

**AECOM Environment** 

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January 28, 2010 Sent via email

Mr. Anthony Karwiel
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

Subject: NAPL Recovery Monitoring – Status Report November 2009

Site #: 7-09-011

Project Title: NYSEG - Norwich Former MGP Site

Dear Mr. Karwiel:

On behalf of New York State Electric and Gas Corporation (NYSEG), AECOM has prepared this letter to describe events associated with non-aqueous phase liquid (NAPL) collection at the Norwich Former Manufactured Gas Plant in Norwich, NY. This letter summarizes activities at the site during the month of November 2009. These activities included off-site disposal of 19,000 gallons of NAPL/water mixture and installation of 12 geoprobe borings on the property south of Front Street to delineate the extent of NAPL in the saturated soils above the confining clay layer.

#### PRODUCT DISPOSAL

From November 16, 2009 through November 25, 2009 approximately 19,000 gallons of NAPL/water mixture was disposed of from the frac tank located on the property south of Front Street using a vacuum truck provided by Clean Harbors. The NAPL/water mixture was collected from the property south of Front Street during the month of October and was summarized in the October Status Report. The frac tank was cleaned first using a diesel petroleum mixture and then an ez-green© and water solution. All liquids generated during cleaning were collected and disposed of at an offsite disposal facility in Richmond, VA. Continuous air monitoring was performed during all site activities.

#### **GEO-PROBE INVESTIGATION**

On November 23, 2009 a total of twelve borings were installed on the property south of Front Street. Figure 1 shows the location of each boring and Attachment A includes the boring logs. As depicted in Figure 1, non-viscous coal tar was present in several borings located on the Front Street Property. The borings have now completely delineated the extent of NAPL saturated soils present on the property.

#### **RECOMMENDATIONS**

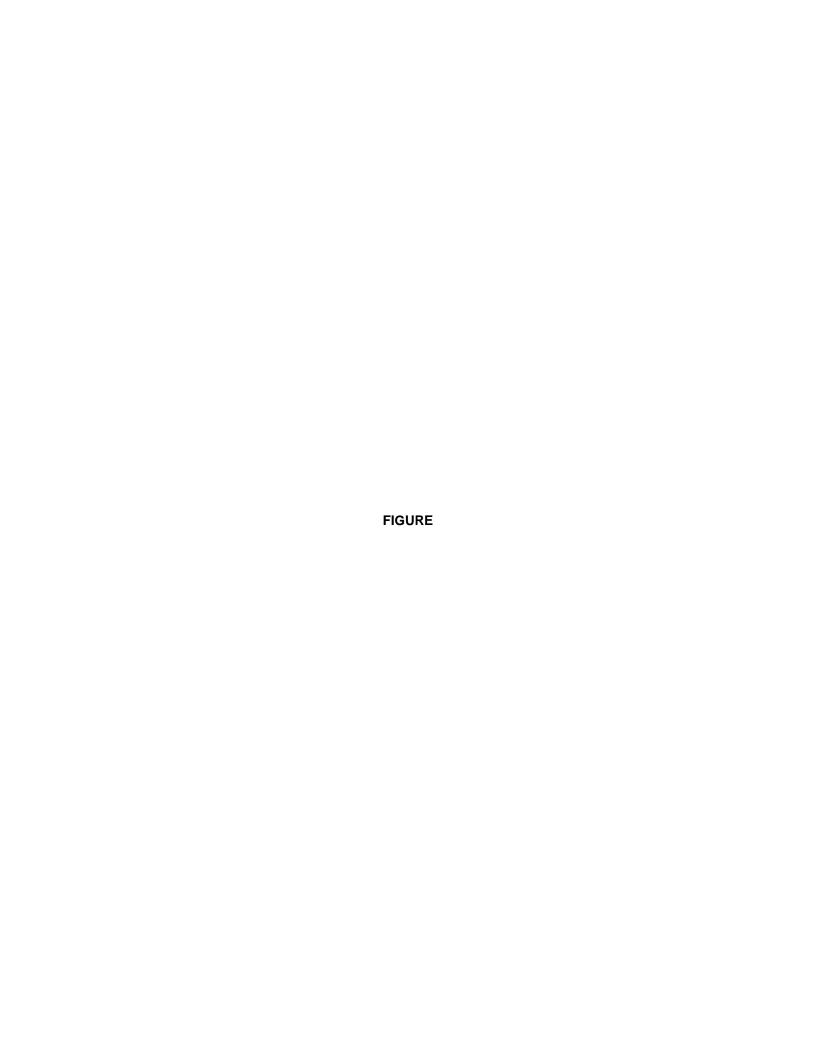
Recovery of NAPL at the site has been suspended due to freezing conditions and will resume in the spring 2010. In addition, three additional NAPL recovery wells will be installed in the spring 2010 at the approximate locations shown in Figure 1. The locations of the NAPL recovery wells were chosen to maximize the potential for NAPL recovery based on the geoprobe investigation described above.

