boring 25.5'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/12/08** ENDED **8/12/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14240

PATRICK ENGINEERING INC.

BORING NUMBER **AP-14** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Powerton Plant**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
439.2	0.0		Water				Borings were completed from a pontoon boat on the Ash Pond Soils were logged from hand auger cuttings and piston sampler cores
432.2	7.0		Black medium sand, trace coarse, trace fine, loose poorly graded, angular, saturated, coal cinders SP				
424.7	14.5		Gray silty clay, medium stiff, medium plasticity, saturated CL	PS-1 15.0-15.5			17.0 ft: Vane shear Su=625 psf
			Clayey silt				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/13/08** ENDED **8/13/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▽
▽

MWG13-15_14241

PATRICK ENGINEERING INC.

BORING NUMBER **AP-14** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Powerton Plant**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) * (1 2 3 4 5)	NOTES & TEST RESULTS
419.2	20.0		Gray silty clay, medium stiff, medium plasticity, saturated CL	PS-2 20.0-20.5			
417.2	22.0		Brown coarse to fine gravel, loose, poorly graded, saturated SP	PS-3 22.0-22.5			
416.2	23.0		End of Boring at 23.0'				

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/13/08** ENDED **8/13/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▽
▽

MWG13-15_14242

PATRICK ENGINEERING INC.

BORING NUMBER **AP-15** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
439.2	0.0		Water				Borings were completed from a pontoon boat on the Ash Pond Soils were logged from hand auger cuttings and piston sampler cores
432.2	7.0		Black, medium sand, trace coarse, trace fine, loose poorly graded, angular, saturated, coal cinders SP				
427.2	12.0		Gray silty clay, medium stiff, medium plasticity, saturated CL				
425.2	14.0		Gray silty clay, medium stiff, saturated CL	PS-1 15.0-15.5			17.0 ft: Vane shear Su=625 psf
				PS-2 19.0-19.5			

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/13/08** ENDED **8/13/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14243

PATRICK ENGINEERING INC.

BORING NUMBER **AP-15** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
419.2	20.0		Gray silty clay, medium stiff, saturated CL				
				PS-3 21.5-22.0			21.0 ft: Vane shear Su=525 psf
				PS-4 26.0-27.0			
412.2	27.0		End of Boring at 27.0'				Confirmed gravel at 27.0'

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/13/08** ENDED **8/13/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▽
▼

MWG13-15_14244

PATRICK ENGINEERING INC.

BORING NUMBER **AP-16** SHEET 1 OF 2
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
439.2	0.0		Water				Borings were completed from a pontoon boat on the Ash Pond Soils were logged from hand auger cuttings and piston sampler cores
432.7	6.5		Black medium sand, trace coarse, trace fine, loose poorly graded, angular, saturated, coal cinders SP				
423.7	15.5		Gray silty clay, medium stiff, medium plasticity, saturated CL	PS-1 16.5-17.0			

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/14/08** ENDED **8/14/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14245

PATRICK ENGINEERING INC.

BORING NUMBER **AP-16** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL Ash Pond**

LOGGED BY **AFG**
GROUND ELEVATION **439.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
419.2	20.0		Gray silty clay, medium stiff, medium plasticity, saturated CL	PS-2 20.0-21.0			
				PS-3 22.0-23.0			
				PS-4 24.5-25.5			
412.2	27.0		End of Boring at 27.0'				Confirmed sand and gravel at 27.0'

DRILLING CONTRACTOR **Patrick Engineering**
DRILLING METHOD **Hand Auger/Piston Sampler**
DRILLING EQUIPMENT **Eijkelkamp**
DRILLING STARTED **8/14/08** ENDED **8/14/08**

REMARKS

WATER LEVEL (ft.)
▽ As noted
▼
▼

MWG13-15_14246

PATRICK ENGINEERING INC.

BORING NUMBER **APB-1-08** SHEET 1 OF 3
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Gravel				
	1.0		Dark brown silty clay fill with sand, cinders, gravel, very stiff FILL	SS-1 1.0-2.5 R=10"	4 4 5		qu=3.5*tsf
				SS-2 3.5-5.0 R=6"	7 6 8		qu=1.0*tsf
	6.5		Cinders, black FILL	SS-3 6.0-7.5	6 10 12		
			Cinders, some clay	SS-4 8.5-10.0 R=15"	2 8 6		qu=3.0*tsf
			Moist	SS-5 11.0-12.5 R=15"	3 3 6		
				SS-6 13.5-15.0	3 2 2		
			Wet				
	17.5		Dark gray silty clay with cinders, soft CL/FILL	ST-7 18.5-20.0 R=30"			

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/7/08** ENDED **8/7/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽
▽
▽

MWG13-15_14247

PATRICK ENGINEERING INC.

