

APPENDIX A  
TEST PIT LOGS

# TEST PIT LOG

PROJECT NO.: 3437-N61  
PROJECT: Penn Yan Gas Plant  
CLIENT: NYSEG  
CONTRACTOR: City Hill Construction, Inc.

TEST PIT NO. TP-2  
LOCATION: Penn Yan, N.Y.  
TRC Inspector: R. Fox

DATE STARTED: 11/19/86  
PIT DIMENSIONS (W X L X D)): 3.0' x 10.0' x 8.0'

DATE COMPLETED: 11/19/86

Depth (ft)	Description
0.0-1.0	Dark brown silt and clay fill, with gravel.
1.0-8.0	Same material as above, including small boulders, whole bricks and occasional large boulders. Wood fragments found at 2.0 ft.

OVA response - backhoe sample from 8.0 ft. Ambient.

Composite sample taken from 5.0 ft. to 7.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-3

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: R. Fox

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/20/86

DATE COMPLETED: 11/20/86

PIT DIMENSIONS (W X L X D): 2.0' x 9.8' x 11.2'

Depth (ft)

Description

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0.0-0.5	Found partial concrete foundation at 0.5 ft. Moved pit to south of foundation and continued excavation.
0.0-1.0	Dark brown soil fill, including cobbles and brick fragments.
1.0-3.0	Same material as above with increasing amounts of red clay, coal clinkers and wood fragments.
3.0-5.0	Same as above, with concrete slab fragments.
5.0-11.2	Same as above, with increasing amounts of brick fragments.

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OVA response - backhoe sample from 8 ft. Ambient.

Composite sample taken from 4.0 ft. to 8.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-4

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: R. Fox

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/20/86

DATE COMPLETED: 11/20/86

PIT DIMENSIONS (W X L X D)): 2.0' x 10.8' x 5.0'

Depth (ft)	Description
0.0-0.5	Compacted fill.
0.5-5.0	Black sandy fill containing wood, concrete and brick fragments.

OVA response - backhoe sample from 5.0 ft. 10 ppm.

Composite sample taken from 3.0 ft. to 5.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-5

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: R. Fox

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/19/86

DATE COMPLETED: 11/19/86

PIT DIMENSIONS (W X L X D)): 2.0' x 9.3' x 8.4'

Depth (ft)

Description

0.0-0.5 Dark brown gravel fill.

0.5-8.4 Medium brown clay, some silt with fine sand and coarse gravel.

OVA response - backhoe sample from 7.0 ft. Ambient.

Composite sample taken from 3.0 ft. to 7.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-6

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: R. Fox

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/19/86

DATE COMPLETED: 11/19/86

PIT DIMENSIONS (W X L X D)): 2.0' x 9.0' x 8.9'

Depth (ft)

Description

0.0-8.9

Medium brown clay, some silt, little fine sand and gravel.

OVA response - backhoe sample from 7.0 ft. Ambient.

Composite sample taken from 5.0 ft. to 7.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-7

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: R. Fox

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/18/86

DATE COMPLETED: 11/18/86

PIT DIMENSIONS (W X L X D): 2.0' x 13.9' x 6.8'

Depth (ft)

Description

0.0-6.8

Red-brown silt, some clay, fine sand and gravel. Pit extended 3 ft. to the north.

OVA response - backhoe sample taken from 6.8 ft. Ambient.

Sample for laboratory analysis not taken here.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-8

PROJECT: Penn Yan Gas Plant

CLIENT: NYSEG

LOCATION: Penn Yan, N.Y.

CONTRACTOR: City Hill Construction, Inc.

TRC Inspector: R. Fox

DATE STARTED: 11/18/86

DATE COMPLETED: 11/18/86

PIT DIMENSIONS (W X L X D)): 2.0' x 8.0' x 2.9'

Depth (ft)

Description

0.0-1.0 Gravel fill with brick fragments.

1.0-2.9 Rubble fill, including wood, brick and glass fragments.  
Concrete floor of relief gas holder found at 2.9 ft.

OVA response - backhoe sample from 2.9 ft. Ambient.

Composite sample taken from 2.0 ft. to 2.9 ft. for laboratory analysis.



# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-9

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: L. Stewart

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/18/86

DATE COMPLETED: 11/18/86

PIT DIMENSIONS (W X L X D)): 2.0' x 12.0' x 3.8'

Depth (ft)	Description
0.0-0.5	Dark brown soil fill.
0.5-3.8	Brown-black rubble fill, including large coal clinkers. Brick wall of tank relief gas holder at 1.0 ft. with clinkers found outside of holder perimeter. Sandy, soil fill found inside of holder perimeter. Hit cement footer at 3.0 ft. Hit cement floor of holder at 3.8', extended pit 6 ft. to the west.

OVA response - backhoe sample from 3.5 ft. Ambient.

Composite sample taken from 2.5 ft. to 3.5 ft. from inside of holder perimeter for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-10

PROJECT: Penn Yan Gas Plant

CLIENT: NYSEG

LOCATION: Penn Yan, N.Y.

CONTRACTOR: City Hill Construction, Inc.

TRC Inspector: R. Fox

DATE STARTED: 11/21/86

DATE COMPLETED: 11/21/86

PIT DIMENSIONS (W X L X D)): 2.0' x 8.0' x 4.8'

Depth (ft)

Description

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0.0-3.0	Brown sand and gravel. Cobble sizes increase with depth.
3.0-4.8	Reddish brown clay fill, including brick fragments. Hit 1.5 inch pipe at 4.7 ft.

