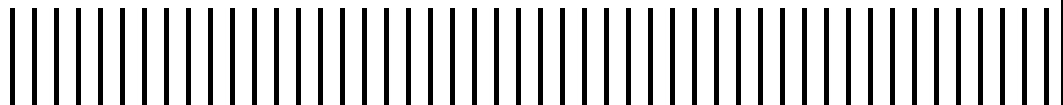


New York State Department of Environmental Conservation
Site Characterization Report

APPENDIX

A

Daily Observation Reports



DAILY OBSERVATION REPORT**NYSDEC****Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221****Work Assignment # D-004439-20****Smithtown, New York****Day:** Monday **Date:** 9/21/2007**Temperature: (F)** (am) 65-70 °F (pm) 70-75 °F**Wind Direction:** N/A (am) (pm)**Weather:** (am) (1100) ~ 70°F clear, few clou
(pm) (1600) ~ 75°F clear few clou**Arrive at site** TQ = 1100 (am) Driller = 1500**Leave site:** A, B = 1230 (pm)TQ, AB = 1600 Driller = 1530**HEALTH & SAFETY:**Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes () n/a ☒ * No ()

Air

Yes () n/a ☒ * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ()

DESCRIPTION OF DAILY WORK PERFORMED:

T. Quinn Met with A. Bobar to discuss project/scope, met with owner of post surgical supply center to discuss placement of decontamination pad in rear parking lot of 25 plant Avenue, Hauppauge NY. Malcolm Pirnie located all boring locations and performed general site walk. Met with drillers in late afternoon. Driller was unable to construct decor pad because they must pick up utility clearance from DSNY (Dig Safe New York) office.

PROJECT TOTALS: Met with drillers, discussed scope of work, performed site walk.**SAMPLING (Soil/Water/Air)****Contractor Sample ID:****DEC Sample ID:****Description:**

DAILY OBSERVATION REPORT

Day: Monday Date: 9/21/2007

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Geologic = Scott Brees, Wayne Checksfield

(Name of Subcontractor) personnel:

(Name of contractor) equipment: CME-55 w/ Sonic drive, 7 flatbed work trucks, pickup
(*Indicates active equipment) ↳ onboard Ford F-550

Other Subcontractors:

VISITORS TO SITE: N/A

1.

PROJECT SCHEDULE ISSUES: Driller arrived @ 1500, unable to construct decon pad.

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN: Need to construct decontamination pad tomorrow

COMMENTS: Planned to meet @ 1200, driller not onsite until 1500.

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE: Tom Quinn - Engineer (EI) / Aaron Bobar - Geologist

Name: (signature) Thomas J. Quinn
cc:

DAILY PHOTOLOG No photos

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 9/22/2009

Temperature: (F) 65-75 (am) 75-78 (pm)

Wind Direction: Ø (am) N Ø S (pm)

Weather: (am) Sunny few clouds
(pm) overcast

Arrive at site 800 (am)

Leave site: 430 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X) Aaron Bobar review HASP w/field team

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a TR * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes (X) No () (Location of CB-01)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Geologic constructed a decontamination pad in the rear parking lot of 25 plant avenue. Aaron Bobar conducted a safety briefing and review HASP. Geologic positioned drill rig (CME-55 w/sonic head) on CB-01 and completed drilling/soil coring using a variety of methods to 24' below ground surface (bgs)

PROJECT TOTALS: Decon Pad constructed, Safety briefing, Drilling of CB-01 to 24' bgs.

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Tues Date: 9/22/9

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE: Geologic (Homer, NY)
(Name of contractor) personnel: Scott Brees (driller), Wayne Chicksfield (helper) Steve Lammex (manager)
(Name of Subcontractor) personnel:
(Name of contractor) equipment: CME-55 w/sonic head, flat bed work truck, trailer, pickup
(*Indicates active equipment)
Other Subcontractors:

VISITORS TO SITE:

1. Attorney from Blue Ribbon Pet Products - "Joel" - directed

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN: Geologic was unprepared today. Geologic had to leave site to pick up battery for drill rig. Geologic also had difficulty with drill rod configurations. DPT drilling methods were ineffective and an auger was used to drill to 24". Sample methods included split spoon, plastic bag collection, and acetate sleeves.

COMMENTS:

Geologic has changed approach: HSA (Hollow Stem Auger) will be used with soil sample being collected with hammer/barrel.

ATTACHMENT(S) TO THIS REPORT:

Drawing of CB-01 location (sketch)

SITE REPRESENTATIVE: Tom Quinn

Name: (signature)
cc:

Thomas J. Quinn

DAILY PHOTOLOG

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 9/23/2009

Temperature: (F) 65 (am) 72 (pm)

Wind Direction: Northin (am) Northw (pm) 0-3 mph

Weather: (am) cloudy, intermitten sun + showers
(pm) over cast

Arrive at site 7 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil Yes (X) n/a () * No ()

Waters Yes () n/a (X) * No ()

Air Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (X)

Photos Taken: Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilling began shortly after 7AM with hollow stem augers. Drilling commenced at 24' bgs (logs were left in @ CB-01 from 9/22/2009) and drill rods were advanced to 68' bgs where the water table was encountered. Soil core logging occurred on the 24' to 68' interval and cores were removed collected from via split spoons/acetate sleeves (micro cores) using traditional hammering methods. 17'-88' bgs to be analyzed for VOC, SVOC, PCBs + Metals. Once at the water table, Geologic attempted to advance a mill slot sampler below the water table however the sonic head on the CME-55 drill was incapable and had refusal after 6" of advancement. A stop to work was called via Malcolm Pirnie and NYSDEC's request for more capable equipment. The manager of Geologic (Steve Laramie) was contact by Malcolm Pirnie who promised to mobilize another drill rig with direct push capability by 0700 hours on 9/24/2009. Following this discussion, Geologic cleaned up work areas and abandoned the bore hole (allowing for placement of topsoil) and all parties were offsite by

PROJECT TOTALS:

Soil core logging of CB-01 24'-68' bgs, collect single soil sample from 67'-68' bgs

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

Soil: MPI-HPG-CB01-67-68

Confirmation boring ^{soil sample} above water table from 67'-68' bgs

DAILY OBSERVATION REPORT

Day: WED Date: 9/23/2009

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Malcolm Pirnie: T. Quinn, A. Bobur

(Name of Subcontractor) personnel: Geologic Inc.: Scott Brees, Wayne Checkfield

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

Flat bed equipment truck + trailer, CME-55 drill rig w/sonic head on F-55
Drill rods, augers, barrel, acetate sleeves and split spoon, bit rascals.

VISITORS TO SITE: 1. NYS DEC rep Kerry Maloney

PROJECT SCHEDULE ISSUES: Geologic had to leave site for 1/2 during day to pick up more ~~aug~~^{TR} auger drills from decon pad area.

PROJECT BUDGET ISSUES: CME-55 w/sonic head incapable of performing scope of work in time allotted. MPE/NYS DEC requested more capable equipment.

ITEMS OF CONCERN:

COMMENTS: Geologic Inc to ~~deploy~~^{mobilize} DPT drill rig by 0700 on 9/24/2009

ATTACHMENT(S) TO THIS REPORT: N/A

SITE REPRESENTATIVE: Tom Quinn

Name: (signature)

CC:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 6/24/09

Temperature: (F) 60° 1030 (am) 60 1500 (pm)

Wind Direction: (am) (pm)

Weather: (am) sunny
(pm) sunny

Arrive at site 1030 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes ☒ n/a () * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes ☒ No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled w/ Geoprobe to 115' bgs @ HPG-CB-01; collect GW sample from 111-115' bgs. pulled rods up 15' to collect another gw sample, but out of H₂O table. To make sure there wasn't a clay layer also tried to collect a gw sample at 90', 80' and 70' bgs. Moved ~1' S and drilled to 130' bgs. Collected gw sample HPG-CB-01(126-130)'.
Both samples collected to be analyzed for VOCs & TAL M⁺.
Also collected a filtered sample at each location to be analyzed for M⁺ only. Waiting for confirmation from NYSDEC before having dissolved M⁺ samples analyzed.
Drillers poured bentonite chips in bore holes bc boreholes stayed open to (102' bgs) drillers are going to put sand in boreholes tomorrow morning.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-01 (111-115)

groundwater sample

HPG-CB-01 (111-115)F

Filtered gw sample

HPG-CB-01 (126-130)

GW sample

HPG-CB-01 (126-130)F

filtered GW sample

DAILY OBSERVATION REPORT

Day: Monday Date: 10/26/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Zebra

(Name of Subcontractor) personnel: Charles Green, Luke Caballero

(Name of contractor) equipment: Geoprobe 7720 DT

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

CC ~~None~~ Is there budget for both filtered & unfiltered M+ analyses?

ITEMS OF CONCERN:

Waiting to hear back from NYSDEC to find out if both filtered & unfiltered samples should be analyzed.

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

Chris Thomas

CC:

DAILY PHOTOLOG

#1,2 pre drilling photos of HPG-LB-01
#3,4 sampling HPG-LB-01 (111-115)

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 10/27/09Temperature: (F) 48 0730 (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) raining
(pm)Arrive at site 0720 (am)Leave site: 1545 (pm)**HEALTH & SAFETY:**

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes (☒) n/a () * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()**DESCRIPTION OF DAILY WORK PERFORMED:**

Drilled to 130' bgs at HPG-CB-03, collected gw samples: HPG-CB-03(126-13) (analyzed for VOCs & M⁺) and HPG-CB-03(126-130)F (Filtered sample analysis for M⁺ only). Drilled to 130' bgs at HPG-CB-33, collected gw samples: HPG-CB-33(126-130) VOCs, M⁺; HPG-CB-33(126-130) F. M⁺ only; HPG-CB-33(111-115) VOCs, M⁺; HPG-CB-33(111-115)F. M⁺ only

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-03(126-130)gw sample: VOCs, M⁺HPG-CB-03(126-130)Fgw sample: filtered, M⁺ only

DAILY OBSERVATION REPORT

Day: Tuesday Date: 10/27/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Zebra

(Name of Subcontractor) personnel: C Green, L. Cabellero

(Name of contractor) equipment: Geo probe

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

N/A

PROJECT BUDGET ISSUES:

N/A

ITEMS OF CONCERN:

Still waiting for response from NYSDEC regarding analyses of TAL Metals in unfiltered and/or filtered samples

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature) Chita Toner

CC:

DAILY PHOTOLOG

#5, 6 drilling at HPG-CB-03
#7, 8 HPG-CB-03 after drilling
#9, 10 Before drilling HPG-CB-33
#11 Drilling @ HPG-CB-33
#12, 13 After drilling @ HPG-CB-33

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 10/28/09

Temperature: (F) 48° (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) raining
(pm)

Arrive at site 0730 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (☒)

Photos Taken: Yes () No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drillers started drilling HPG-CB-23, having issues with the hammer so had a mechanic come out to site to give it a nitrogen charge. Drilled to 85' bgs then had refusal. Exposed screen, no water in strapping rods. Moved rig ~10' SE drilled to 65' drillers noticed something wrong with hammer so pulling rods, filling backholes and taking Geoprobe back to shop.