BORING NUMBER **APB-1-08** SHEET **2** OF **3**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ ○ △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	20.0		Dark gray silty clay with cinders, soft CL/FILL	ST-8 20.0-22.0 30" tube			
				SS-9 23.5-25.0 R=18"	1 2 2	44	qu=1.0*tsf
				SS-10 28.5-30.0 R=15"	2 3 2	23	qu=2.0*tsf
	31.0		Coarse sand, with gravel, loose to medium dense SP/GP	SS-11 33.5-35.0	1 1 1		
				SS-12 38.5-40.0	4 6 6		

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/7/08** ENDED **8/7/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽
▽
▼

MWG13-15_14248

PATRICK ENGINEERING INC.

BORING NUMBER **APB-1-08** SHEET **3** OF **3**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	40.0		Coarse sand, with gravel, loose to medium dense SP/GP				
				SS-13 43.5-45.0	2 5 6		
				SS-14 48.5-50.0	5 7 7		
	51.0		End of Boring at 51.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/7/08** ENDED **8/7/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽
▽
▽

MWG13-15_14249

PATRICK ENGINEERING INC.

BORING NUMBER **APB-2-08** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 50 LL / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		Topsoil				
	1.0		Brown silty clay with cinders, some gravel, very stiff FILL	SS-1 1.0-2.5 R=10"	9 15 17		qu=3.0*tsf
				SS-2 3.5-5.0 R=8"	5 6 8		qu=3.5*tsf
				SS-3 6.0-7.5 R=8"	3 3 18		
				SS-4 8.5-10.0 R=13"	5 12 13		
	10.5		Black silty clay with cinders, some gravel, very stiff FILL	SS-5 11.0-12.5 R=12"	6 18 22		qu=3.0*tsf
				SS-6 13.5-15.0	16 20 22		qu=4.0*tsf
				ST-7 18.0-20.0			

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/7/08** ENDED **8/7/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **20.0'** While Drilling
▽
▽

MWG13-15_14250

PATRICK ENGINEERING INC.

BORING NUMBER **APB-2-08** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	20.5		Black silty clay with cinders, some gravel, very stiff FILL				
				ST-8 22.0-24.0			
	23.0		Gray silty clay CL				
				ST-9 24.0-26.0			
	27.0		Black organic clay, trace sand, very stiff OL				
				SS-10 28.5-30.0 R=18"	0 0 3		qu=2.5*tsf
	32.0		Gray silty clay with gravel, stiff CL				
				SS-11 33.5-35.0 R=16"	2 3 3		qu=1.0*tsf
	35.0		Sand with clay, loose SP				
	38.0		Sand and gravel, loose SP/GP				
				SS-12 38.5-40.0	2 2 4		
	40.0		End of Boring at 40.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/7/08** ENDED **8/7/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **20.0'** While Drilling
▽
▽

MWG13-15_14251

PATRICK ENGINEERING INC.

BORING NUMBER **APB-3-08** SHEET 1 OF 4
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Brown sand and gravel, loose SP/GP				
				SS-1 1.0-2.5 R=8"	6 4 4		
	3.0		Brown medium to coarse sand, trace gravel, medium dense SP	SS-2 3.5-5.0 R=10"	4 8 10		% Sand=90 % Gravel=6.6 % Fines=3.5
				SS-3 6.0-7.5 R=16"	4 5 8		
				SS-4 8.5-10.0 R=16"	4 5 7		
				SS-5 11.0-12.5 R=14"	3 6 6		
				SS-6 13.5-15.0 R=16"	4 5 7		
				SS-7 18.5-20.0	3 4 4		

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED **8/8/08** ENDED **8/8/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▼
▼

MWG13-15_14252

PATRICK ENGINEERING INC.

BORING NUMBER **APB-3-08** SHEET **2** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
	20.0		Brown medium to coarse sand, trace gravel, medium dense SP				
	24.0		▽ Coarse sand, some gravel, saturated SP	SS-8 23.5-25.0 R=16"	5 6 6		
				SS-9 28.5-30.0 R=16"	6 11 12		
				SS-10 33.5-35.0	4 5 3		% Sand=95.8 % Gravel=3.3 % Fines=0.9
				SS-11 38.5-40.0 R=14"	3 4 8		

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED **8/8/08** ENDED **8/8/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling

MWG13-15_14253

PATRICK ENGINEERING INC.