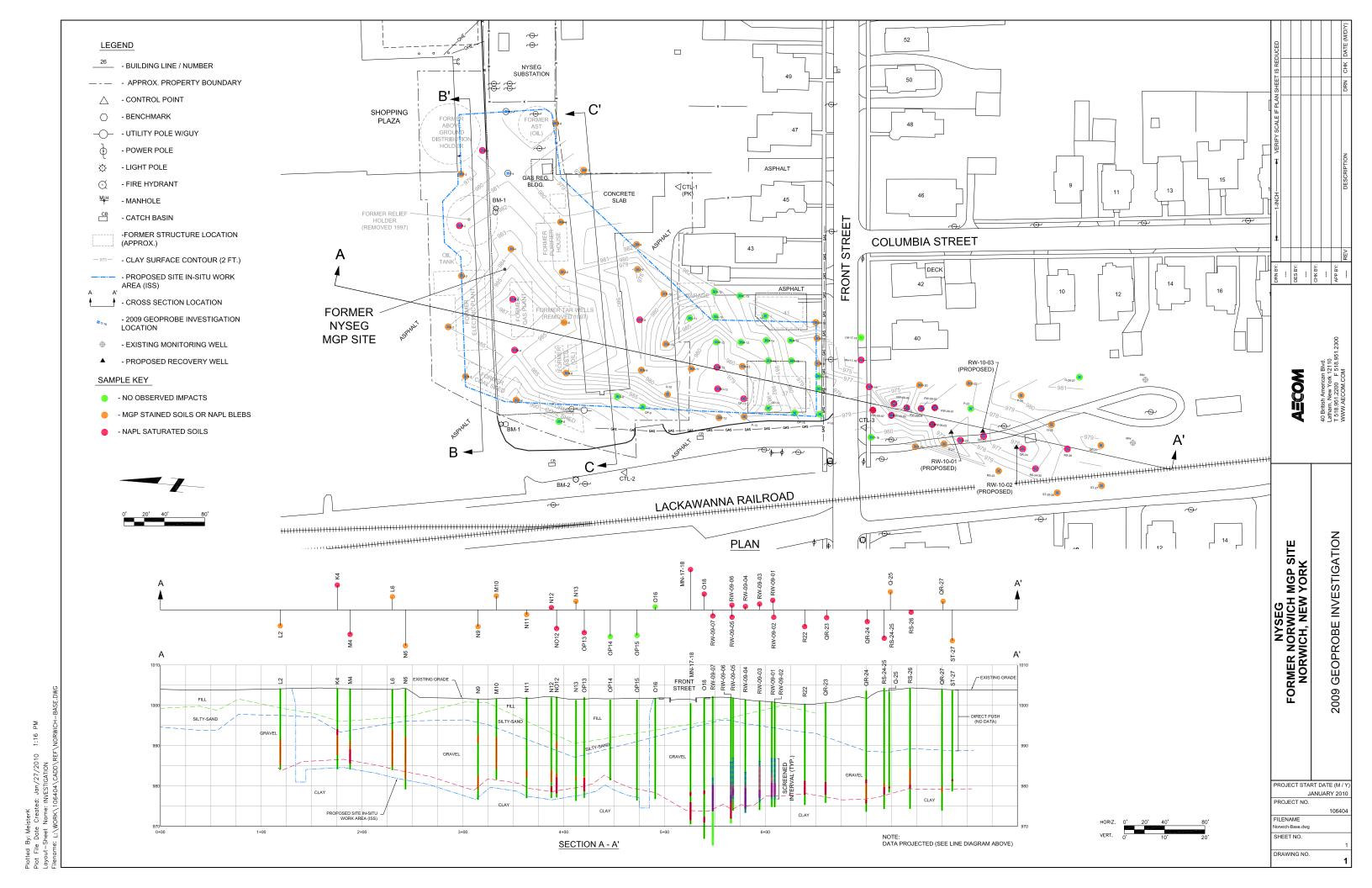
Should you have any questions or require additional information in the meantime, please do not hesitate to call me at (518) 396-7638 or Tracy Blazicek at (607) 762-8839.