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Composite sample taken from 2.0 ft to 4.5 ft for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61  
PROJECT: Penn Yan Gas Plant  
CLIENT: NYSEG  
CONTRACTOR: City Hill Construction, Inc.

TEST PIT NO. TP-11  
LOCATION: Penn Yan, N.Y.  
TRC Inspector: R. Fox

DATE STARTED: 11/21/86

DATE COMPLETED: 11/21/86

PIT DIMENSIONS (W X L X D)): 2.0' x 9.2' x 10.0'

Depth (ft)	Description
0.0-2.0	Dark brown coarse sand fill with medium cobbles.
2.0-10.0	Medium brown undisturbed clay. Water at 10.0 ft.

OVA response - backhoe sample from 10.0 ft. Ambient.

Composite sample taken from 5.0 ft. to 10.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61  
PROJECT: Penn Yan Gas Plant  
CLIENT: NYSEG  
CONTRACTOR: City Hill Construction, Inc.

TEST PIT NO. TP-14  
LOCATION: Penn Yan, N.Y.  
TRC Inspector: R. Fox

DATE STARTED: 11/18/86

DATE COMPLETED: 11/18/86

PIT DIMENSIONS (W X L X D)): 2.0' x 5.0' x 5.5'

Depth (ft)	Description
0.0-3.0	Gravel fill, including wood chips and brick fragments. Large foundation stones found at 3.0 ft.
3.00-5.5	Rubble fill, including brick and wood fragments, and large foundation stones. Backhoe could not continue through wood timbers found at 5.5 ft.

OVA response - backhoe sample from 5.5 ft. Ambient.

Composite sample taken from 3.0 ft. to 5.5 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-15

PROJECT: Penn Yan Gas Plant

CLIENT: NYSEG

LOCATION: Penn Yan, N.Y.

CONTRACTOR: City Hill Construction, Inc.

TRC Inspector: L. Stewart

DATE STARTED: 11/14/86

DATE COMPLETED: 11/14/86

PIT DIMENSIONS (W X L X D)): 2.0' x 8.0' x 6.0'

Depth (ft)

Description

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0.0-0.5	Coarse sand and gravel fill. Railroad tie found at 0.5 ft.
0.5-3.0	Fill, including coal clinkers, ash, and fragments of brick, wood and glass.
3.0-4.0	Tan clay.
4.0-6.0	Clay darkens to black. Strong coal odor at 4.0 ft. Backhoe bucket sample shows coal tar contamination in clay.

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OVA response - backhoe sample from 6.0 ft. 520 ppm.

Composite sample taken from 4.0 ft. to 6.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-16

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: L. Stewart

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/14/86

DATE COMPLETED: 11/14/86

PIT DIMENSIONS (W X L X D)): 2.0' x 8.0' x 5.8'

Depth (ft)

Description

0.0-0.5	Black fill, including ash, coal clinkers, wood and brick fragments.
1.6-5.8	Sandy, fill with clay. Blue-green and orange zone, 3 in. thick at 2.5 ft. (Moderate coal tar odor at 4.5 ft.) A black, low-viscosity material seeped from western side of pit.

OVA response - backhoe sample from 3.9 ft. 3 ppm.

Composite sample taken from 2.5 ft. to 3.9 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-17

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: L. Stewart

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/18/86

DATE COMPLETED: 11/18/86

PIT DIMENSIONS (W X L X D)): 2.0' x 6.0' x 5.5'

Depth (ft)

Description

0.0-0.5

Soil fill.

0.5-5.5

Black, sandy rubble fill, including light gray ash, coal clinkers, wood chips, brick fragments. Water at 5.5 ft.

OVA response - backhoe sample from 5.5' Ambient.

Composite sample taken from 3.0 ft. to 5.5 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61  
PROJECT: Penn Yan Gas Plant  
CLIENT: NYSEG  
CONTRACTOR: City Hill Construction, Inc.

TEST PIT NO. TP-18  
LOCATION: Penn Yan, N.Y.  
TRC Inspector: L. Stewart

DATE STARTED: 11/14/86

DATE COMPLETED: 11/14/86

PIT DIMENSIONS (W X L X D)): 2.0' x 6.0' x 6.3'

Depth (ft)

Description

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0.0-0.5            Soil fill, sand and gravel

0.5-6.3            Black rubble fill, including fragments of bricks and wood  
                     beams.

Purifier waste found at 4.7 ft.

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OVA response - backhoe sample from 6.3 ft. 4.0 ppm.

Composite sample taken from 3.0 ft. to 6.0 ft. for laboratory  
analysis.



# TEST PIT LOG

PROJECT NO.: 3437-N61

TEST PIT NO. TP-19

PROJECT: Penn Yan Gas Plant

LOCATION: Penn Yan, N.Y.

CLIENT: NYSEG

TRC Inspector: L. Stewart

CONTRACTOR: City Hill Construction, Inc.

DATE STARTED: 11/20/86

DATE COMPLETED: 11/20/86

PIT DIMENSIONS (W X L X D)): 2.0' x 3.0' x 4.0'

Depth (ft)	Description
0.0-0.5	Gravel fill.
0.5-4.0	Dark brown to black clay fill. Coal tar contamination visible in clay.  Brick fragments found in clay. Strong coal tar odor, but OVA response was ambient. Water at 4.0 ft.
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	OVA response - backhoe sample from 4.0 ft. 1.2 ppm.
	Composite sample taken from 2.5 ft. to 4.0 ft. for laboratory analysis.