BORING NUMBER **APB-3-08** SHEET **3** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	40.0		Coarse sand, some gravel, saturated SP				
				SS-12 43.5-45.0 R=0"	6 11 11		
				SS-13 48.5-50.0 R=16"	3 5 7		
			Blind drilling started at 50.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED **8/8/08** ENDED **8/8/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▼
▼

MWG13-15_14254

PATRICK ENGINEERING INC.

BORING NUMBER **APB-3-08** SHEET **4** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ LL 10 20 30 40 50 / Unconfined Compressive Strength (TSF) ✳ 1 2 3 4 5	NOTES & TEST RESULTS
	60.0		Possible cobbles/weathered rock at 61.0'				
	67.0		Auger Refusal at 67.0' End of Boring at 67.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED **8/8/08** ENDED **8/8/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▽
▽

MWG13-15_14255

PATRICK ENGINEERING INC.

BORING NUMBER **APB-4-08** SHEET 1 OF 4
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) * (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Brown medium sand with gravel fill, medium dense				
			FILL	SS-1 1.0-2.5 R=10"	4 4 5		
				SS-2 3.5-5.0 R=12"	3 3 5		
				SS-3 6.0-7.5 R=12"	4 5 7		
	9.0		Tan medium to coarse sand, with gravel, loose to medium dense	SS-4 8.5-10.0 R=13"	6 9 13		
			SP/GP	SS-5 11.0-12.5 R=12"	4 3 4		% Sand=81.3 % Gravel=10.5 % Fines=8.2
				SS-6 13.5-15.0 R=12"	4 3 4		
	17.0		Brown clay with silt, stiff	SS-14 16.0-17.5 R=12"	4 3 3		qu=1.5*tsf
			CL				
			Rust stains	SS-7 18.5-20.0 R=16"	2 3 5		qu=1.5*tsf

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **28.5** While Drilling
▽
▽

MWG13-15_14256

PATRICK ENGINEERING INC.

BORING NUMBER **APB-4-08** SHEET **2** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	20.0		Brown clay with silt, stiff				
	21.0		CL				
			Brown medium to coarse sand, loose to very loose, wet	SS-16 21.0-22.5	4 4 4		
			SP				
				SS-8 23.5-25.0 R=10"	1 2 2		
	28.5	▽					
			Saturated	SS-9 28.5-30.0 R=12"	2 2 1		
				SS-10 33.5-35.0	3 1 1		
				SS-11 38.5-40.0	2 2 4		

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **28.5** While Drilling
▽
▽

MWG13-15_14257

PATRICK ENGINEERING INC.

BORING NUMBER **APB-4-08** SHEET **3** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 50 LL / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
	40.0		Brown medium to coarse sand, loose to very loose, wet SP				
				SS-12 43.5-45.0 R=18"	4 6 6		% Sand=96.9 % Gravel=2.3 % Fines=0.8
			Coarse sand	SS-13 48.5-50.0 R=16"	0 4 6		
			Blind drilling started at 50.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **28.5** While Drilling
▽
▽

MWG13-15_14258

PATRICK ENGINEERING INC.

BORING NUMBER **APB-4-08** SHEET **4** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	60.0						
	72.0		Auger Refusal at 72.0' on apparent bedrock End of Boring at 72.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **28.5** While Drilling
▼
▼

MWG13-15_14259

PATRICK ENGINEERING INC.

BORING NUMBER **APB-5-08** SHEET **1** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) ✳ 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		Brown medium coarse sand, loose SP				
				SS-1 1.0-2.5 R=14"	4 4 4		
				SS-2 3.5-5.0 R=16"	4 3 3		
				SS-3 6.0-7.5 R=14"	2 1 3		
				SS-4 8.5-10.0 R=14"	2 3 2		% Sand=96.4 % Gravel=2.2 % Fines=1.4
				SS-5 11.0-12.5 R=14"	1 1 3		
				SS-6 13.5-15.0 R=14"	3 4 6		
	16.0		Brown medium to coarse sand, with trace gravel, loose	SS-7 16.0-17.5 R=10"	2 2 2		
				SS-8 18.5-20.0 R=12"	3 3 3		

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▽
▽

MWG13-15_14260

PATRICK ENGINEERING INC.