PROJECT TOTALS:

0

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

N/A

DEC Sample ID:

N/A

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 10/28/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Zebra (Luis Caballero, Carlos)

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Geoprobe

(*Indicates active equipment)

Other Subcontractors: MXE (IDW) through Ties de

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

N/A

PROJECT BUDGET ISSUES:

N/A

ITEMS OF CONCERN:

Fixing Geoprobe

COMMENTS:

Kerry Maloney on-site at 12:00

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Turner

DAILY PHOTOLOG

#14-21 HP 6-08-23

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 10/29/09

Temperature: (F) 46° (am) 0720; 52° (pm) 1400

Wind Direction: (am) (pm)

Weather: (am) overcast
(pm) sunny

Arrive at site 0720 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes ☒ n/a () * No ()

Air

Yes ☒ n/a () * No ()

If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes ☒ No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled to 130' bgs at HPG-CB-23. Collected groundwater samples from 126-130' bgs (Dup HPG-CB-23 GW-X1), 115-115' bgs (MS/MSD), and 100-104' bgs. Drilled to 130' bgs at HPG-CB-08; collected groundwater sample from 126-130' bgs. Water table estimated to be ~120' bgs at this location.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-23 (126-130)

Metals, VOCs

HPG-CB-23 (126-130) F

Filtered, M+ only

HPG-CB-GW-X1

Dup of HPG-CB-23 (126-130): VOCs, M+

HPG-CB-GW-X1 F

" " Filtered, M+ only; on HOLD

HPG-CB-23 (111-115)

VOCs, M+

HPG-CB-23 (111-115) F

Filtered M+

HPG-CB-23 (111-115) MS/MSD

VOCs, M+

NYSDEC DER Daily Observation Report

HPG-CB-23 (100-104) + filtered sample

HPG-CB-08 (126-130) + filtered sample

DAILY OBSERVATION REPORT

Day: Thursday Date: 10/29/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Zebra (L. Cabellero + Carlos)

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Geoprobe 7720DT

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. NA

PROJECT SCHEDULE ISSUES:

NA

PROJECT BUDGET ISSUES:

N/A

ITEMS OF CONCERN:

NA

COMMENTS:

Larry Maloney (NYSDEC) on-site 1045-1215.

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:

[Signature]

DAILY PHOTOLOG

22-25 After drilling at HPG-CB-23
26-31 Before & After at HPG-CB-08

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Friday Date: 10/30/09

Temperature: (F) 50° 1300 (am) 55° (pm) 1300

Wind Direction: (am) (pm)

Weather: (am) clear, sunny
(pm) clear, sunny

Arrive at site 0730 (am)

Leave site: 1300 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled to 40' bgs at HPG-CB-24, Refusal at 40 bgs, rods snapped, drillers lost 20' rods in ground.

Drilled to 75' bgs at HPG-CB-28. Water table at ~35' bgs. Collected samples from 46-50 bgs and 35-39' bgs.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-28(35-39)

HPG-CB-28(35-39)F

HPG-CB-28(46-50)

HPG-CB-28(46-50)F

gw sample; Vols, M+

M+ (filtered)

VOLs, M+

M+, filtered

DAILY OBSERVATION REPORT

Day: Friday Date: 10/30/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Zebra (L. Cabellero, Carlos)

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Geoprobe 7220 DT

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. NA

PROJECT SCHEDULE ISSUES:

N/A

PROJECT BUDGET ISSUES:

NA

ITEMS OF CONCERN:

NA

COMMENTS:

NA

ATTACHMENT(S) TO THIS REPORT:

NA

SITE REPRESENTATIVE:

Name: (signature) Chick Thomas
cc:

DAILY PHOTOLOG

#32-43 boring HPG-CB-24
#44 boring HPG-CB-28

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 11/2/09

Temperature: (F) 55 (am) 58 (pm)

Wind Direction: calm (am) (pm)

Weather: (am) (pm) Partly Cloudy

Arrive at site 1315 (am)

Leave site: 1600 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- fill Geoprobe holes / fix & rake Geoprobe tracks in grass areas

- Dean Rig for Tuesday

- Discuss Plan for week - four site & drilling locations

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Monday Date: 11/2/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel:

Zebra Env. (Charles & Mike)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

Dugout Spindles Malcolm Perrier Inc.

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

- No drilling today

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

Too late in day to start drilling.

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

D. Spruel 11/2/09

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 11/3/09

Temperature: (F) 40° (am) 55° (pm)

Wind Direction: (am) (pm)

Weather: (am) clear
(pm)

Arrive at site 0700 (am)

Leave site: 1600 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

photos of Before & after drilling

DESCRIPTION OF DAILY WORK PERFORMED:

- Drill @ locations in Residential area (HPG-CB-26 & HPG-CB-27)

- unusable
DS

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-27 (36-40)

2 VOCs, 2 plastic metals

HPG-CB-27 (32-36)

" "

HPG-CB-26 (66-70)

" "

HPG-CB-26 (51-55)

" "

DAILY OBSERVATION REPORT

Day: Tuesday Date: 11/3/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel:

Zebra Env. (Mike & Charles)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

Dwight Symonds Malcolm Pinnick

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

U-22 Horiba was stolen @ 1130

-work continued w/out Horiba - (visual observations of toxicity)

-Police Report filed

-U-22 Horiba was Returned @ 1530 (found on side of Road)

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

D. Symonds 11/3/09

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 11/4/09

Temperature: (F) 42° (am) 52° (pm)

Wind Direction: (am) (pm)

Weather: (am) clear / partly cloudy
(pm)

Arrive at site 0700 (am)

Leave site: 1630 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

photos taken of before & after drilling

DESCRIPTION OF DAILY WORK PERFORMED:

- Drill @ HPG-CB-11 on Arkay Ave.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

HPG-CB-11 (126-130)

HPG-CB-11 (118-122)

DEC Sample ID:

Description:

2 voas, 2 plastic (metals) Filtered/Unfiltered
" "

DAILY OBSERVATION REPORT

Day: Wednesday Date: 11/4/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel:

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

Zebra Env. (Lance & John)
Dwight Symonds Malcolm Pirnie Inc.

VISITORS TO SITE:

1.

Joseph A. Incalcaterra V.P. operations AudioVox Corp

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

I couldn't advance tubing through Rod @ 118-122 interval
- Had to extract Rods & enter same Bore hole
- Second attempt - tubing w/ check valve entered screen & sample was collected.

COMMENTS:

- 1 hrs spent trying to get tubing into water
- 1.5 hrs spent extracting & re inserting rods in borehole.

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

D. Spruel 11/4/09

DAILY PHOTOLOG

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 11/5/09

Temperature: (F) 45 (am) 55° (pm)

Wind Direction: (am) (pm)

Weather: (am) partly cloudy
(pm) cloudy

Arrive at site 0700 (am)

Leave site: 1700 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (✓)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (✓) * No ()

Waters

Yes (✓) n/a () * No ()

Air

Yes () n/a (✓) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (✓)

Photos Taken:

Yes (✓) No () photos of locations before/after

DESCRIPTION OF DAILY WORK PERFORMED:

- Geoprobe @ HP6-CB-10 on Arkay Ave.

- Geoprobe @ HP6-CB-6 on Adams Ave.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HP6-CB-10 (126-130')

HP6-CB-10 (116-120')

HP6-CB-6 (126-130')

~~HP6-CB-6 (126-130')~~

2 Vials, 2 plastic liners

"

"

"

"

DAILY OBSERVATION REPORT

Day: Thursday Date: 11/5/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel:

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

*Zebra Env. (Luke & Quiney)
Dwight Symonds Malcolm Pirnie.*

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

D. Snell 11/5/09

DAILY PHOTOLOG

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Friday Date: 11/6/09

Temperature: (F) 40 (am) 50° (pm)

Wind Direction: (am) (pm)

Weather: (am) clear, windy
(pm)

Arrive at site 0630 (am)

Leave site: 1330 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No () - Photos of locations

DESCRIPTION OF DAILY WORK PERFORMED:

- purge GW @ HP4-CB-6 (115-119')
Collect samples

- M&B & Drill @ HP4-CB-21

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HP4-CB-6 (115-119')

2 vials, 2 plastic TMC metals

HP4-CB-21 (126-130')

4

4

DAILY OBSERVATION REPORT

Day: Friday Date: 11/6/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel:

Zeban Env. (Luket Quiney)

(Name of Subcontractor) personnel:

Dwight Symonds up!

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

D. Spurl 11/6/09

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

Day: Monday Date: 11/9/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPI (C. Thomas)

(Name of Subcontractor) personnel: Zebra (Luis Caballero)

(Name of contractor) equipment: Geoprobe 7720

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

NA

PROJECT BUDGET ISSUES:

NA

ITEMS OF CONCERN:

NA

COMMENTS:

ATTACHMENT(S) TO THIS REPORT: None

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

#56, 57, 58 post drilling photos of HPG-CB-21
#59 post drilling HPG-CB-08
#60 " " HPG-CB-03
#61, 62 post drilling HPG-CB-01
#63, 64 " " HPG-CB-33
#65, 66, 67 " " HPG-CB-23

DAILY OBSERVATION REPORT**NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday **Date:** 11/9/09

Temperature: (F) 68° 1030 (am) 70° (pm) 1400

Wind Direction: (am) (pm)

Weather: (am) Sunny
(pm) cloudy

Arrive at site 1025 (am)

Leave site: 1610 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes (☒) n/a () * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Continued drilling HPG-CB-21. Collected groundwater samples from 111-115' bgs and 96-100' bgs.