Yours Sincerely,

Scott Underhill, PE Project Manager

cc: T. Blazicek, NYSEG





ATTACHMENT A November 2009 Geoprobe Boring Logs



1001 West Seneca Street, Suite 204 Ithaca, New York, 14850

# Well ID: LM-17-18

Page 1 of 1

**Project Name:** Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031

**Date Started/Date Completed:** 11/23/09

**Boring Location:** 

Drilling Company: Zebra

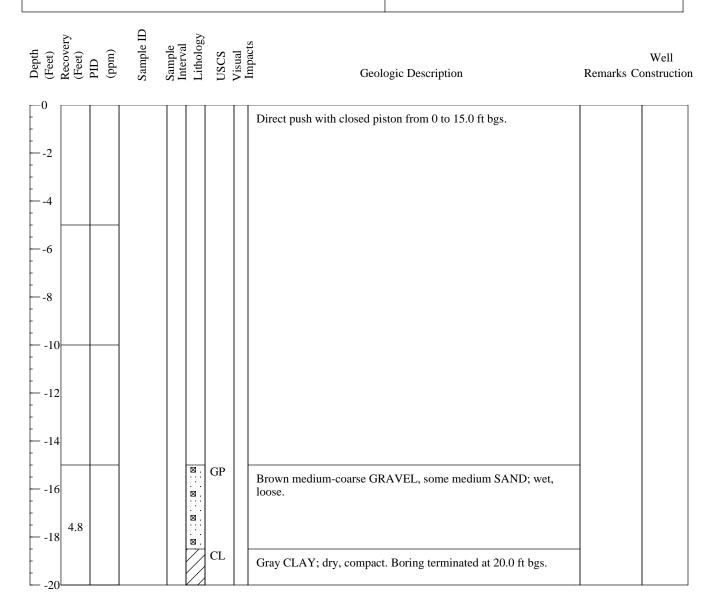
Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 20.0

Logged By: K. Stahle





Coal Tar or Coal Tar NAPL Saturated Soil



Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 18.5' - Top of clay

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## Well ID: NM-17-18

Page 1 of 1

Project Name: Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031

**Date Started/Date Completed:** 11/23/09

**Boring Location:** 

**Drilling Company:** Zebra

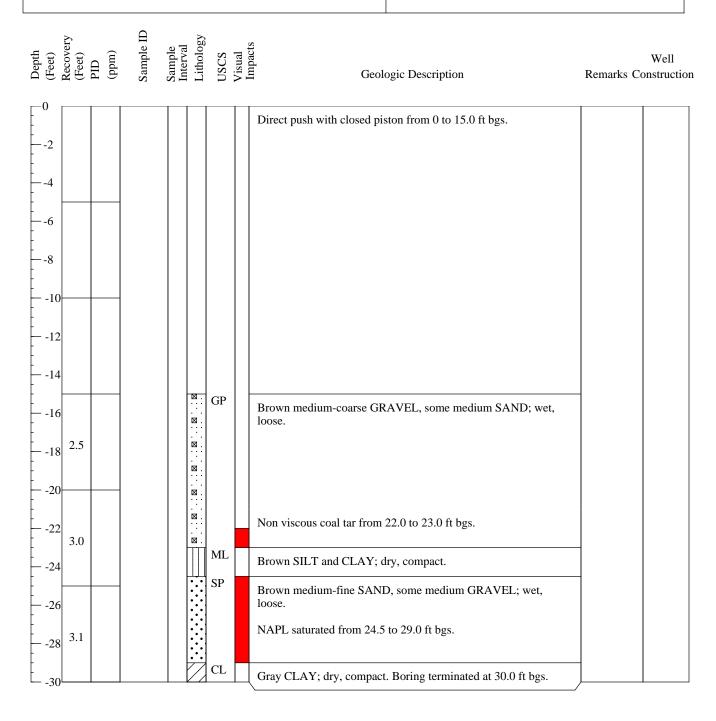
Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 30.0