# TEST PIT LOG

PROJECT NO.: 3437-N61  
PROJECT: Penn Yan Gas Plant  
CLIENT: NYSEG  
CONTRACTOR: City Hill Construction, Inc.

TEST PIT NO. TP-20  
LOCATION: Penn Yan, N.Y.  
TRC Inspector: R. Fox

DATE STARTED: 11/21/86

DATE COMPLETED: 11/21/86

PIT DIMENSIONS (W X L X D)): 2.0' x 8.0' x 3.9'

Depth (ft)	Description
0.0-2.0	Brown soil fill with cobbles.
2.0-3.9	Same material as above, with brick fragments. Water at 3.9 ft.

OVA response - backhoe sample from 3.9 ft. Ambient.

Sample for laboratory analysis not taken here.

## APPENDIX B

### BORING LOGS AND WELL CONSTRUCTION DIAGRAMS

PROJECT NO. 3437 N61

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BORING NO. 106

BORING NO. MW 10

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: ISSC 736.03'

DATE STARTED: 11/17/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 54.0'

COMPLETED: 11/18/86

LOCATION: Penn Yan, New York

CASING STICK UP: 0.33"

TOP OF SCREEN: 44.0'

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 17.3'

BOTTOM OF SCREEN: 54.0'

DRILLER: A. Bo

DRILLING METHOD: Spun Casing/Hollow Stem Auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
0-5'					Loose, brown/dark brown, medium SAND and SILT, rubble (brick fragments, coal clinkers).	Hollow stem auger to 2' spun casing starting at 2'
5-7'	2-3-2-4	50	ND		Same as above including cobbles.	ND = Non Detected <0.1 ppm.
7-9'	2-4-6-7	50	ND		Same as above grading to medium dense, moist, including wood chips.	
9-11'	3-6-7-10	75	ND		Medium dense, brown, SILT, little clay, trace fine gravel.	

PROJECT NO. 3437 N61      PAGE     OF          BORING NO. MW 1D  
 PROJECT: NYSEG - Penn Yan      TOP OF CASING ELEVATION: TSSC 736.03'      DATE STARTED: 11/17/86  
 CLIENT: New York State Electric and Gas Corp.      WELL DEPTH: 54.0'      COMPLETED: 11/18/86  
 LOCATION: Penn Yan, New York      CASING STICK UP: 0.33"      TOP OF SCREEN: 44.0'  
 DRILLING CONTRACTOR: Empire Soils Inv., Inc.      WATER LEVEL: 17.3'      BOTTOM OF SCREEN: 54.0'  
 DRILLER: A. Bo      DRILLING METHOD: Spun Casing/Hollow Stem Auger 4"  
 TRC INSPECTOR: BEG      COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
11-13'	3-6-7-10	75	ND		Same as above.	
13-15'	4-7-10-15	65	ND		Same as above.	
15-17'					No recovery.	
17-19'	7-14-17-19	90	ND		Hard, brown, SILT, little clay, moist.	Hollow stem auger 4". Water at 17.3'

PROJECT NO. 3437-N61

PAGE 1 OF 1

BOF 10G

BORING NO. MW ID

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 736.03'

DATE STARTED: 11/17/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 54.0'

COMPLETED: 11/18/86

LOCATION: Penn Yan, New York

CASING STICK UP: 0.33"

TOP OF SCREEN: 44.0'

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 17.3'

BOTTOM OF SCREEN: 54.0'

DRILLER: A. Bo

DRILLING METHOD: Spun Casing/Hollow Stem Auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
19-21'	7-7 10-15	80	ND		Very stiff, brown, CLAY, little silt.	
21-23	28-32-20-30	80	ND		.8' Hard, brown, SILT, little clay, trace fine gravel.	
					.9' Very dense, brown, SAND, some silt, trace shale and sandstone fragments.	
23-25'	13-20-20-10	50	ND		.5' Same as above. .5' Hard, brown, SILT, some clay.	
25-27'	10-8-8-10	50	ND		Same as above, grading to very stiff and trace fine gravel.	

PROJECT NO. 3437 NG1  
 PROJECT: NYSEG - Penn Yan  
 CLIENT: New York State Electric and Gas Corp.  
 LOCATION: Penn Yan, New York  
 DRILLING CONTRACTOR: Empire Soils Inv., Inc.  
 DRILLER: A. Bo  
 TRC INSPECTOR: BEG

PAGE OF  
 BORING NO. MW-1D  
 TOP OF CASING ELEVATION: TSSC 736.03'  
 WELL DEPTH: 54.0'  
 CASING STICK UP: 0.33"  
 WATER LEVEL: 17.3'  
 DATE STARTED: 11/17/86  
 COMPLETED: 11/18/86  
 TOP OF SCREEN: 44.0'  
 BOTTOM OF SCREEN: 54.0'  
 DRILLING METHOD: Spun Casing/Hollow Stem Auger - 4"  
 COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
27-29'	7-8-9-10	90	ND		Same as above.	
29-31'	5-4-6-5	100	ND		Stiff, dark brown, SILT and CLAY, trace fine gravel.	
31-33'	4-5-5-5	100	ND		Same as above.	
33-35'	3-3-3-4	100	ND		Firm, same as above.	