Spoke to Jerry Finazzo, of PALL Science CBlg Manager, notified him we would be drilling on their property tomorrow.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-21 (111-115)

HPG-CB-21 (111-115) F

HPG-CB-21 (96-100)

HPG-CB-21 (96-100) F

Gw sample: VOCs, M+

M+, filtered

VOCs, M+

M+, filtered

DAILY OBSERVATION REPORT

Day: Tuesday Date: 11/10/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT (C. Thomas)

(Name of Subcontractor) personnel: Zebra (L. Cabellero & Carlos)

(Name of contractor) equipment: Geoprobe 7720

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. NA

PROJECT SCHEDULE ISSUES:

NA

PROJECT BUDGET ISSUES:

NA

ITEMS OF CONCERN:

NA

COMMENTS:

—

ATTACHMENT(S) TO THIS REPORT:

—

SITE REPRESENTATIVE:

Name: (signature) Chris Thomas

cc:

DAILY PHOTOLOG

#68-73 HPG-CB-12

#74 HPG-CB-18

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 11/10/07

Temperature: (F) 50° 07K (am) 50° 1530 (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast
(pm) overcast

Arrive at site 0710 (am)

Leave site: 1540 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled HPG-CB-12; collected three groundwater samples: 116-120' bgs, 101-105' bgs, and 86-90' bgs. Collected split samples at each interval and gave them to PALL science per their request w/under direction of NYSDEC.

Went to 77 Eagle Lane to drill CB-32, but utility clearance mark outs not clear, Zebra requested new mark outs for gas.

Drilled HPG-CB-18; collected groundwater sample from 116-120' bgs. Zebra left rods in ground will finish sampling at the location tomorrow.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-12(116-120)		GW sample, M ⁺ , VOCs, filtered sample also collected
HPG-CB-12(101-105)		" "
HPG-CB-GW-X2		duplicate of HPG-CB-12(101-105)
HPG-CB-12(86-90)		M ⁺ , VOCs, filtered sample for M ⁺
HPG-CB-18(116-120)		" "

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 11/11/09Temperature: (F) 46° 0720 (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast, light rain
(pm)Arrive at site 0720 (am)Leave site: 1600 (pm)**HEALTH & SAFETY:**

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes () n/a () * No ()

Air

Yes () n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Finished drilling at HPG-CB-18. Collected groundwater sample from 101-105' bgs at HPG-CB-18. Drilled to 130' bgs at HPG-CB-05, collected groundwater samples from 126-130' bgs and 118-122' bgs. Drill to 110' bgs at HPG-CB-17; water table at 99' bgs. Tomorrow will collect gw sample from 101-105' bgs.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-18(101-105)Gw sample; VOCs, M+HPG-CB-18(101-105) MS/MSD" " QA/QC samplesHPG-CB-18(101-105) Ffiltered sample, analyzed for M+ onlyHPG-CB-05(126-130)VOCs, M+HPG-CB-05(126-130) Ffiltered, M+ onlyHPG-CB-05(118-122)VOCs, M+HPG-CB-05(118-122) Ffiltered, M+ only

DAILY OBSERVATION REPORT

Day: Wednesday Date: 11/11/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas (HPZ)

(Name of Subcontractor) personnel: Zebra (L. Cabellero & Carlos)

(Name of contractor) equipment: Geoprobe 7720

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

NA

PROJECT BUDGET ISSUES:

NA

ITEMS OF CONCERN:

NA

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

75, 76 post drilling at HP G-CB-18

77-80 HP G-CB-05

81-82 HP G-CB-17

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 11/12/09

Temperature: (F) 45° 0715 (am) 42° 1300 (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast, WINDY
(pm) raining

Arrive at site 0715 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (X)

Photos Taken: Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Collected groundwater sample from boring HP6-CB-17 from
101-105' bgs.

Collected 3 groundwater samples at boring HP6-CB-20:
126-130' bgs, 111-115' bgs, and 97-101' bgs.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-17(101-105)

gw sample: VOCs, M+ *

HPG-CB-17(101-105)F

filtered gw sample, analyzed for M+ only **

HPG-CB-20(126-130)

*

HPG-CB-20(126-130)F

* *

HPG-CB-20(111-115)

*

HPG-CB-20(111-115)F

* *

HPG-CB-20(97-101)

*

HPG-CB-20(97-101)F

* *

DAILY OBSERVATION REPORT

Day: Thursday Date: 11/12/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas (MPT)

(Name of Subcontractor) personnel: L. Labellane & Carlos (Labra)

(Name of contractor) equipment: Geoprobe 7720

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

#83,84 post drilling HP6-CB-17
#85-87 post drilling HP6-CB-20
#88 post drilling HP6-CB-10

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 4/16/09Temperature: (F) 55° 1000 (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) windy, sunny
(pm)Arrive at site 1000 (am)Leave site: 1610 (pm)**HEALTH & SAFETY:**

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes (☒) n/a () * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes () No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled boring HPG-CB-24; collected 3 groundwater
samples from this boring: (126-130)' bgs, 111-115' bgs, and
101-105' bgs

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-24(126-130)gw sample, VOCs, Metals *HPG-CB-24(126-130)Ffiltered sample, Metals only **HPG-CB-24(111-115)*HPG-CB-24(111-115)F**HPG-CB-24(101-105)*HPG-CB-24(101-105)F**

Day: Monday Date: 11/16/09

(Name of contractor) personnel: MPE - C Thomas
(Name of Subcontractor) personnel: Zehra L. Cabellano & Quincy
(Name of contractor) equipment: Genprode 7720
(*Indicates active equipment)
Other Subcontractors:

1. Name

Name _____

Name _____

None

None

Name: (signature)
cc:

#89, 90, 91 being HPG-CB-24

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 11/17/09

Temperature: (F) 45° 0700 (am) 47° 1530 (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast
(pm) sunny

Arrive at site 0700 (am)

Leave site: 1610 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes (☒) n/a () * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled HPG-CB-30 to 130' bgs. Collected groundwater samples from: 126-130' bgs, 111-115' bgs, 96-100' bgs, and 48-52' bgs.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-30(126-130)

gw sample; VOCs, metals *

HPG-CB-30(126-130)F

Filtered sample, metals only **

HPG-CB-30(111-115)

*

HPG-CB-30(111-115)F

* *

HPG-CB-30(96-100)

VOCs, metals, nitrate, chloride, nitrate, ammonia

HPG-CB-30(96-100)F

* *

HPG-CB-30(48-50)

*

NYSDEC DER Daily Observation Report

HPG-CB-30(48-50)F

* *

DAILY OBSERVATION REPORT

Day: Tuesday Date: 11/17/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas (MPC)

(Name of Subcontractor) personnel: L. Cabellano & Quincy (Zebra)

(Name of contractor) equipment: Geoprobe 7720DT

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Ivan Guerra, Eastern Locaters rep re-marked gas lines

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:

C. Thomas

DAILY PHOTOLOG

#92-96 Pre drilling HPG-CB-30

#97-99 Post drilling HPG-CB-30

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 11/18/09

Temperature: (F) 40° 0715 (am) 48° 1115 (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast
(pm) sunny

Arrive at site 0715 (am)

Leave site: 1115 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes (☒) n/a () * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled boring HPG-CB-32. Collected a groundwater sample from 48-52' bgs.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-32(48-52)
HPG-CB-32(48-52)F

gw sample, VOCs, metals
↓
filtered sample, metals only

Day: Wednesday Date: 11/18/09

(Name of contractor) personnel: Thomas (M^{PI})
(Name of Subcontractor) personnel: Labellaro & Quinay (Zebrin)
(Name of contractor) equipment: Geoprobe 7720 DT
(*Indicates active equipment)

VISITORS TO SITE:

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

CC:

Art Thomas

DAILY PHOTOLOG

#100, 101, 102, 103 pre drilling HPG-CB-32
#104, 105, 106 post drilling HPG-CB-32

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 11/30/09

Temperature: (F) ~50°F (am) ~40°F (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast ~50°F
(pm) Rain

Arrive at site 0900 (am) arrive on-site 1000

Leave site: 1700 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Soil Sample @ CB-30 + CB-32

CB-32

Sampled to a depth of 50' bgs ($\frac{7}{8}$ " @ ~47.0)
- 1 Sample collected @ 44.5-46.5'

CB-30

Sampled to depth of 45' bgs ($\frac{7}{8}$ " @ ~42.0)
- 2 Samples collected @ 28-30' and 39-41' bgs.
- Increased gravel @ ~35-40' pulled 'No Recovery' also @ 40-45'
tripped out rods resampled ~1' from original location.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPH-CB-32-44.5-46.5

@ 1240

HPH-CB-30-28-30

@ 1435

HPH-CB-30-39-41

@ 1605

DAILY OBSERVATION REPORT

Day: Monday Date: 11/30/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Matthew Jones - MPI
(Name of Subcontractor) personnel: Zobra Luke + Pete
(Name of contractor) equipment: Genprobe
(*Indicates active equipment)
Other Subcontractors:

VISITORS TO SITE:

1. NA

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)
cc:

Matthew Jones MPI

DAILY PHOTOLOG

Before and After Pictures of CB-30 + CB-32
(Photos 1-4)

DAILY OBSERVATION REPORT

Day: Tuesday Date: 12/1/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas (MPE)
(Name of Subcontractor) personnel: Zebrn - Luke & Pete
(Name of contractor) equipment: 6610DT - Geoprobe
(*Indicates active equipment)
Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature) Chris Thomas
cc:

DAILY PHOTOLOG

4-5-7 Before drilling HPG-CB-18
8 " " " HPG-CB-17
9 After drilling HPG-CB-18
10-13 HPG-CB-17 soil
14,15 shoe w/ gtz gravel
16-17 post drilling HPG-CB-17

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 12/1/09

Temperature: (F) 38° 100 (am) 42° 1400 (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast
(pm) sunny

Arrive at site 1000 (am)

Leave site: 1430 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes ☒ n/a () * No ()

Waters

Yes () n/a ☒ * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Used dual tube sampling technique with a 6610 Geoprobe.
Drilled HPG-CB-17 and HPG-CB-18. Refusal at 40' bgs wt at both
boring locations. Shoe was filled with crushed gtz gravel at both
boring locations. Did not collect any samples because did not
reach depth of anomalies.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

None

DAILY OBSERVATION REPORT

Day: Wednesday Date: 12/2/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas - MPI

(Name of Subcontractor) personnel: Luke & Pete - Zebra

(Name of contractor) equipment: Geoprobe 7720 DT
(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)
cc:

C. Thomas

DAILY PHOTOLOG

#18-20 Pre drilling HPG-CB-23
#21 Post drilling HPG-CB-28
#22-23 Pre drilling HPG-CB-27
#24-25 Post drilling HPG-CB-27
#26-27 Post drilling HPG-CB-23

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 12/2/09

Temperature: (F) 30° 0715 (am) 40° 1400 (pm)

Wind Direction: (am) (pm)

Weather: (am) clear skies, cold
(pm) overcast

Arrive at site 0715 (am)

Leave site: 1430 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (☒)

Photos Taken: Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled HPG-CB-23. Encountered refusal at 49' bgs. No sample collected because did not reach target depth (anomaly).