Logged By: K. Stahle







Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 29.0' - Top of clay

1001 West Seneca Street, Suite 204 Ithaca, New York, 14850

# Well ID: O-26-27

Page 1 of 1

Project Name: Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031 **Date Started/Date Completed:** 11/23/09

**Boring Location:** 

**Drilling Company:** Zebra

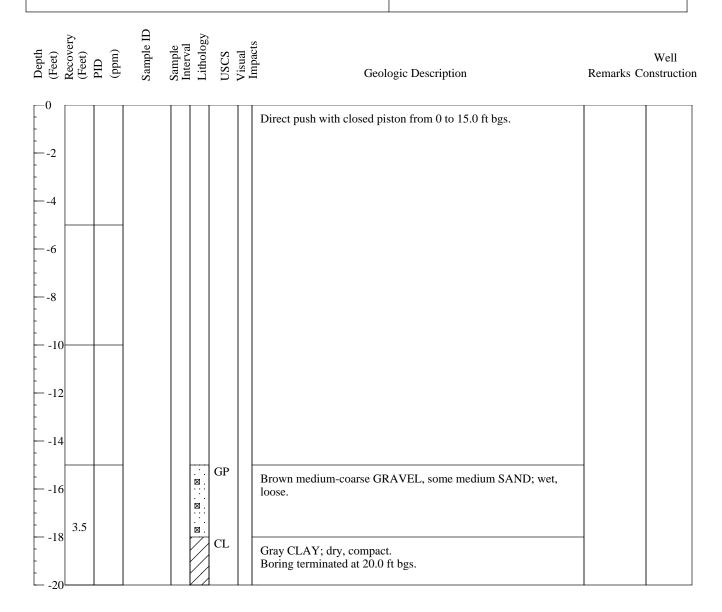
Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

Total Depth: 20.0

Logged By: K. Stahle



Coal Tar or Coal Tar NAPL Saturated Soil



Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 18.0' - Top of clay

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# Well ID: P-24

Page 1 of 1

Project Name: Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031

**Date Started/Date Completed:** 11/23/09

**Boring Location:** 

**Drilling Company:** Zebra

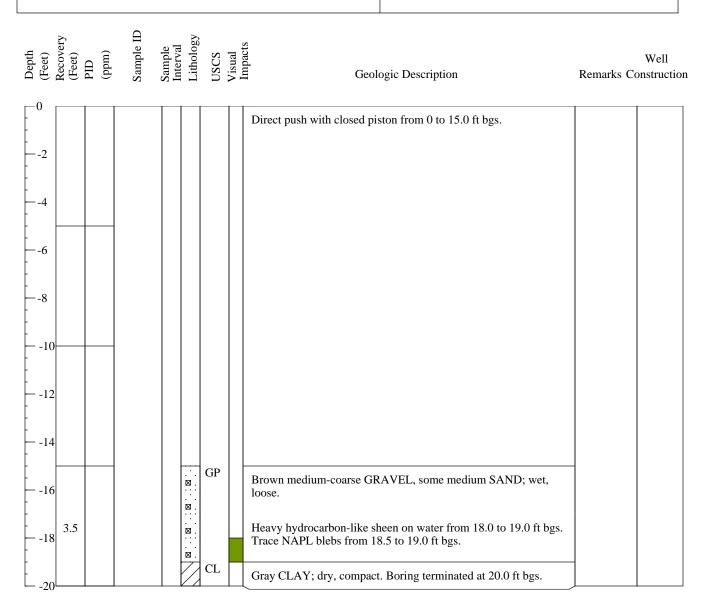
Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 20.0