BORING NUMBER **APB-5-08** SHEET **2** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	20.0		Brown medium to coarse sand, with trace gravel, loose				
	22.0		Brown coarse to medium sand, with gravel, loose, saturated SP				
	24.0		▽	SS-9 23.5-25.0 R=12"	3 2 3		
				SS-10 28.5-30.0 R=12"	5 7 3		% Sand=95.7 % Gravel=1.6 % Fines=2.8
				SS-11 33.5-35.0 R=8"	1 1 1		
				SS-12 38.5-40.0 R=16"	1 2 5		
	40.0						

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▽
▽

MWG13-15_14261

PATRICK ENGINEERING INC.

BORING NUMBER **APB-5-08** SHEET **3** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	40.0		Medium to coarse sand, with gravel, loose SP				
				SS-13 43.5-45.0 R=8"	2 1 3		
			Blind drilling began at 45.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▽
▽

MWG13-15_14262

PATRICK ENGINEERING INC.

BORING NUMBER **APB-5-08** SHEET **4** OF **4**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	60.0						
	70.5		Auger refusal at 70.5' on apparent bedrock End of Boring at 70.5'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/11/08** ENDED **8/11/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **24.0** While Drilling
▽
▽

MWG13-15_14263

PATRICK ENGINEERING INC.

BORING NUMBER **APB-6-08** SHEET 1 OF 1
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) * (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Brown fine to coarse sand, with gravel, medium dense				
			SP	SS-1 1.0-2.5 R=10"	6 4 5		
	4.0	▽		SS-2 3.5-5.0 R=12"	8 8 5		
				SS-3 6.0-7.5 R=8"	3 3 4		% Sand=60 % Gravel=35.3 % Fines=4.7
			Saturated	SS-4 8.5-10.0 R=14"	8 5 4		
			Medium to coarse sand	SS-5 11.0-12.5 R=13"	11 10 6		
			Coarse sand	SS-6 13.5-15.0 R=18"	5 5 6		% Sand=85.7 % Gravel=12.5 % Fines=1.9
				SS-7 16.0-17.5	12 6 6		
				SS-8 18.5-20.0	11 6 6		
	20.0		End of Boring at 20.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **4 1/4" HS**
DRILLING STARTED **8/13/08** ENDED **8/13/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **4.0** While Drilling
▽
▽

MWG13-15_14264

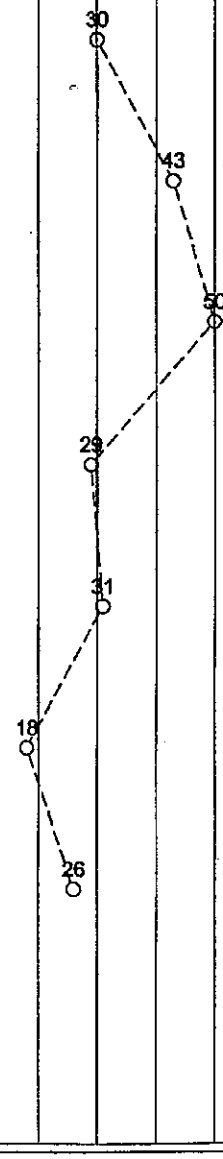
PATRICK ENGINEERING INC.

BORING NUMBER **APB-7-08** SHEET 1 OF 1
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	NOTES & TEST RESULTS
	0.0		Gray silty clay, high plasticity, medium stiff			
			CH	SS-1 1.0-2.5 R=18"	1 3 2	qu=0.5*tsf LL=40 PI=19
				ST-2 3.5-5.0		qu=1.0*tsf LL=53 PI=28 % Clay=54 % Silt=45.4
	5.5		Gray silty clay with sand seams, medium stiff	SS-3 6.0-7.5 R=18"	1 1 1	qu=1.0*tsf % Clay=44.9 % Sand=25.2 % Silt=29.9
	8.0		Dark gray silty clay, with sand seams, high plasticity, medium stiff, wet			
			CH	SS-4 8.5-10.0 R=18"	1 2 3	qu=0.5*tsf % Clay=45.7 % Silt=45.7 % Sand=8.5
				SS-5 11.0-12.5 R=18"	2 3 5	qu=1.0*tsf LL=49 PI=30
	13.5		Gray silty sand, loose	SS-6 13.5-15.0 R=16"	2 3 4	% Sand=74.3 % Silt=11.1 % Clay=13.1
			SM			
	15.0		Dark gray silty clay, medium stiff			
			CL	SS-7 16.0-17.5 R=15"	2 3 3	qu=0.5*tsf LL=40 PI=25
	17.5		Fine to coarse sand, with gravel, medium dense			
			SP	SS-8 18.5-20.0	8 10 9	
	20.0		End of Boring at 20.0'			

Water Content: PL ○ LL △ (10 20 30 40 50)
Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)



DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED **8/13/08** ENDED **8/13/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽
▼
▼

MWG13-15_14265

PATRICK ENGINEERING INC.