Drilled HPG-CB-28. Drilled to 35' bgs. Collected soil sample from 26.5-29.5' bgs. Also collected QA/QC samples MS/MSD. H₂O table at 30' bgs.

Drilled HPG-CB-27. Drilled to 35' bgs. Collected soil sample from 26.5-29.5' bgs, also collected duplicate of the sample. H₂O table at 30' bgs.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-CB-28 (26.5-29.5)

Soil sample; VOCs, SVOCs, PCBs, Pest, TAL metals

HPG-CB-28 (26.5-29.5) MS/MSD

QA/QC soil sample analyzed for all listed above

HPG-CB-27 (26.5-29.5)

Soil sample; VOCs, SVOCs, PCBs, Pest, TAL metals

HPG-CB-X3

↓, duplicate of HPG-CB-27 (26.5-29.5)

DAILY OBSERVATION REPORT

Day: Thursday Date: 12/3/09

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas - MPI
(Name of Subcontractor) personnel: Luke & Pete - Zebra
(Name of contractor) equipment: Geoprobe 7720T
(*Indicates active equipment)
Other Subcontractors:

VISITORS TO SITE:

1. _____

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:

Ch. Thomas

DAILY PHOTOLOG

#28-29 Pre drilling CB-06
#30-32 Post drilling CB-06
#33-35 Post drilling CB-12
#36 Pre drilling CB-11
#37 Post " "

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 12/3/09

Temperature: (F) 60° 0715 (am) 60° 1300 (pm)

Wind Direction: south (am) south (pm)

Weather: (am) windy, overcast
(pm) windy, sunny

Arrive at site 0715 (am)

Leave site: 1300 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Drilled CB-06; encountered refusal at 15' bgs, moved rig for 2nd attempt,
refusal at 10' bgs.

CB-12
Drilled ~~CB-12~~; attempted to reach target depth three times.
Encountered refusal at 15' bgs, 10' bgs, and 8' bgs.

Drilled CB-11; encountered refusal at 35' bgs.
Encountering refusal from tight soil and grt. gravel.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT**NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday **Date:** 2/15/2010

Temperature: (F) 32° 1015 (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) sunny
(pm)

Arrive at site 1015 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes () No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Aztech built decom pad and steam cleaned casing.
Aztech called utility clearance to have them re-mark utilities
bc they are covered in snow. Aztech shoveled area to drill
monitoring wells at CB-75. Note there is ~2.5' of snow on ground.
MPI talked to homeowners at 75 Eagle Lane to notify them
we would be installing monitoring wells. MPI gave homeowners
Kenny Maloney's business card.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: MONDAY Date: 2/15/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPI CET

(Name of Subcontractor) personnel: A2Tech Marty

(Name of contractor) equipment: HSA forny fig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature) Chita Thomas
cc:

DAILY PHOTOLOG

#8-10 show at CB-75

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 2/16/2010

Temperature: (F) 32° 07° (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast, skating
(pm) heavy snow, cold

Arrive at site 0700 (am)

Leave site: 1730 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (☒)

Photos Taken: Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Installed MW-30S. Water table ~40.5' bgs, screened interval ~38-48' bgs.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Tuesday Date: 2/16/2020

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: CET (MPI)

(Name of Subcontractor) personnel: Marty Harrington & Bob Gannon (Artech)

(Name of contractor) equipment: Rotary rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Mark Hennesey of Eastern Locator Service

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

#11 Drilling MW-305

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 2/17/2010

Temperature: (F) 20° 0700 (am) 20° 1800 (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast, cold
(pm) overcast, cold

Arrive at site 0700 (am)

Leave site: 1830 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a () * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (X)

Photos Taken: Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Installed monitoring well MW-30I. Screen set from 89-99' bgs, sand to 85' bgs, bentonite seal from 75-85' bgs, grouted to surface.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 2/17/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Christine Thomas - MPI

(Name of Subcontractor) personnel: Marty Harrington & Bob Gannon - Artech

(Name of contractor) equipment: HSA Rotary ns

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Mark Hennessy - ELS

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Christine Thomas

DAILY PHOTOLOG

#12 Drilling MW-30E

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 2/18/2010
Temperature: (F) 25° 1700 (am) 25° (pm)
Wind Direction: 35° 1500 (am) (pm)
Weather: (am) cloudy
(pm) sunny
Arrive at site 0700 (am)
Leave site: 1630 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes ☒ n/a () * No ()

Waters

Yes () n/a ☒ * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ☒

DESCRIPTION OF DAILY WORK PERFORMED:

Aztech topped grout in monitoring wells MW-30I and MW-30S.
But constructed curb boxes for monitoring wells MW-30I and MW-30S.
Using rotary drilling tech methods dirt augered to 43' bgs at MW-30D
and augered split spaced to 45' bgs at this location.
MPE & Aztech evaluated drilling locations for accessibility on the PROW.
Due to utilities borings CB-15, CB-34, CB-20 and CB-24 have to
be moved. Aztech called in new utility clearance for 40 Engineers Rd
(across the street from 35 Engineers Rd) and 175 Marcus Blvd (across
the street from 150 Marcus Blvd).

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HP6-MW-30D (38-39)

soil sample

soil sample analyzed for VOCs + M+

DAILY OBSERVATION REPORT

Day: Thursday Date: 2/15/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: C. Thomas - MPT

(Name of Subcontractor) personnel: M. Harrington, B. Gannon - Atech

(Name of contractor) equipment: Rotary rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

~~Utilities~~ utilities are in PROW, not possible to drill
at the following locations (in PROW): CB-15, CB-34, CB-24, CB-20.

COMMENTS:

Contacts: 40 Engineers Rd - Tom Walsh 631-234-8500
175 Marcus Blvd - Steven Wolf 516-333-9000

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)
cc:

C. Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT**NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

Work Assignment # D-004439-20

Smithtown, New York

Day: Friday

Date: 2/19/09

Temperature: (F) 30° 0700 (am) 30° (pm)

Wind Direction: west (am) (pm)

Weather: (am) cloudy, w. wind
(pm) cloudy, w. wind

Arrive at site 0700 (am)

Leave site: 1130 AM (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Sampled to 51' bgs at MW-30 D. Saw Augered to 49' bgs, sand started to run up rods so pulled augers and set casing to 48' bgs.

Hydraulic motor not working, cannot drill using direct wash methods. Called Utility Clearance for 50 Oxen Arc (across from 45 Oxen).

Spoke to Phil Fallon, Environmental manager for property at 50 Oxen Arc. He was appreciative of the advanced notice.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Friday Date: 2/19/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPE - C. Thomas

(Name of Subcontractor) personnel: Artech - M. Harrington, B. Gernon

(Name of contractor) equipment: Rotary rig
(Indicates active equipment)

(*Indicates active equipment)

Other Subcontractors: _____

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

NA

PROJECT BUDGET ISSUES:

N/A

ITEMS OF CONCERN:

Drinking ~~taking~~ going slowly.

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

CC:

Ch. Thomas

DAILY PHOTOLOG

#13 MWs 30S and 30I

#14 MW-30 D

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday

Date: 2/22/10

Temperature: (F) 32° 1050 (am) 52° 1600 (pm)

Wind Direction: from SE (am) from E (pm)

Weather: (am) sunny
(pm) overcast

Arrive at site 1020 (am)

Leave site: 1645 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a () * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Continued drilling monitoring well MW-30 D. used drive & wash drilling techniques and installed ^{temporary} casing as we drilled. Sampled ~~water~~ split. Spore using standard sampling ~~press~~ techniques. Sampled to 75' bgs, casing set at 75 bgs. Left rods & casing in ground. Lost a lot of H₂O to the formation (500 gal). Tomorrow drillers would like to use mud rotary drilling techniques.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

2

DAILY OBSERVATION REPORT

Day: Monday Date: 2/22/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPI - C. Thomas

(Name of Subcontractor) personnel: Aztech - M. Harrington, B. Gannon

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

Lost a lot of H₂O to the formation.
Drillers would like to use mud rotary drilling method
tomorrow.

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

C. Thomas

DAILY PHOTOLOG

#15, 16 MW-30D (68-70)

#17, 18 Drivethash drilling @ MW-30D

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 2/23/10

Temperature: (F) 32° 0700 (am) 32° 1630 (pm)

Wind Direction: from northeast (am) (pm)

Weather: (am) running (light rain)
(pm) raining

Arrive at site 0700 (am)

Leave site: 1650 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a () * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes () No (X)

DESCRIPTION OF DAILY WORK PERFORMED:

Finished installing monitoring well MW-300. Drilled ^{from 75'} to 138' bgs using mud rotary drilling methods. Could not sample because raining all day (too dangerous to use hammer). Screen set from 122.5' - 127.5' bgs; sand ^{from} to 119' - 127.5' bgs, bentonite slurry 109' - 119'; grout to surface.

checked locations 40 Engineers & 175 Mancus Blvd, not all locations have been cleared. @

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Tuesday Date: 2/23/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPE - C. Thomas

(Name of Subcontractor) personnel: Atch - M. Hanning & B. Gannon

(Name of contractor) equipment: Rotary rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. _____

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

Utilities & drilling locations.