PROJECT NO. 3437-N61

PAGE OF

BORING LOG

BORING NO. MW 10

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 736.03'

DATE STARTED: 11/17/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 54.0'

COMPLETED: 11/18/86

LOCATION: Penn Yan, New York

CASING STICK UP: 0.33"

TOP OF SCREEN: 44.0'

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 17.3'

BOTTOM OF SCREEN: 54.0'

DRILLER: A. Bo

DRILLING METHOD: Spun Casing/Hollow Stem Auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
35-37'	3-3 10-20	100	ND		Medium dense, grayish brown, grading to fine SAND.	
37-39'	10-12-14-16	50	ND		Grading to medium SAND.	
39-41'	8-10-12-12	60	ND		Grading to coarse SAND.	
41-43'	8-10-12-12	100	ND		Grading to fine SAND.	



PROJECT NO. 3437 N61

PAGE \_\_\_\_ OF \_\_\_\_

BDRIT OG

BORING NO. MW:10

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 736.03'

DATE STARTED: 11/17/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 54.0'

COMPLETED: 11/18/86

LOCATION: Penn Yan, New York

CASING STICK UP: 0.33"

TOP OF SCREEN: 44.0'

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 17.3'

BOTTOM OF SCREEN: 54.0'

DRILLER: A. Bo

DRILLING METHOD: Spun Casing/Hollow Stem Auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
43-45'	9-11-13-13	80	ND		Same as above.	
45-47'	10-10-10-10	100	ND		Same as above.	
47-49'	10-10-10-8	65	ND		Grading to medium sand.	
49-51'	12-8-10-10	70	ND		Grading to medium GRAVEL including large cobbles.	

## BORING LOG

PROJECT NO. 3437-N61

PAGE 1 OF 1

BORING NO. MW 10

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 736.03'

DATE STARTED: 11/17/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 54.0'

COMPLETED: 11/18/86

LOCATION: Penn Yan, New York

CASING STICK UP: 0.33"

TOP OF SCREEN: 44.0'

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 17.3'

BOTTOM OF SCREEN: 54.0'

DRILLER: A. Bo

DRILLING METHOD: Spun Casing/Hollow Stem Auger 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless Steel Monitoring Well Pumped Until Clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA NO	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
51-53'	10-14-18-24	65	NO		Dense, grading to coarse SAND.	
53-55'	18-26-50-65	25	NO		Very dense, grading to medium SAND.	Monitoring well set and completed at 54'.



PROJECT NO. 3437 N61

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BOP LOG

BORING NO. MW 25

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 720.14'

DATE STARTED: 11/24/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 19'

COMPLETED: 11/25/86

LOCATION: Penn Yan, NY

CASING STICK UP: 0.57"

TOP OF SCREEN: 3.3

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 6'

BOTTOM OF SCREEN: 19'

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well. Pumped until clear.

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
0-5'					Rubble, fill, including bricks and wood fragments, wood chips, and large stone slabs.	Augered first 5' without taking a split spoon sample.
5-7'	5-4-4-4	60	ND		Black FILL, including coal clinker, ash, brick, wood fragments.	Water at 6.0'.
9-11'	3-5-8-12	60	ND		Same as above.	
13-15'	4-5-7-8	75	ND		Firm, reddish-brown, SILT, little clay, trace fine gravel.	

## BORING LOG

PROJECT NO. 3437 N61

PAGE 1 OF 1

BORING NO. MW-25 \_\_\_\_\_

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 720.14'

DATE STARTED: 11/24/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 19'

COMPLETED: 11/25/86

LOCATION: Penn Yan, NY

CASTING STICK UP: 0.57"

TOP OF SCREEN: 3.3\_\_

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 6' \_\_\_\_\_

BOTTOM OF SCREEN: 19' ..

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger - 4".

TRC INSPECTOR: BEG\_\_\_\_\_

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well, Pumped until clear, \_\_\_\_\_

[illegible]

PROJECT NO. 3437-N61

PAGE \_\_\_\_ OF \_\_\_\_

BOR \_\_\_\_ OG

BORING NO. MW\_35

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 718.17'

DATE STARTED: 11/25/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 17'

COMPLETED: 11/25/86

LOCATION: Penn Yan, NY

CASING STICK UP: 0.56"

TOP OF SCREEN: 1.3'

DRILLING CONTRACTOR: Empire Soils Inv., Inc.

WATER LEVEL: 4'

BOTTOM OF SCREEN: 17'

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well. Pumped until clear.

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
0-5'					Black rubble FILL, including light gray ash, wood chips, and coal clinkers.	Augered first 5' without taking split spoon samples.
5-7'	3-2-2-3	60	ND		Very loose, dark brown fine sand and silt. FILL, including coal clinkers and wood fragments.	
9-11'	4-5-5-6	90	>10 ppm		Very loose, reddish brown fine SAND and CLAY, little silt.	Could be fill.
13-15'	2-2-2-2	60	ND		Same as above, grading to very loose, including a wood fragment.	Augered to 17' and set monitoring well. Could be fill.

PROJECT NO. 3437-N6.1

PAGE \_\_\_\_ OF \_\_\_\_

BORING NO. MW-40

BORING NO. MW-40

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 718.87'

DATE STARTED: 11/21/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 39'

COMPLETED: 11/24/86

LOCATION: Penn Yan, NY

CASING STICK UP: 0.49"

TOP OF SCREEN: 29'

DRILLING CONTRACTOR: Empire Soil Inv., Inc.