BORING NUMBER **APB-8-08** SHEET **1** OF **1**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
	0.0		Brown fine to coarse sand, some gravel, loose to medium dense SP				
				SS-1 1.0-2.5 R=12"	6 4 6		
				SS-2 3.5-5.0 R=12"	2 2 4		% Sand=82.5 % Gravel=8.7 % Fines=8.9
				SS-3 6.0-7.5 R=6"	3 4 4		
				SS-4 8.5-10.0 R=4"	4 6 7		
	10.5		Brown and gray coarse sand, gravel, loose to medium dense, wet				
				SS-5 11.0-12.5 R=12"	3 3 5		
	12.0	▽		SS-6 13.5-15.0	8 7 6		% Sand=75 % Gravel=19.1 % Fines=5.9
				SS-7 16.0-17.5	9 8 7		
				SS-8 18.5-20.0	3 4 5		
	20.0		End of Boring at 20.0'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED **8/14/08** ENDED **8/14/08**

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽ **12.0** While Drilling
▽
▽

MWG13-15_14266

PATRICK ENGINEERING INC.

BORING NUMBER **APB-9-08** SHEET **1** OF **1**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**

LOGGED BY **KRM**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Brown clay and sand	SS-1	2		
			FILL	0.0-1.5	4		
	1.0			R=10"	2		
			Cinders, sand and slag	SS-2	3		
			FILL	1.5-3.0	2		
				R=5"	2		
				SS-3	2		
				3.0-4.5	1		
	4.5			R=10"	1		
			End of Boring at 4.5'				

DRILLING CONTRACTOR **Terracon**
DRILLING METHOD **D90**
DRILLING EQUIPMENT **HS**
DRILLING STARTED ENDED

REMARKS
Boring backfilled with grout slurry.

WATER LEVEL (ft.)
▽
▽
▽

MWG13-15_14267

PATRICK ENGINEERING INC.

BORING NUMBER **APB-10-08** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **20803.041**
LOCATION **Pekin, IL**
LOGGED BY **JK**
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □----○----△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
	0.0		Organic silt				
	1.0		Light tan silt, trace sand and clay, medium stiff, moist ML	SS-1 1.0-2.5 12"R	4 3 2		
				SS-2 3.5-5.0 18"R	6 4 5		
				SS-3 6.0-7.5 18"R	6 5 8		
	8.0		Dark brown silty sand to sandy silt, with some gravel, loose, moist SM	SS-4 8.5-10.0 18"R	7 5 4		
				SS-5 11.0-12.5 18"R	3 3 3		
	13.0		Dark brown sandy silty clay, with some gravel, medium stiff, moist SC/CL	SS-6 13.5-15.0 18"R	2 4 4		
	19.0			SS-7 18.5-20.0 14"R	2 2 2		
	20.0		Light tan to brown silty sand, some gravel, loose, wet				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **CME-75**
DRILLING EQUIPMENT **3.25" I.D. HSA**
DRILLING STARTED **8/18/08** ENDED **8/18/08**

REMARKS
Borehole sealed with cuttings and bentonite chips.

WATER LEVEL (ft.)
▽ **9.0'** While Drilling
▽
▽

MWG13-15_14268

PATRICK ENGINEERING INC.

BORING NUMBER APB-10-08 SHEET 2 OF 2
CLIENT Midwest Generation
PROJECT & NO. 20803.041
LOCATION Pekin, IL

LOGGED BY JK
GROUND ELEVATION

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL / Unconfined Compressive Strength (TSF)	NOTES & TEST RESULTS
	20.0		Tan fine to coarse sand, lose, wet SP				
				SS-8 21.0-22.5 12"R	2 2 3		
	23.0		Multi-color very sandy gravel, loose, wet SP/GP				
				SS-9 23.5-25.0 10"R	2 2 2		
				SS-10 26.0-27.5 12"R	3 5 3		
				SS-11 28.5-30.0 12"R	2 2 2		
	30.0		End of Boring at 30.0'				

DRILLING CONTRACTOR Groff Testing
DRILLING METHOD CME-75
DRILLING EQUIPMENT 3.25" I.D. HSA
DRILLING STARTED 8/18/08 ENDED 8/18/08

REMARKS
Borehole sealed with cuttings and bentonite chips.

WATER LEVEL (ft.)
▽ 9.0' While Drilling
▽
▼

MWG13-15_14269