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc: C. Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 2/27/10

Temperature: (F) 32° - 70° (am) (pm)

Wind Direction: 38° 150° (am) (pm)

Weather: (am) rainy
(pm) rainy

Arrive at site 0700 (am)

Leave site: 1500 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes ☒ n/a () * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ☒

DESCRIPTION OF DAILY WORK PERFORMED:

Artech did not want to start drilling in the road due to weather forecast (snow storm). Artech constructed curb box @ MW-300 and off site at 0845.
MPI met w/ Ivan from Eastern Locator Service. Questionable mark on plant Arc, done by LIPA. LIPA has to come to double check. 40 Engineers & 175 Marcus still not marked, Ivan will find out who has them in the field.
MPI purged ~30 gal from monitoring wells MW-30S and MW-30E.
RVR

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 2/24/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: BMPT - C. Thomas, J. Luffield, J. Hock

(Name of Subcontractor) personnel: Arden M. Harrington B. Cannon

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

CC:

Chit Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 3/3/10

Temperature: (F) 32° 0700 (am) 32° 1630 (pm)

Wind Direction: from North (am) from North (pm)

Weather: (am) snowing, cold, windy
(pm) drizzling, cold, windy

Arrive at site 0700 (am)

Leave site: 1750 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Installed monitoring well MW-23E. Screen set from 109'-114' bgs;
sand from 106'-114' bgs; bentonite slurry 96'-106' bgs; grout to ~26' bgs.
will top off grout tomorrow.

Broke pavement for ~~MW-23D~~ MW-23D. Hand cleared to 4' bgs, then augered
to 30' bgs. Left augers in ground overnight.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 3/3/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPE - C. Thomas

(Name of Subcontractor) personnel: Artech - Marty & Bob Genon

(Name of contractor) equipment: Rotary rig Hannington

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. _____

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

CK Thomas

DAILY PHOTOLOG

#19, 20 : Drilling MW-23 I

DAILY OBSERVATION REPORT**NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

Work Assignment # D-004439-20

Smithtown, New York

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes (x) n/a () * No ()

Waters

Yes () n/a (x) * No ()

Air

Yes (x) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (x)

Photos Taken:

Yes (x) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Dilled to 135' bgs at MW-23D; standard sampled
from 50-90' bgs. Augers left in ground will construct MW tomorrow.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

Field Blank

Poured DI down spl + spurn: VOCs, M+

HP6-MW-23D(75-77)

90LC: VOCs, M+

HP6-MW-X5

Dup: VOCs, M+

DAILY OBSERVATION REPORT

Day: Thursday Date: 3/4/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT - C. Thomas

(Name of Subcontractor) personnel: Aztech - M. Harrington, B. Garon

(Name of contractor) equipment: Retaining

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

#21,22 Drilling MW-23D.

#23,24 Soil from MW-23D (70-72 feet bgs)

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: FRIDAY Date: 3/5/10

Temperature: (F) 32° 07W (am) 35° 14W (pm)

Wind Direction: from North (am) from North (pm)

Weather: (am) showing
(pm) overcast, windy

Arrive at site 0700 (am)

Leave site: 1415 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Installed monitoring well MW-23D; screen set from 129-134' bgs; sand from 126-134' bgs; bentonite slurry from 116-126' bgs; Artech 3 batches 55 gal each of grout poured in borehole. Artech will finish excavating and construct curb box on Monday. Top auger placed over PVC casing and left rig in Plant Area over site.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

2

DAILY OBSERVATION REPORT

Day: Friday Date: 3/5/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MRE - C. Thomas

(Name of Subcontractor) personnel: Artech - M. Harrington, B. Gannon

(Name of contractor) equipment: Lottery
(*Indicates active equipment)

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature) Chris Thomas
cc:

CC:

DAILY PHOTOLOG

#25, 26 MW-23D, ng left over weekend

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 3/8/10

Temperature: (F) 38° 1030 (am) 38° 1600 (pm)

Wind Direction: from North (am) from West (pm)

Weather: (am) Sunny

(pm) Sunny

Arrive at site 1030 (am)

Leave site: 1645 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes () No (☒)

DESCRIPTION OF DAILY WORK PERFORMED:

Finished grouting monitoring wells MW-23J and MW-23D.
Constructed road boxes for both monitoring wells.

Met with Eastern Locator Service at 40 Engineers Rd.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Monday Date: 3/8/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPI - C. Thomas

(Name of Subcontractor) personnel: Aztech - M. Harrington, B. Bell

(Name of contractor) equipment: Rotary rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Rob Avery (EPA)

PROJECT SCHEDULE ISSUES:

—

PROJECT BUDGET ISSUES:

—

ITEMS OF CONCERN:

—

COMMENTS:

—

ATTACHMENT(S) TO THIS REPORT:

—

SITE REPRESENTATIVE:

Name: (signature)

cc:

C. Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 3/9/10

Temperature: (F) 40° 0700 (am) 45° 1600 (pm)

Wind Direction: from West (am) from NW (pm)

Weather: (am) sunny
(pm) sunny

Arrive at site 0700 (am)

Leave site: 1815 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes ☒ n/a () * No ()

Waters

Yes () n/a ☒ * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes ☒ No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Installed monitoring well MW-24I, screen set from 98'-108' bgs, sand from 95.5'-108' bgs; bentonite slurry 85.5'-95.5' bgs. Left rig in Road, with grout augers in ground, will grout mw tomorrow.

Shipped samples via Fed Ex.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-MW-24I (55-57)

Soil sample, VOLs, TAL M+

HPG-MW-24I (55-57) MS/MSD

" " MS/MSD

DAILY OBSERVATION REPORT

Day: Tuesday Date: 3/9/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT - C. Thomas

(Name of Subcontractor) personnel: Artech - M. Harrington, B. Bell, J. Stair

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Tom Aduvino (he represents a few properties in the industrial park)
2. Don Rosich (potential new hire for Artech)

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

#27 -30 MW-24E

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 3-10-10

Temperature: (F) 40° 0700 (am) 45° 1600 (pm)

Wind Direction: from N (am) from S (pm)

Weather: (am) SUNNY

(pm) SUNNY

Arrive at site 0700 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a () * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Completed installing MW-24I: grouted borehole to surface, removed augers, constructed curb box, and decontaminated augers.

Started drilling MW-20I. Used standard sampling techniques, augered to 55' bgs.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 3-10-10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPC - C. Thomas

(Name of Subcontractor) personnel: Aztech - M. Hainwright, B. Bell, J. Stair

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

#31, 32 Drilling MW-20T

33, 34 SOIL MW-20T (10-12' bgs)

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 3/11/10

Temperature: (F) 40° 0700 (am) 45° 1600 (pm)

Wind Direction: from E (am) from E (pm)

Weather: (am) overcast
(pm) overcast

Arrive at site 0700 (am)

Leave site: 1730 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (☒)

Photos Taken: Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

Finished drilling monitoring well MW-20I. Screen set 113-123' bgs;
sand 110-123' bgs; bentonite slurry 100-110' bgs; grouted to within
10 feet of ground surface. Will finish grouting and construct curb box
tomorrow.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

#PG-MW-20I (90-91.3)

Soil sample; analyzed for VOCs & metals

DAILY OBSERVATION REPORT

Day: Thursday Date: 3/11/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPI - C. Thomas

(Name of Subcontractor) personnel: Artech - M. Harrington, J. Stair

(Name of contractor) equipment: Rotary rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. _____

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

C. Thomas

DAILY PHOTOLOG

#35 Drilling MW-201

DAILY OBSERVATION REPORT**NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

Work Assignment # D-004439-20

Smithtown, New York

Day: FRIDAY **Date:** 3/12/10

Temperature: (F) 40°, 0700 (am) 45° 1300 (pm)

Wind Direction: (am) (pm)

Weather: (am) light rain
(pm) light rain

Arrive at site 0700 (am)

Leave site: 1300 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes (☒) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes () No (☒)

DESCRIPTION OF DAILY WORK PERFORMED:

Topped off grant in MW-20I and constructed curb box.
Artech spread top soil & grass seed at MW-20I and MW-30.
Cannot start new well b/c hammer do not want to leave
ring in middle of Oser Are over the weekends.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

7

DAILY OBSERVATION REPORT

Day: Friday Date: 3/12/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT - C Thomas

(Name of Subcontractor) personnel: Aztech - M Hutchinson, J. Sair

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 3/15/10

Temperature: (F) 41 (am) 45 (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) Drizzling / Raining
(pm) Drizzling / Raining

Arrive at site 0745 (am)

Leave site: 1530 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Malcolm Pirnie arrived on-site (100 Oser Ave.) to meet drum delivery to new staging area at 100 Oser Ave. at 0745
- Began drilling MW-150 in front of 75 Oser Ave.
 - Drilled to 60' using HSA
 - Set up to finish well installation tomorrow using mud rotary method.
 - Collected soil sample above water table.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-MW-150 (50-52)

-Soil sample collected just above water table

DAILY OBSERVATION REPORT

Day: Monday Date: 3/15/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jeruid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel: Marty Harrington + Scott Megan (Aztech)

(Name of contractor) equipment: HSA drill rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 3/16/10

Temperature: (F) 42° (am) 50° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) clear, breezy
(pm) clear

Arrive at site 0645 (am)

Leave site: 1730 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a () * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Continued installation of MW-15D.
- 22 Drums filled with soil cuttings removed from site by IDW contractor.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Tuesday Date: 3/16/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jeruid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel: Marty Harrington Scott Megan (Aztech)

(Name of contractor) equipment: HSA drill rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 3/17/2010

Temperature: (F) 40° (am) 60° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) clear, sunny
(pm) clear, sunny

Arrive at site 7:00 (am)

Leave site: 5:00 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes (X) n/a () * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Completed installation of MW-15D. Constructed well cap.
- Decontaminated augers.
- Set up and started drilling at MW-34D location (In front of 7 Oser Ave.)
 - Drilled to 70'
 - Collected a soil sample from 55'-57' interval.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

HPG-MW-34D(55-57)

Soil sampled from split spoon. Taken just above water table.

DAILY OBSERVATION REPORT

Day: Wednesday Date: 3/17/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jervid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel: Marty Harrington and Scott Megan (Aztech)

(Name of contractor) equipment: HSA drill rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 3/18/2010

Temperature: (F) 41° (am) 60° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) clear, sunny

(pm) clear, sunny

Arrive at site 0700 (am)

Leave site: 1845 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Continued installation of MW-34D
 - Drilled to depth
 - set screen
 - installed sand pack, bentonite slurry, and most of grout.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

DAILY OBSERVATION REPORT

Day: Thursday Date: 3/18/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Teru'd Shoemaker (Malcolm Picnie)

(Name of Subcontractor) personnel: Marty Harrington and Scott Megan (Aztech)

(Name of contractor) equipment: HSA drill rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Police Officers

2. Renea Reynolds (Bactolac)

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

- A drunk driver struck the Malcolm Picnie field vehicle.

COMMENTS:

- There were no injuries due to the accident and the drunk driver was detained by police officers.