WATER LEVEL: .4'

BOTTOM OF SCREEN: 39'

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well. Pumped until clear.

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
0-5'					Black rubble FILL, including brick fragments and intact railroad ties.	Augered first 5' without taking split spoon samples. Water at .4'.
5-7'	1-1-1*	10	ND		0.3' Very loose black ash FILL. 0.3' SILT and fine SAND, trace clay, trace gravel.	*300 lb hammer. ND. Non detected. <0.1 ppm.
7-9'	3-2-1-1*	40	ND		Same as above, including wood fragment.	
9-11'	3-2-3-4*	55	ND		Firm, reddish brown, CLAY, some silt, trace fine gravel.	

PROJECT NO. 3437 N61

PAGE \_\_\_\_ OF \_\_\_\_

BORING LOG

BORING NO. MW 10

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 718.87'

DATE STARTED: 11/21/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 39'

COMPLETED: 11/24/86

LOCATION: Penn Yan, NY

CASING STICK UP: 0.49"

TOP OF SCREEN: 29'

DRILLING CONTRACTOR: Empire Soil Inv., Inc.

WATER LEVEL: 4'

BOTTOM OF SCREEN: 39'

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well Pumped until clear

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
11-13'	3-3-4-3*	80	ND		Same as above.	
13-15'	1-2-1-2*	60	ND		Same as above, grading to soft.	
15-17'	1-2-1-1*	70	ND		Soft, grayish brown, CLAY.	
17-19'	WOH, WOH, WOH, 1*	100	ND		Same as above.	WOH = Weight of hammer



PROJECT NO. 3437-N61 PAGE    OF    BORING LOG BORING NO. MW: 4D

PROJECT: NYSEG - Penn Yan TOP OF CASING ELEVATION: TSSC 718.87' DATE STARTED: 11/21/86

CLIENT: New York State Electric and Gas Corp. WELL DEPTH: 39' COMPLETED: 11/24/86

LOCATION: Penn Yan, NY CASING STICK UP: 0.49" TOP OF SCREEN: 29'

DRILLING CONTRACTOR: Empire Soil Inv., Inc. WATER LEVEL: 4' BOTTOM OF SCREEN: 39'

DRILLER: A. Bo DRILLING METHOD: Hollow stem auger - 4"

TRC INSPECTOR: BEG COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well, Pumped until clear.

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
19-21'	WOH, WOH, 2-3*	100	ND		Same as above including some silt, trace fine gravel.	
21-23'	2-3-4-7*	100	ND		Same as above grading into loose, fine SAND.	
23-25'	4-4-5-6*	35	ND		Loose, brown, SILT, trace fine sand and fine gravel.	
25-27'	3-3-6-9*	50	ND		Same as above.	

PROJECT NO. 3437 N61

PAGE 1 OF 1 BOR OG

BORING NO. MW 40

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 718.82'

DATE STARTED: 11/21/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 39'

COMPLETED: 11/24/86

LOCATION: Penn Yan, NY

CASING STICK UP: 0.49"

TOP OF SCREEN: 29'

DRILLING CONTRACTOR: Empire Soil Inv., Inc.

WATER LEVEL: 4'

BOTTOM OF SCREEN: 39'

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger - 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well. Pumped until clear.

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA NO	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
27-29'	5-7-9-11'	100	NO		Same as above grading into medium dense, trace clay.	
29-31'	2-3-4-4*	100	NO		Loose grayish brown, fine SAND.	
31-33'	2-3-2-3*	65	NO		Grading to medium SAND.	
33-35'	5-3-3-3*	50	NO		Grading to fine SAND.	

PROJECT NO. 3437 N61

PAGE OF

BORTON, LLC

BORING NO. MW 40

PROJECT: NYSEG - Penn Yan

TOP OF CASING ELEVATION: TSSC 718.87'

DATE STARTED: 11/21/86

CLIENT: New York State Electric and Gas Corp.

WELL DEPTH: 39'

COMPLETED: 11/24/86

LOCATION: Penn Yan, NY

CASING STICK UP: 0.49"

TOP OF SCREEN: 29'

DRILLING CONTRACTOR: Empire Soil Inv., Inc.

WATER LEVEL: 1.4'

BOTTOM OF SCREEN: 39'

DRILLER: A. Bo

DRILLING METHOD: Hollow stem auger 4"

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well. Pumped until clear.

DEPTH INTERVAL	BLOW ON SPLIT SPOON	PERCENT RECOVERY	(ppm) HNU/OVA ND	SAMPLES ANALYZED	SAMPLE DESCRIPTION	REMARKS
35-37	4-3 3-5*	60%	ND		Firm, gray, SILT and fine SAND, trace clay and fine gravel.	
37-39'	3-3 3-3*	100	ND		Same as above.	
39-41'	10-18-24 22	75	ND		Same as above.	140 lb hammer. Monitoring well set and completed at 39'.

PAGE      OF      BOP      LOG

BORING NO. MW-45

TOP OF CASING ELEVATION: TSSC 718.70'

WELL DEPTH: 17'

COMPLETED: 11/24/86

CASING STICK UP: 0.28"

TOP OF SCREEN: 2'

WATER LEVEL: 4'

BOTTOM OF SCREEN: 17'

DRILLING METHOD: Hollow stem auger - 4".