Logged By: K. Stahle





Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 19.0' - Top of clay

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# **Well ID: Q-25**

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Project Name: Norwich MGP Site

 $\textbf{NYSEG/Project Number:} \ NYSEG/04964-031$ 

**Date Started/Date Completed:** 11/23/09

**Boring Location:** 

**Drilling Company:** Zebra

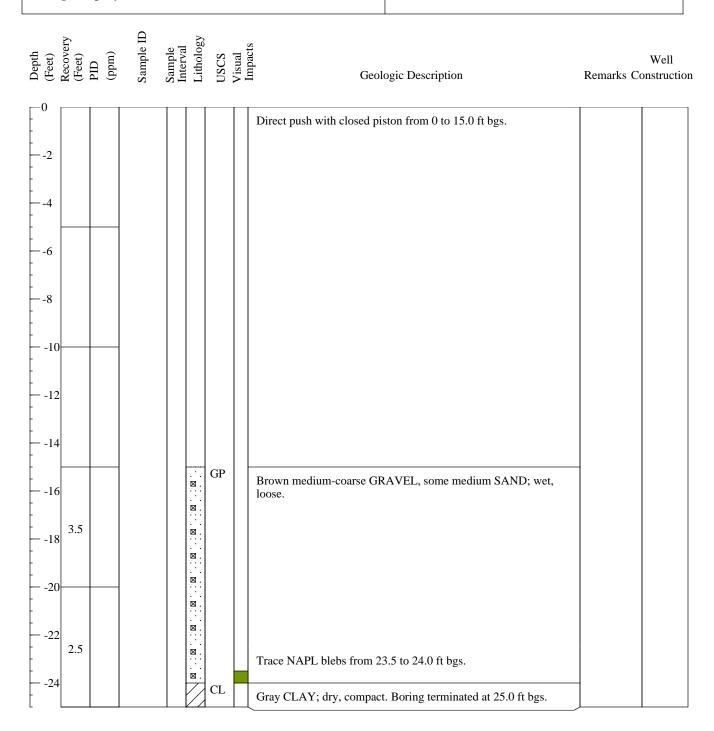
Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 25..0

Logged By: K. Stahle







Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 24.0' - Top of clay

1001 West Seneca Street, Suite 204 Ithaca, New York, 14850

Project Name: Norwich MGP Site

# Well ID: QR-24

Page 1 of 1 Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88): Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 30.0 Logged By: K. Stahle

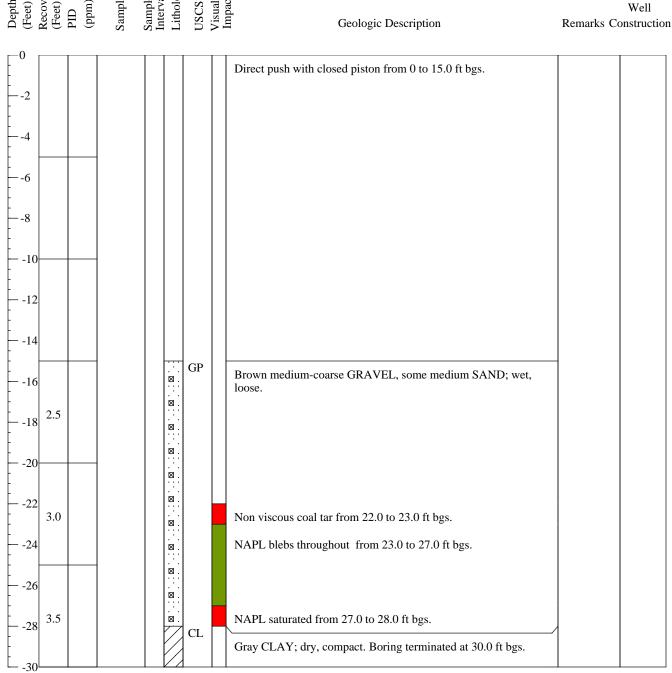
NYSEG/Project Number: NYSEG/04964-031

**Boring Location:** 

**Date Started/Date Completed:** 11/23/09

**Drilling Company:** Zebra

Sample ID Depth (Feet) Recovery (Feet) PID Sample Interval Lithology USCS Visual Impacts







Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 28.0' - Top of clay

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# Well ID: QR-27

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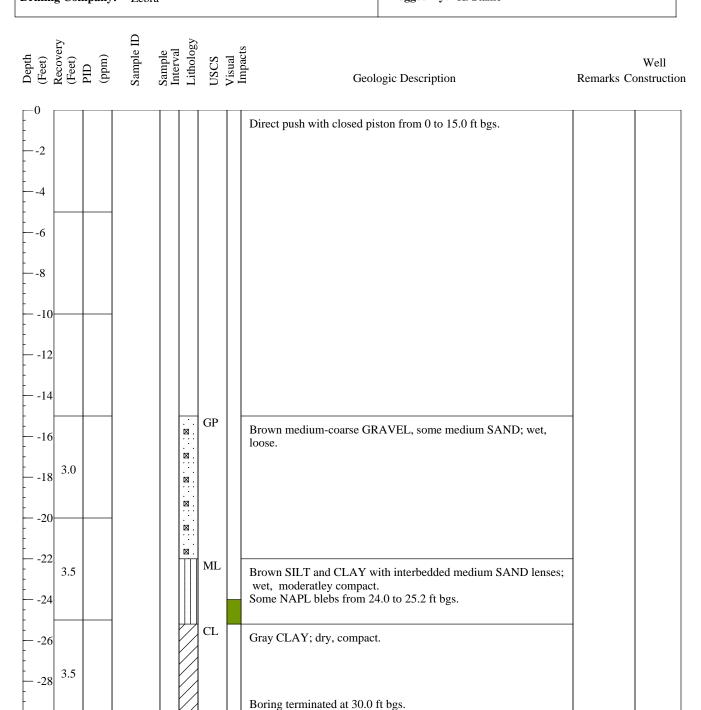
Project Name: Norwich MGP Site Sampling Method: Direct-Push, macro-core

NYSEG/Project Number: NYSEG/04964-031 PVC Elevation (ft/msl, NAVD 88):

Date Started/Date Completed: 11/23/09 Ground Elevation (ft/msl, NAVD 88):

Boring Location: Total Depth: 30.0

Drilling Company: Zebra Logged By: K. Stahle





Comments: 25.2' - Top of clay

-30

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## Well ID: RS-23

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Project Name: Norwich MGP Site Sampling Method: Direct-Push, macro-core

NYSEG/Project Number: NYSEG/04964-031 PVC Elevation (ft/msl, NAVD 88):

Date Started/Date Completed: 11/23/09 Ground Elevation (ft/msl, NAVD 88):

Boring Location: Total Depth: 30.0

Drilling Company: Zebra Logged By: K. Stahle

Sample ID Depth (Feet) Recovery (Feet) PID Sample Interval Lithology USCS Visual Impacts Well Geologic Description Remarks Construction Direct push with closed piston from 0 to 15.0 ft bgs. -4 -6 -8 - -10 -12 -14 GP  $\boxtimes$ Brown medium-coarse GRAVEL, some medium SAND; wet, -16  $\boxtimes$ . 🗵 - -18 × Slight hydrocarbon-like odors from 19.0 to 20.0 ft bgs. - -20  $\boxtimes$ . ⊠ -22 I⊠. 3.1 . 🗵 Trace NAPL blebs from 23.0 to 24.0 ft bgs. -24 CLGray CLAY; dry, compact.

Boring terminated at 30.0 ft bgs.



Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 24.0' - Top of clay

-26

- -28 3.5

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# Well ID: RS-24-25

Page 1 of 1

Project Name: Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031

**Date Started/Date Completed:** 11/23/09

**Boring Location:** 

**Drilling Company:** Zebra

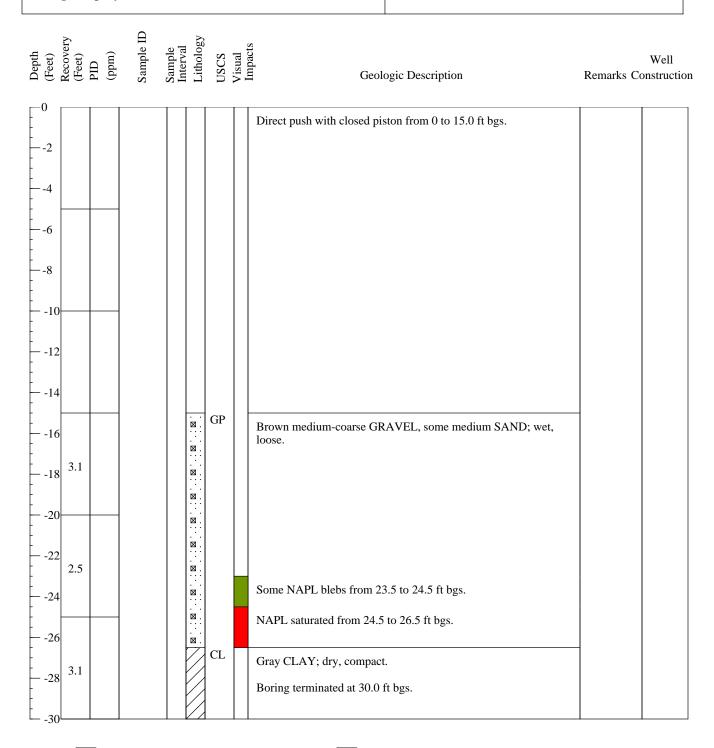
Sampling Method: Direct-Push, macro-core

Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

PVC Elevation (ft/msl, NAVD 88): Ground Elevation (ft/msl, NAVD 88):

Total Depth: 30.0

Logged By: K. Stahle



Comments: 26.5' - Top of clay

Coal Tar or Coal Tar NAPL Saturated Soil

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## Well ID: RS-26

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Project Name: Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031

**Date Started/Date Completed:** 11/23/09

**Boring Location:** 

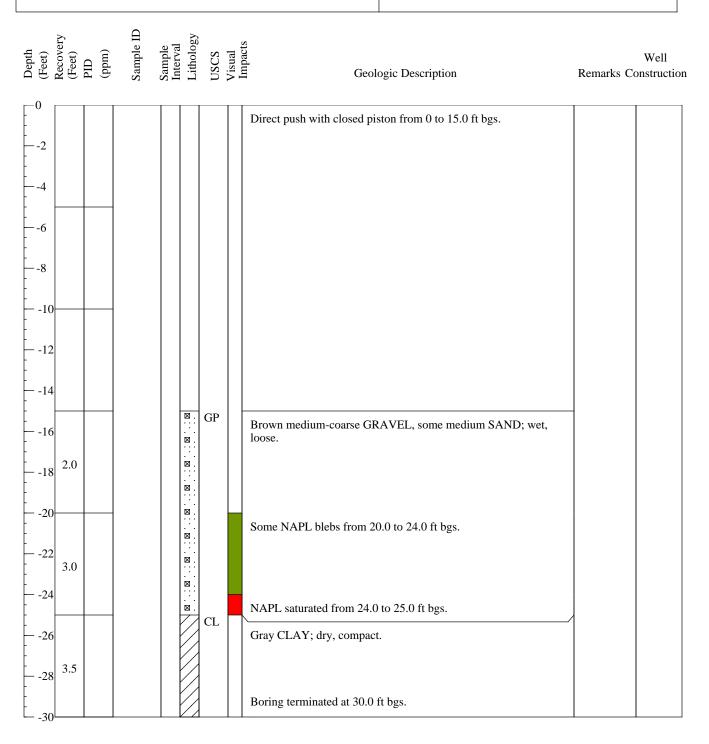
**Drilling Company:** Zebra

Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88): Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 30.0