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT
NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Friday **Date:** 3/19/2010

Temperature: (F) 41° (am) 60° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) clear, sunny

(pm) clear, sunny

Arrive at site: 0700 (am)

Leave site: 1445 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes (☒) n/a () * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Completed installation of MW-34 D
- Installed SVP location in front of 80 Eagle Lane.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Friday Date: 3/19/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jeruid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel: Marty Harrington + Scott Megan (Aztech)

(Name of contractor) equipment: Drill Rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

**DAILY OBSERVATION REPORT
NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday **Date:** 3/23/2010

Temperature: (F) 56° (am) 58° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) light rain

(pm) light rain

Arrive at site 0730 (am)

Leave site: 1545 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes (X) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Developed MW-30S
- started developing MW-30I

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Tuesday Date: 3/23/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jeruid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

None

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

NYSDEC

Smithtown, New York

Day: Wednesday Date: 3/24/2017

Temperature: (F) 47° (am) 580 (pm)

Wind Direction: *NE* (am) *NE* (pm)

Weather: (am) clear, sunny
(pm) clear, sunny

Arrive at site 0945 (am)

Leave site: 1715 (pm)

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (4) * No ()

- *If No, provide comments*

Site Sketch Attached:

Yes () No (☒)

Photos Taken:

Yes () No (☒)

DESCRIPTION OF DAILY WORK PERFORMED:

- Developed MW-30I
- Placed purgewater in drums and placed in staging area.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 3/24/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jeruid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None Well development will take longer than initially thought.

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS: None

ATTACHMENT(S) TO THIS REPORT: None

SITE REPRESENTATIVE:

Name: (signature)

cc:



DAILY PHOTOLOG

**DAILY OBSERVATION REPORT
NYSDEC**

**Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221**

**Work Assignment # D-004439-20
Smithtown, New York**

Day: Tuesday **Date:** 3/30/2010

Temperature: (F) 42° (am) 48° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) Heavy Rain
(pm) Light Rain

Arrive at site 0710 (am)

Leave site: 1520 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes () n/a (X) * No ()

Air

Yes () n/a (X) * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (X)
Photos Taken: Yes () No (X)

DESCRIPTION OF DAILY WORK PERFORMED:

- Developed MW-300
- During development, discovered well casing damaged.
- Driller who installed well will be on-site tomorrow to verify if well casing damaged. Driller will replace if damaged.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Tuesday Date: 3/30/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jervid Shoemaker (Malcolm Pirnie)

(Name of Subcontractor) personnel:

(Name of contractor) equipment: QED Bladder pump and compressor

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

- MW-30A could have damaged well casing.

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE: Jervid Shoemaker

Name: (signature)

cc:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 3/31/2010

Temperature: (F) 44° (am) 50° (pm)

Wind Direction: NE (am) NE (pm)

Weather: (am) light rain
(pm) cloudy

Arrive at site 0715 (am)

Leave site: 1740 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (☒)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (☒) * No ()

Waters

Yes () n/a (☒) * No ()

Air

Yes () n/a (☒) * No ()

- If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (☒)

Photos Taken: Yes (☒) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

- Developed monitoring wells MW-30A, MW-33A, and MW-33I

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Wednesday Date: 3/31/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Jeruid Shoemaker and Christine Thomas (Malcolm Pirnie)

(Name of Subcontractor) personnel: Marty Harrington (Aztech Technologies)

(Name of contractor) equipment: *QED Bladder Pump (Malcolm Pirnie), Air compressor and trash pump
(*Indicates active equipment) (Aztech)

Other Subcontractors:

VISITORS TO SITE:

1. None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS: None

ATTACHMENT(S) TO THIS REPORT: None

SITE REPRESENTATIVE: Jeruid Shoemaker

Name: (signature)

cc:



DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 4/1/10

Temperature: (F) 45° 070 (am) 68° 140 (pm)

Wind Direction: (am) (pm)

Weather: (am) Sunny
(pm) Sunny

Arrive at site 0700 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes ☒ n/a () * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No ☒

Photos Taken: Yes () No ☒

DESCRIPTION OF DAILY WORK PERFORMED:

Developed monitoring wells MW-24, MW-20, MW-34, MW-15.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

DAILY OBSERVATION REPORT

Day: Thursday Date: 4/1/2010

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: CET, JS

(Name of Subcontractor) personnel: —

(Name of contractor) equipment: —

(*Indicates active equipment)

Other Subcontractors: —

VISITORS TO SITE:

1. —

PROJECT SCHEDULE ISSUES:

—

PROJECT BUDGET ISSUES:

—

ITEMS OF CONCERN:

—

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

—

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

7

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation

Hauppauge Area-wide GW Study

NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Monday Date: 5/17/10

Temperature: (F) 60° (am) 70° (pm)

Wind Direction: (am) (pm)

Weather: (am) sunny

(pm) sunny

Arrive at site 10:50 (am)

Leave site: 1:50 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes ☒ n/a () * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ☒

DESCRIPTION OF DAILY WORK PERFORMED:

Measured water levels in newly installed monitoring wells, select monitoring wells from @ NYSDEC Over the site and select monitoring wells from EPA Computer Circuit site.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

MW-23D / MW-23D-F

1

gw sample VOCs, Mt; filtered sample Mt only

DAILY OBSERVATION REPORT

Day: Mon Date: 5/17/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: L. Thomas, D. Giron

(Name of Subcontractor) personnel:

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. Rob Alvey (USEPA)

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

Chris Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Tuesday Date: 5/18/10

Temperature: (F) 50° (am) 50° (pm)

Wind Direction: (am) (pm)

Weather: (am) raining
(pm) raining

Arrive at site 0740 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No (X)

Are monitoring results at acceptable levels?

Soil

Yes () n/a (X) * No ()

Waters

Yes (X) n/a () * No ()

Air

Yes (X) n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No (X)

Photos Taken:

Yes () No (X)

DESCRIPTION OF DAILY WORK PERFORMED:

Collected ground water samples:

MW-23 I: VOCs, TAL metals, hexavalent chromium

MW-15 D: "

MW-34 D: VOCs, TAL Metals

MW-24 I: VOCs, TAL metals, hex. Chromium

MW-20 I: VOCs, TAL metals

MW-23 I-F, MW-15 D-F, MW-34 D-F, MW-24 I-F, ~~20~~ MW-20 F: filtered
samples, analyzed for metals only

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

MW-23 I / MW-23 I-F

gw sample: VOCs, M⁺, Cr⁶⁺

MW-34 D / MW-34 D-F

gw sample: VOCs, M⁺

MW-15 D / MW-15 D-F

gw sample: VOCs, M⁺, Cr⁶⁺

MW-24 I / MW-24 I-F

gw sample: VOCs, M⁺, Cr⁶⁺

MW-20 I / MW-20 I-F

gw sample: VOCs, M⁺

DAILY OBSERVATION REPORT

Day: Tuesday Date: 5/18/18

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT - C. Thomas, D. Giroux

(Name of Subcontractor) personnel: —

(Name of contractor) equipment: —

(*Indicates active equipment)

Other Subcontractors: —

VISITORS TO SITE:

1. Vinny (Police officer of Suffolk County Police Dept.)

PROJECT SCHEDULE ISSUES:

—

PROJECT BUDGET ISSUES:

—

ITEMS OF CONCERN:

—

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

—

SITE REPRESENTATIVE:

Name: (signature)
cc:

Chris Thomas

DAILY PHOTOLOG

—

DAILY OBSERVATION REPORT**NYSDEC**

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Wednesday Date: 5/19/10

Temperature: (F) 50° (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) overcast, light rain
(pm)

Arrive at site 0745 (am)

Leave site: (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes ☒ n/a () * No ()

Air

Yes ☒ n/a () * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ☒

DESCRIPTION OF DAILY WORK PERFORMED:

Collected groundwater samples from monitoring wells MW-30S, MW-30D, and MW-30I. GW samples analyzed for VOCs and TAL metals.

Performed helium tests on six soil vapor points. Each helium test was negative. Collected soil vapor samples from six soil vapor points.

PROJECT TOTALS:**SAMPLING (Soil/Water/Air)**

Contractor Sample ID:

DEC Sample ID:

Description:

MW-30S

MW-30D

MW-30I

~~HPG~~ HPG-SV-01

HPG-SV-02

HPG-SV-03

HPG-SV-04

HPG-SV-05, HPG-SV-06, HPG-SV-07 (Dup of HPG-SV-04)

gw sample; VOCs, metals



Soil vapor sample; TO-15



DAILY OBSERVATION REPORT

Day: Wednesday Date: 5/19/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT - C. Thomas, D. Giroux

(Name of Subcontractor) personnel: MS Engineering - Mohammed & Jack

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature)

cc:

C. Thomas

DAILY PHOTOLOG

DAILY OBSERVATION REPORT

NYSDEC

Division of Environmental Remediation
Hauppauge Area-wide GW Study
NYSDEC Site # 1-52-221

Work Assignment # D-004439-20

Smithtown, New York

Day: Thursday Date: 5/20/10

Temperature: (F) 60° (am) (pm)

Wind Direction: (am) (pm)

Weather: (am) SUNNY
(pm) SUNNY

Arrive at site 0800 (am)

Leave site: 1030 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan?
(If yes, list the deviation under items for concern)

Yes () No ☒

Are monitoring results at acceptable levels?