TRC INSPECTOR: BEG

COMPLETION AND DEVELOPMENT: 2" Stainless steel monitoring well. Pumped until clear.

[illegible]

BORING LOG

BORING NO. MW-1S

PROJECT NO. 3437-N61

BORING DEPTH: 30'

DATE STARTED: 11/20/86

PROJECT: Penn Yan

DRILLER: A. Bo

DATE COMPLETED: 11/20/86

CLIENT: NYSEG

TRC INSPECTOR: Beverly Gewanter

WATER TABLE ELEVATION: 720.70'  
(10/87)

LOCATION: Penn Yan, N.Y.

DRILLING METHOD: Spun Casing/Hollow Stem Auger

GROUND ELEVATION: 736.48'

DRILLING CONTRACTOR: Empire Soils

DEPTH INTERVAL (Feet)	BLOW COUNTS	OVA (ppm)	BORING DEPTH (Feet)	SOIL DESCRIPTION	STRATA	WELL CONSTRUCTION
0.0-5.0			0	Loose, brown/dk-brown, medium grained SAND and SILT, some rubble, some brick fragments, some coal clinkers, moist, FILL		
			-			
			-			
			-			
5.0-7.0	2 3	ND	5	Same as above, including cobbles		
	2 4		-			
7.0-9.0	2 4	ND	-	Same as above, grading to dense medium grained, SAND and SILT, moist, some wood chips		
	6 7		-			
9.0-11.0	3 6	ND	-	Medium dense, brown, SILT, little clay, trace fine gravel		
	7 10		10			10.0'
11.0-13.0	3 6	ND	-	Same as above		
	7 10		-			12.0'
13.0-15.0	4 7	ND	-	Same as above		
	10 15		-			
15.0-17.0	-	ND	15			
			-			
17.0-19.0	7 14	ND	-	Hard, brown SILT, little clay, moist		
	17 19		-			15.0'
19.0-21.0	7 7	ND	-	Very stiff, brown CLAY, little silt		
	10 15	2	20			
21.0-23.0	28 32	ND	-	Same as above, grading to very dense, brown, SAND, some silt		
	20 30		-			
23.0-25.0	13 20	ND	-	Same as above, grading to hard, brown SILT, some clay		
	20 10		-			
25.0-27.0	10 8	ND	25	Same as above, grading to very stiff, trace fine gravel		
	8 10		-			
27.0-29.0	7 8	ND	-	Same as above		
	9 10		-			
29.0-31.0	5.4	ND	-	Stiff, dk-brown, SILT and CLAY, trace fine gravel		
			30			30.0'

Bottom of Boring - 31 feet

BORING LOG

BORING NO. MN-1D

PROJECT NO. 3437-N61

BORING DEPTH: 55'

DATE STARTED: 11/17/86

PROJECT: Penn Yan

DRILLER: A. Bo

DATE COMPLETED: 11/18/86

CLIENT: NYSEG

TRC INSPECTOR: Beverly Gewanter

WATER TABLE ELEVATION: 718.82'  
(10/87)

LOCATION: Penn Yan, N.Y.

DRILLING METHOD: Spun Casing/Hollow Stem Auger - 4"

GROUND ELEVATION: 736.36'

DRILLING CONTRACTOR: Empire Soils

DEPTH INTERVAL (Feet)	BLOW COUNTS	OVA (ppm)	BORING DEPTH (Feet)	SOIL DESCRIPTION	STRATA	WELL CONSTRUCTION
0.0-5.0			0	Loose, brown/dk-brown, medium grained SAND and SILT, some rubble, some brick fragments, some coal clinkers, moist, FILL		
5.0-7.0	2 3 2 4	ND	5	Same as above, including cobbles		
7.0-9.0	2 4 6 7	ND	-	Same as above, grading to dense medium grained SAND and SILT, moist, some wood chips		
9.0-11.0	3 6 7 10	ND	-	Medium dense, brown, SILT, little clay, trace fine gravel		
11.0-13.0	3 6 7 10	ND	-	Same as above		
13.0-15.0	4 7 10 15	ND	-	Same as above		
15.0-17.0	-	ND	15			
17.0-19.0	7 14 17 19	ND	-	Hard, brown SILT, little clay, moist		
19.0-21.0	7 7 10 15	ND	-	Very stiff, brown CLAY, little silt		
21.0-23.0	28 32 20 30	ND	-	Same as above, grading to very dense, brown, SAND, some silt		
23.0-25.0	13 20 20 10	ND	-	Same as above, grading to hard, brown SILT, some clay		
25.0-27.0	10 8 8 10	ND	25	Same as above, grading to very stiff, trace fine gravel		
27.0-29.0	7 8 9 10	ND	-	Same as above		
29.0-31.0	5 4 6 5	ND	-	Stiff, dk-brown, SILT and CLAY, trace fine gravel		
31.0-33.0	4 5 5 5	ND	-	Same as above		
33.0-35.0	3 3 3 4	ND	-	Firm, same as above		
35.0-37.0	3 3 10 20	ND	35	Medium dense, grayish-brown, grading to fine grained SAND		
37.0-39.0	8 10 12 12	ND	-	Grading to medium grained SAND		
39.0-41.0	8 10 12 12	ND	-	Grading to coarse grained SAND		
41.0-43.0	8 10 12 12	ND	-	Grading to fine grained SAND		
43.0-45.0	9 11 13 13	ND	-	Same as above		
45.0-47.0	10 10 10 10	ND	45	Same as above		
47.0-49.0	10 10 10 8	ND	-	Grading to medium grained SAND		
49.0-51.0	12 8 10 10	ND	-	Grading to medium grained GRAVEL, some large cobbles		
51.0-53.0	10 14 18 24	ND	-	Dense, grading to coarse grained SAND		
53.0-55.0	18 26 50 65	ND	-	Very dense, grading to medium grained SAND		
			55			