Logged By: K. Stahle







Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 25.0' - Top of clay

1001 West Seneca Street, Suite 204 Ithaca, New York, 14850

# Well ID: ST-25-26

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**Project Name:** Norwich MGP Site

roject Name. Norwich with Site

NYSEG/Project Number: NYSEG/04964-031 Date Started/Date Completed: 11/23/09

**Boring Location:** 

**Drilling Company:** Zebra

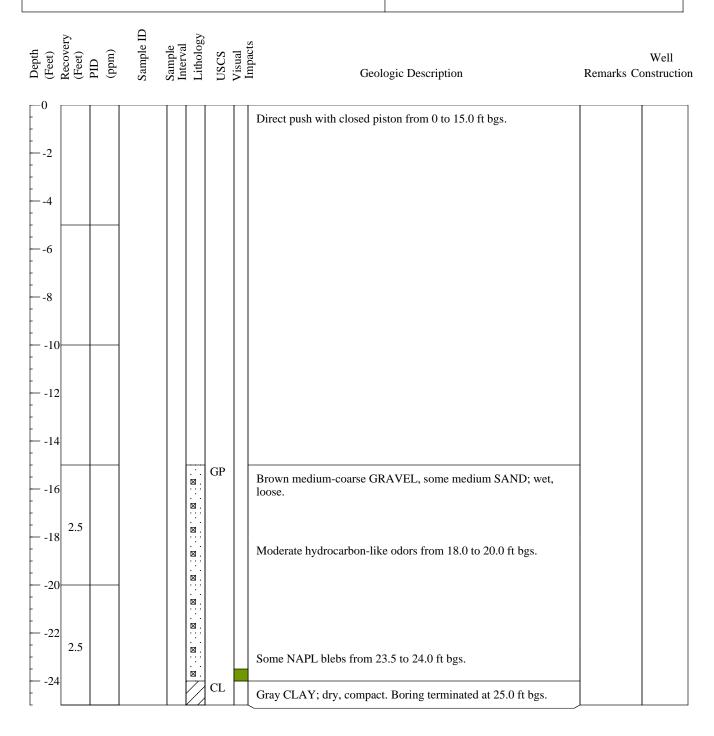
Sampling Method: Direct-Push, macro-core

PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

**Total Depth:** 25..0

Logged By: K. Stahle







Hydrocarbon Staining, Hydrocarbon Sheen or NAPL Blebs

Comments: 24.0' - Top of clay

1001 West Seneca Street, Suite 204 Ithaca, New York, 14850

Project Name: Norwich MGP Site

NYSEG/Project Number: NYSEG/04964-031

**Date Started/Date Completed:** 11/23/09

# Well ID: ST-27

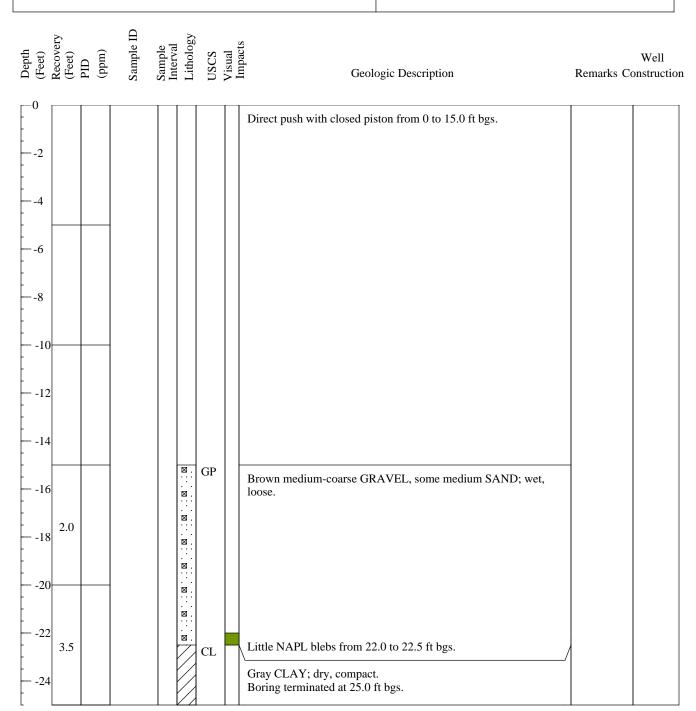
Sampling Method: Direct-Push, macro-core

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PVC Elevation (ft/msl, NAVD 88):

Ground Elevation (ft/msl, NAVD 88):

Boring Location:Total Depth:25.0Drilling Company:ZebraLogged By:K. Stahle





Comments: 22.5' - Top of clay