Soil

Yes () n/a ☒ * No ()

Waters

Yes () n/a ☒ * No ()

Air

Yes () n/a ☒ * No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached:

Yes () No ☒

Photos Taken:

Yes () No ☒

DESCRIPTION OF DAILY WORK PERFORMED:

Signed manifest for EDW. Used GPS to map locations of CVP's.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:

DEC Sample ID:

Description:

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DAILY OBSERVATION REPORT

Day: Thursday Date: 5/20/10

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: MPT C. Thomas, Dr. Grover

(Name of Subcontractor) personnel: Tim Bee

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

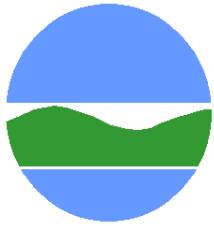
COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: (signature) *Phil Thomas*
cc:

DAILY PHOTOLOG

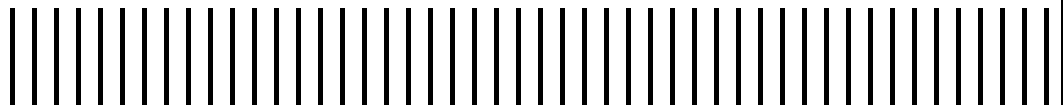


New York State Department of Environmental Conservation
Site Characterization Report

APPENDIX

B

Groundwater Sampling/Purge Logs



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-01(110-115)

DATE: 10/26/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~108'

D: Volume of Water in Casing: ~0.28 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1216	1222	1226	1231	1239	1243	1248	1253	1258				
Gallons	<1	<1	~1		~2.5	~3		~4	~4.5				
Depth to Water (ft bgs)													
pH	6.35	6.2	5.61	5.58	5.45	5.42	5.36	5.34	5.32				
Conductivity (mohm/cm)	0.183	0.140	0.135	0.142	0.146	0.138	0.141	0.139	0.152				
Turbidity (ntu)	>800	>800	>800	>800	>800	>800	>800	>800	>800				
Disolved Oxygen (mg/l)	6.8	8.87	8.2	9.14	8.98	8.61	8.6	8.92	8.99				
Temperature (°C)	18.29	16.83	16.45	16.65	16.49	15.68	16.08	15.92	15.81				
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TDS	0.10	0.09	0.09	0.09	0.10	0.09	0.09	0.09	0.10				
Redox (mV)	-14	65	90	97	117	114	125	140	146				

Notes: 1204 initiate purge manually; 1258 purged ~ 4.5 gallons;

Collect samples: HPG-CB-01(111-115) analyzed for VOCs and metals

HPG-CB-01(111-115)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-01(126-130)

DATE: 10/26/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~108'

D: Volume of Water in Casing: ~0.88 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1527	1536	1540	1546	1551	1556							
Gallons	0	<1	~1	~2	~2	~2.5							
Depth to Water (ft bgs)													
pH	5.94	5.67	5.66	5.26	5.17	5.14							
Conductivity (mohm/cm)	0.238	0.209	0.205	0.179	0.177	0.174							
Turbidity (ntu)	>800	>800	>800	>800	>800	>800							
Disolved Oxygen (mg/l)	1.14	1.95	1.66	4.75	5.10	4.96							
Temperature (°C)	19.05	18.16	17.77	17.18	17.06	17.06							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.16	0.14	0.13	0.12	0.12	0.11							
Redox (mV)	-118	17	8	95	105	111							

Notes: 1520 Initiate purge manually; 1556 purged ~ 2.5 gallons;

Collect samples: HPG-CB-01(126-130) analyzed for VOCs and metals

HPG-CB-01(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-03(126-130)

DATE: 10/27/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~118'

D: Volume of Water in Casing: ~0.48 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1022	1030	1040	1053									
Gallons	<1	<1	~1	~1.5									
Depth to Water (ft bgs)													
pH	5.99	6.15	6.18	5.79									
Conductivity (mohm/cm)	0.182	0.16	0.15	0.124									
Turbidity (ntu)	>800	>800	>800	757									
Disolved Oxygen (mg/l)	2.45	4.23	5.24	8.12									
Temperature (°C)	13.68	14.21	14.29	15.18									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.12	0.10	0.10	0.08									
Redox (mV)	-27	7	19	100									

Notes: 1012 Initiate purge manually; 1053purged ~ 1.5 gallons;

Collect samples: HPG-CB-03(126-130) analyzed for VOCs and metals

HPG-CB-03(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-33(126-130)

DATE: 10/27/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 99.50'

D: Volume of Water in Casing: ~1.2 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1343	1351	1356	1400	1404	1409	1425					
Gallons	<1	<1	~1	~1.5	~2	~2.5	~3.5					
Depth to Water (ft bgs)												
pH	6.03	5.62	5.52	5.59	5.63	5.45	5.63					
Conductivity (mohm/cm)	0.291	0.265	0.262	0.261	0.26	0.258	0.263					
Turbidity (ntu)	>800	>800	>800	>800	>800	>800	>800					
Disolved Oxygen (mg/l)	1.27	4.93	5.71	6.5	6.96	7.04	6.67					
Temperature (°C)	15.95	15.59	15.65	15.65	15.54	15.46	15.38					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.19	0.17	0.17	0.17	0.17	0.17	0.17					
Redox (mV)	-47	84	92	94	92	112	88					

Notes: 1336 Initiate purge manually; 1425 purged ~ 3.5 gallons;

Collect samples: HPG-CB-33(126-130) analyzed for VOCs and metals

HPG-CB-33(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-33(111-115)

DATE: 10/27/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 99.50'

D: Volume of Water in Casing: ~0.6 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1445	1454	1459	1505								
Gallons	<1	<1	~1	~2								
Depth to Water (ft bgs)												
pH	5.95	5.77	6.06	5.96								
Conductivity (mohm/cm)	0.225	0.209	0.238	0.211								
Turbidity (ntu)	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	3.41	6.36	1.82	4.67								
Temperature (°C)	15.79	15.54	15.42	15.44								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.15	0.14	0.15	0.14								
Redox (mV)	30	67	-82	16								

Notes: 1438 Initiate purge manually; 1505 purged ~ 2 gallons;

Collect samples: HPG-CB-33(126-130) analyzed for VOCs and metals

HPG-CB-33(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-23(126-130)

DATE: 10/29/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 94.00'

D: Volume of Water in Casing: ~1.4 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0858	0910	0920	0932									
Gallons	<1	<1	~1.5	~3									
Depth to Water (ft bgs)													
pH	5.91	5.76	5.54	5.32									
Conductivity (mohm/cm)	0.244	0.213	0.205	0.201									
Turbidity (ntu)	>800	>800	847	432									
Disolved Oxygen (mg/l)	0.41	6.61	7.45	7.73									
Temperature (°C)	15.46	15.52	14.73	14.49									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.16	0.14	0.13	0.13									
Redox (mV)	-169	86	129	152									

Notes: 0845 Initiate purge manually; 0945 purged ~ 4 gallons;

Collect samples: HPG-CB-23(126-130) and HPG-CB-GW-X1 analyzed for VOCs and metals

HPG-CB-23(126-130)F and HPG-CB-GW-X1F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-23(111-115)

DATE: 10/29/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 94.00'

D: Volume of Water in Casing: ~0.8 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1000	1018	1025	1030	1035								
Gallons	<1	~1	~1.5	~2	~2.5								
Depth to Water (ft bgs)													
pH	5.71	6.13	5.79	5.78	5.52								
Conductivity (mohm/cm)	0.205	0.152	0.145	0.142	0.144								
Turbidity (ntu)	>800	>800	>800	816	829								
Disolved Oxygen (mg/l)	1.09	6.67	7.11	6.93	7.38								
Temperature (°C)	15.33	15.22	15.15	15.12	15.49								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.13	0.10	0.09	0.09	0.09								
Redox (mV)	-180	44	92	89	95								

Notes: 1000 Initiate purge manually; 1035 purged ~ 2.5 gallons;

Collect samples: HPG-CB-23(111-115) analyzed for VOCs and metals

HPG-CB-23(111-115)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-23(100-104)

DATE: 10/29/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 104'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 94.00'

D: Volume of Water in Casing: ~0.16 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1125	1130											
Gallons	<1	~0.5											
Depth to Water (ft bgs)													
pH	5.96	5.96											
Conductivity (mohm/cm)	0.230	0.223											
Turbidity (ntu)	>800	>800											
Disolved Oxygen (mg/l)	0.96	1.49											
Temperature (°C)	15.46	16.36											
Salinity	0.0	0.0											
TDS	0.15	0.15											
Redox (mV)	-91	-52											

Notes: 1108 Initiate purge manually; 1130 purged ~ 0.5 gallons;

Collect samples: HPG-CB-23(100-104) analyzed for VOCs and metals

HPG-CB-23(100-104)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-08(126-130)

DATE: 10/29/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~120'

D: Volume of Water in Casing: ~0.6 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1502	1513	1519	1529	1535								
Gallons	<1	<1	~1	~1.5	~2.5								
Depth to Water (ft bgs)													
pH	6.00	5.46	5.19	5.28	5.11								
Conductivity (mohm/cm)	0.126	0.121	0.133	0.119	0.114								
Turbidity (ntu)	>800	>800	>800	>800	499								
Disolved Oxygen (mg/l)	5.80	5.93	4.68	6.60	7.20								
Temperature (°C)	19.77	18.3	17.34	17.02	16.72								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.08	0.08	0.09	0.08	0.07								
Redox (mV)	32	75	59	101	142								

Notes: 1455 Initiate purge manually; 1535 purged ~2.5 gallons;

Collect samples: HPG-CB-08(126-130) analyzed for VOCs and metals

HPG-CB-08(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-28(46-50)

DATE: 10/30/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 50'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 35.00'

D: Volume of Water in Casing: ~0.6 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1052	1055	1100	1105									
Gallons	<1	~1.5	~3	~4									
Depth to Water (ft bgs)													
pH	5.82	5.92	5.76	5.78									
Conductivity (mohm/cm)	0.186	0.169	0.164	0.161									
Turbidity (ntu)	>800	>800	>800	>800									
Disolved Oxygen (mg/l)	3.96	6.50	6.30	7.01									
Temperature (°C)	14.73	14.45	14.49	14.55									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.12	0.11	0.11	0.10									
Redox (mV)	36	71	95	86									

Notes: 1050 Initiate purge manually; 1105 purged ~4 gallons;

Collect samples: HPG-CB-28(46-50) analyzed for VOCs and metals

HPG-CB-28(46-50)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-28(35-39)

DATE: 10/30/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 39'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 35.00'

D: Volume of Water in Casing: ~0.3 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1114	1120	1125									
Gallons	<1	~1	~2									
Depth to Water (ft bgs)												
pH	5.99	5.73	5.63									
Conductivity (mohm/cm)	0.165	0.13	0.125									
Turbidity (ntu)	>800	>800	>800									
Disolved Oxygen (mg/l)	1.26	4.82	6.35									
Temperature (°C)	14.65	14.22	13.95									
Salinity	0.0	0.0	0.0									
TDS	0.11	0.08	0.08									
Redox (mV)	-11	70	91									

Notes: 1113 Initiate purge manually; 1125 purged ~2 gallons;

Collect samples: HPG-CB-28(35-39) analyzed for VOCs and metals

HPG-CB-28(35-39)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-27(36-40)

DATE: 11/3/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 40'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 29.00'