Bottom of boring - 55 feet

## BORING LOG

BORING NO. MW-2S

PROJECT NO. 3437-N61

BORING DEPTH: 19'

DATE STARTED: 11/24/86

PROJECT: Penn Yan

DRILLER: A. Bo

DATE COMPLETED: 11/25/86

CLIENT: NYSEG

TRC INSPECTOR: Beverly Gewanter

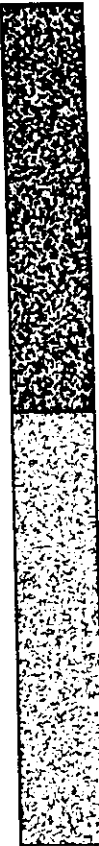
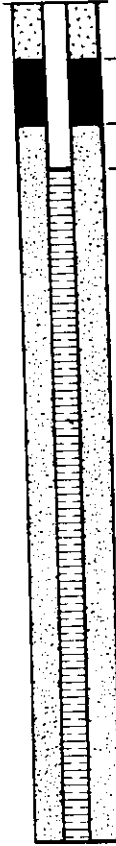
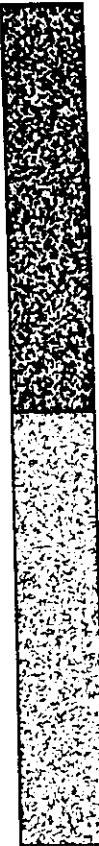
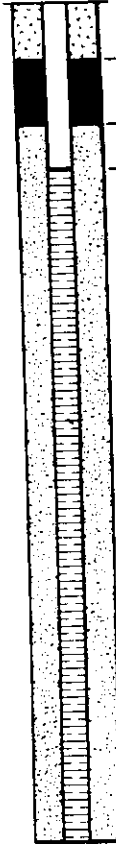
WATER TABLE ELEVATION: 714.29'  
(10/87)

LOCATION: Penn Yan, N.Y.

DRILLING METHOD: Hollow Stem Auger

GROUND ELEVATION: 720.61'

DRILLING CONTRACTOR: Empire Soils

DEPTH INTERVAL (Feet)	BLOW COUNTS	OVA (ppm)	BORING DEPTH (Feet)	SOIL DESCRIPTION	STRATA	WELL CONSTRUCTION
0.0-3.0			0	Brown, GRAVEL, some cobbles, some sand, some silt, moist, FILL		
			-			
			-			
3.0-5.0			-	RUBBLE, some brick frags, some wood chips, some large stone slabs, FILL		
			-			
5.0-7.0	5 4	ND	5	Black, SILT and SAND, some coal clinkers, some ash, some wood fragments, FILL		
	4 4		-			
			-			
			-			
9.0-11.0	3 5	ND	-	Firm, Reddish-brown, SILT, some clay, trace fine sand, trace fine gravel		
	8 12		10			
			-			
			-			
13.0-15.0	4 5	ND	-	Firm, reddish-brown SILT, little clay, trace fine gravel		
	7 8		-			
	-	ND	15			
			-			
17.0-19.0	3 3	ND	-	Same as above		
	4 4		-			
			19			
			-			
			-			
			-			

Bottom of Boring - 19 feet

BORING LOG

BORING NO. MW-3S

PROJECT NO. 3437-N61

BORING DEPTH: 17'

DATE STARTED: 11/25/86

PROJECT: Penn Yan

DRILLER: A. Bo

DATE COMPLETED: 11/25/86

CLIENT: NYSEG

TRC INSPECTOR: Beverly Gewanter




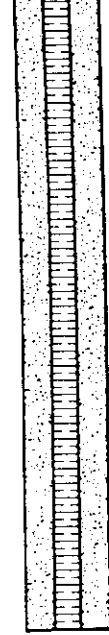
WATER TABLE ELEVATION: 715.21'  
(10/87)

LOCATION: Penn Yan, N.Y.

DRILLING METHOD: Hollow Stem Auger - 4"

GROUND ELEVATION: 718.73'

DRILLING CONTRACTOR: Empire Soils

DEPTH INTERVAL (Feet)	BLOW COUNTS	OVA (ppm)	BORING DEPTH (Feet)	SOIL DESCRIPTION	STRATA	WELL CONSTRUCTION
0.0-5.0			0	Black, RUBBLE, some light gray ash, some wood chips, some coal clinkers, moist, FILL		
			-			
			-			
			-			
5.0-7.0	3 2 2 3	ND	5	Very loose, dark brown, fine SAND and SILT, some coal clinkers, some wood fragments, FILL		
			-			
			-			
			-			
9.0-11.0	4 5 5 6	>10ppm	- 10	Very loose, reddish-brown fine SAND and CLAY, little silt		
			-			
			-			
			-			
13.0-15.0	2 2 2 2 -	ND  ND	- - 15	Reddish-brown fine grained SAND and CLAY, little silt, grading to very loose, some wood frags.		
			-			
			-			

Bottom of Boring - 17 feet



## BORING LOG

BORING NO. MW-4SPROJECT NO. 3437-N61BORING DEPTH: 17'DATE STARTED: 11/24/86PROJECT: Penn YanDRILLER: A. BoDATE COMPLETED: 11/24/86CLIENT: NYSEGTRC INSPECTOR: Beverly GewanterWATER TABLE ELEVATION: 714.57'  
(10/87)LOCATION: Penn Yan, N.Y.DRILLING METHOD: Hollow Stem AugerGROUND ELEVATION: 728.98'DRILLING CONTRACTOR: Empire Soils

DEPTH INTERVAL (Feet)	BLOW COUNTS	OVA (ppm)	BORING DEPTH (Feet)	SOIL DESCRIPTION	STRATA	WELL CONSTRUCTION
0.0-5.0			0	Black, RUBBLE, some brick fragments, some intact railroad ties, FILL		
			-			
			-			
			-			
			-			
5.0-7.0	1 1	ND	5	Very loose, black, ASH		
	1 1		-	SILT and fine grained SAND, trace clay, trace gravel, FILL		
7.0-9.0	3 2	ND	-	Same as above, including some wood fragment		
	1 1		-			
9.0-11.0	3 2	ND	-	Firm, reddish brown CLAY, some silt, trace fine gravel		
	3 4		10			
11.0-13.0	3 3	ND	-	Same as above		
	4 3		-			
13.0-15.0	1 2	ND	-	Same as above, grading to soft		
	1 2		-			
15.0-17.0	1 2	ND	15	Soft, grayish-brown, CLAY		
	1 1		-			
			-			

Bottom of Boring - 17 feet

## BORING LOG

BORING NO. 14-4D

PROJECT NO. 3437-N61  
 PROJECT: Penn Yan  
 CLIENT: NYSEG  
 LOCATION: Penn Yan, N.Y.  
 DRILLING CONTRACTOR: Empire Soils

BORING DEPTH: 39'  
 DRILLER: A. Bo  
 TRC INSPECTOR: Beverly Gewanter  
 DRILLING METHOD: Hollow Stem Auger - 4"

DATE STARTED: 11/7/86  
 DATE COMPLETED: 11/24/86  
 WATER TABLE ELEVATION: Artesian  
 GROUND ELEVATION: 719.36'

DEPTH INTERVAL (Feet)	BLOW COUNTS	OVA (ppm)	BORING DEPTH (Feet)	SOIL DESCRIPTION	STRATA	WELL CONSTRUCTION
0.0-5.0			0	Black RUBBLE, some brick fragments, some intact railroad ties, FILL		
			-			
			-			
			-			
			-			
5.0-7.0	1 1	ND	5	Very loose, black, ASH		
	1 1		-	SILT and fine grained SAND, trace clay, trace gravel, FILL		
7.0-9.0	3 2	ND	-	Same as above, including some wood fragment		
	1 1		-			
9.0-11.0	3 2	ND	-	Firm, reddish brown, CLAY, some silt, trace fine gravel		
	3 4		10			
11.0-13.0	3 3	ND	-	Same as above		
	4 3		-			
13.0-15.0	1 2	ND	-	Same as above, grading to soft		
	1 2		-			
15.0-17.0	1 2	ND	15	Soft, grayish-brown, CLAY		
	1 1		-			
17.0-19.0	WOH, WOH	ND	-	Same as above		
	WOH, 1		-			
19.0-21.0	WOH, WOH	ND	-	Same as above, including some silt, trace fine gravel		
	2 3		20			
21.0-23.0	2 3	ND	-	Same as above grading into loose, fine grained SAND		
	4 7		-			
23.0-25.0	4 4	ND	-	Loose, brown, SILT, trace fine grained sand trace fine gravel		
	5 6		-			
25.0-27.0	3 3	ND	25	Same as above		
	6 9		-			
27.0-29.0	5 7	ND	-	Same as above, grading into medium dense, trace clay		
	9 11		-			
29.0-31.0	2 3	ND	-	Loose grayish brown, fine grained SAND		
	4 4		30			
31.0-33.0	2 3	ND	-	Grading to medium grained SAND		
	2 3		-			
33.0-35.0	5 3	ND	-	Grading to fine grained SAND		
	3 3		-			
35.0-37.0	4 3	ND	35	Firm, gray, SILT and fine grained SAND, trace clay, trace fine gravel		
	3 5		-			
37.0-39.0	3 3	ND	-	Same as above		
	3 3		-			
39.0-41.0	10 18	ND	-	Firm, gray SILT and fine grained SAND, trace clay, trace fine gravel		
	24 22		40			

WOH - Weight of hammer

Bottom of Boring - 39 Feet

**APPENDIX A**  
**SOIL BORING/SEDIMENT CORING LOGS**



## SAMPLE/CORE LOG

## SAMPLE/CORE LOG





## SAMPLE/CORE LOG









## SAMPLE/CORE LOG

[illegible]



## SAMPLE/CORE LOG

## SAMPLE/CORE LOG

## SAMPLE/CORE LOG

## SAMPLE/CORE LOG



## SAMPLE/CORE LOG

[illegible]

## SOIL BORING LOG

[illegible]



## SOIL BORING LOG



[illegible]



## SOIL BORING LOG



## SOIL BORING LOG







## SOIL BORING LOG

## SOIL BORING LOG

# SOIL BORING LOG