D: Volume of Water in Casing: ~0.5 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0848	0858	0904	0910	914	922							
Gallons	<1	~1	~1.5	~2	~3	~4							
Depth to Water (ft bgs)													
pH	5.57	5.53	5.4	5.28	5.16	5.15							
Conductivity (mohm/cm)	0.150	0.156	0.168	0.168	0.169	0.166							
Turbidity (ntu)	>800	>800	>800	800	667	396							
Disolved Oxygen (mg/l)	3.44	5.81	5.85	6.71	7.62	7.33							
Temperature (°C)	13.05	13.81	13.45	13.5	13.61	13.74							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.10	0.10	0.11	0.11	0.11	0.11							
Redox (mV)	107	138	158	191	199	200							

Notes: 0845 Initiate purge manually; 0925 purged ~4 gallons;

Collect samples: HPG-CB-27(36-40) analyzed for VOCs and metals

HPG-CB-27(36-40)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-27(32-36)

DATE: 11/3/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 36'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 29.00'

D: Volume of Water in Casing: ~0.3 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1005	1008	1012	1015								
Gallons	<1	~1	~1.5	~2								
Depth to Water (ft bgs)												
pH	5.61	5.54	5.53	5.17								
Conductivity (mohm/cm)	0.104	0.104	0.102	0.098								
Turbidity (ntu)	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	6.59	9.06	7.03	8.55								
Temperature (°C)	13.89	13.81	13.65	13.67								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.07	0.07	0.07	0.06								
Redox (mV)	128	147	168	170								

Notes: 0930 Initiate purge manually; 1025 purged ~2 gallons;

Collect samples: HPG-CB-27(32-36) analyzed for VOCs and metals

HPG-CB-27(32-36)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-26(66-70)

DATE: 11/3/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 70'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time													
Gallons													
Depth to Water (ft bgs)													
pH													
Conductivity (mohm/cm)													
Turbidity (ntu)													
Disolved Oxygen (mg/l)													
Temperature (°C)													
Salinity													
TDS													
Redox (mV)													

Notes: Horiba stolen from Cardinal Lane; 1250 Initiate purge manually; 1335 purged ~5 gallons;

Visual observations on turbidity: 0 to 2.5 gal. ~ >800 ntu; 2.5-3.5 gal. ~500 ntu; 3.5-5.0 gal. ~300 ntu;

Collect samples: HPG-CB-26(66-70) analyzed for VOCs and metals

HPG-CB-26(66-70)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-26(51-55)

DATE: 11/3/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 55'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time													
Gallons													
Depth to Water (ft bgs)													
pH													
Conductivity (mohm/cm)													
Turbidity (ntu)													
Disolved Oxygen (mg/l)													
Temperature (°C)													
Salinity													
TDS													
Redox (mV)													

Notes: Horiba stolen from Cardinal Lane; 1345 Initiate purge manually; 1400 purged ~5 gallons;

Visual observations on turbidity: 0 to 2.5 gal. ~ >800 ntu; 2.5-3.5 gal. ~500 ntu; 3.5-5.0 gal. ~300 ntu;

Collect samples: HPG-CB-26(51-55) analyzed for VOCs and metals

HPG-CB-26(51-55)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-26(36-40)

DATE: 11/3/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 40'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time													
Gallons													
Depth to Water (ft bgs)													
pH													
Conductivity (mohm/cm)													
Turbidity (ntu)													
Disolved Oxygen (mg/l)													
Temperature (°C)													
Salinity													
TDS													
Redox (mV)													

Notes: Horiba stolen from Cardinal Lane; 1435 Initiate purge manually; 1450 purged ~5 gallons;

Visual observations on turbidity: 0 to 2.5 gal. ~ >800 ntu; 2.5-3.5 gal. ~500 ntu; 3.5-5.0 gal. ~300 ntu;

Collect samples: HPG-CB-26(36-40) analyzed for VOCs and metals

HPG-CB-26(36-40)F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-11(126-130)

DATE: 11/4/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~115'

D: Volume of Water in Casing: ~0.6 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0945	0955	1008	1018	1035								
Gallons	<1	~1	<1.5	~2	~2.5								
Depth to Water (ft bgs)													
pH	6.25	6.18	6.01	6.06	5.95								
Conductivity (mohm/cm)	0.084	0.068	0.062	0.059	0.060								
Turbidity (ntu)	>800	>800	830	391	395								
Disolved Oxygen (mg/l)	4.86	8.12	8.51	8.58	9.00								
Temperature (°C)	16.41	15.89	16.56	16.03	16.29								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.05	0.04	0.04	0.04	0.04								
Redox (mV)	23	81	117	132	154								

Notes: 0945 Initiate purge manually; 1045 purged ~2.5 gallons;

Collect samples: HPG-CB-11(126-130) analyzed for VOCs and metals

HPG-CB-11(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-11(118-122)

DATE: 11/4/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 122'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~115'

D: Volume of Water in Casing: ~0.3 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1400	1420	1439	1455									
Gallons	<1	~1	~1.5	~2.5									
Depth to Water (ft bgs)													
pH	6.06	5.24	5.12	5.15									
Conductivity (mohm/cm)	0.120	0.102	0.097	0.095									
Turbidity (ntu)	>800	>800	>800	>800									
Disolved Oxygen (mg/l)	5.47	7.85	8.33	8.48									
Temperature (°C)	17.58	15.75	16.18	15.3									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.08	0.07	0.06	0.06									
Redox (mV)	43	136	148	151									

Notes: 1400 Initiate purge manually; 1510 purged ~2.5 gallons;

Collect samples: HPG-CB-11(118-122) analyzed for VOCs and metals

HPG-CB-11(118-122)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-10(126-130)

DATE: 11/5/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~115'

D: Volume of Water in Casing: ~0.6 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0955	1005	1018	1028	1035								
Gallons	<1	<1.5	~2.5	~3.5	~4								
Depth to Water (ft bgs)													
pH	5.94	6.10	5.85	5.73	5.71								
Conductivity (mohm/cm)	0.137	0.125	0.136	0.141	0.141								
Turbidity (ntu)	>800	>800	>800	773	649								
Disolved Oxygen (mg/l)	6.95	8.01	9.20	9.24	9.18								
Temperature (°C)	15.47	15.20	15.55	15.63	15.51								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.09	0.08	0.09	0.09	0.09								
Redox (mV)	102	72	118	133	136								

Notes: 0955 Initiate purge manually; 1040 purged ~4 gallons;

Collect samples: HPG-CB-10(126-130) analyzed for VOCs and metals

HPG-CB-10(126-130)F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-10(116-120)

DATE: 11/5/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 120'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~115'

D: Volume of Water in Casing: ~0.2 gal.

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1100	1115	1125	1135	1140								
Gallons	<1	<1.5	~2.5	~3.5	~4								
Depth to Water (ft bgs)													
pH	5.95	6.12	5.95	5.88	5.01								
Conductivity (mohm/cm)	0.384	0.392	0.373	0.392	0.373								
Turbidity (ntu)	>800	>800	>800	>800	740								
Disolved Oxygen (mg/l)	1.48	6.55	7.58	7.52	8.32								
Temperature (°C)	15.48	15.69	15.54	15.24	15.07								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.25	0.25	0.24	0.25	0.25								
Redox (mV)	-23	35	52	69	85								

Notes: 1100 Initiate purge manually; 1150 purged ~4 gallons;

Collect samples: HPG-CB-10(116-120) analyzed for VOCs and metals

HPG-CB-10(116-120)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-06(126-130)

DATE: 11/5/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1455	1509	1521	1531								
Gallons	<1	>1	<2.5	>2.5								
Depth to Water (ft bgs)												
pH	6.14	6.13	5.97	5.95								
Conductivity (mohm/cm)	0.294	0.275	0.270	0.263								
Turbidity (ntu)	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	0.33	5.11	5.56	7.01								
Temperature (°C)	16.65	15.60	15.60	15.60								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.19	0.18	0.17	0.17								
Redox (mV)	-57	22	43	55								

Notes: 1445 Initiate purge manually; 1540 purged ~3.2 gallons;

Collect samples: HPG-CB-06(126-130) analyzed for VOCs and metals

HPG-CB-06(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-06(115-119)

DATE: 11/6/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 119'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: _____

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0740	0750	0817	0829								
Gallons	<1	>1	>2	~3								
Depth to Water (ft bgs)												
pH	6.40	6.54	6.24	6.30								
Conductivity (mohm/cm)	0.377	0.368	0.379	0.369								
Turbidity (ntu)	>800	>800	>800	800								
Disolved Oxygen (mg/l)	0.29	5.54	4.69	6.54								
Temperature (°C)	12.08	12.86	13.51	13.46								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.25	0.24	0.25	0.24								
Redox (mV)	-99	-7	-8	22								

Notes: 0730 Initiate purge manually; 0835 purged ~3 gallons;

Collect samples: HPG-CB-06(115-119) analyzed for VOCs and metals

HPG-CB-06(115-119)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-21(126-130)

DATE: 11/6/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: D. Symonds

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 85.00'

D: Volume of Water in Casing: ~1.8 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1105	1115	1125	1135	1145								
Gallons	<1	>1	>2	>2.5	~3								
Depth to Water (ft bgs)													
pH	5.89	5.89	5.72	5.70	5.70								
Conductivity (mohm/cm)	0.269	0.246	0.247	0.248	0.289								
Turbidity (ntu)	>800	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	1.62	2.57	3.82	5.00	5.00								
Temperature (°C)	14.93	14.47	13.62	13.78	13.69								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.18	0.16	0.16	0.16	0.16								
Redox (mV)	62	76	82	79	80								

Notes: 1105 Initiate purge manually; 1145 purged ~3 gallons;

Collect samples: HPG-CB-21(126-130) analyzed for VOCs and metals

HPG-CB-21(126-130)F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-21(111-115)

DATE: 11/9/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 85.00'

D: Volume of Water in Casing: ~1.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1135	1150	1200	1205	1215								
Gallons	<1	~1	~2	~2.5	~3.5								
Depth to Water (ft bgs)													
pH	6.35	6.01	5.99	5.91	5.89								
Conductivity (mohm/cm)	0.207	0.123	0.111	0.109	0.105								
Turbidity (ntu)	>800	>800	631	>800	489								
Disolved Oxygen (mg/l)	0.09	3.44	4.92	4.55	5.25								
Temperature (°C)	16.06	15.41	15.35	15.11	15.04								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.13	0.08	0.07	0.07	0.07								
Redox (mV)	-222	6	38	45	54								

Notes: 1130 Initiate purge manually; 1215 purged ~3.5 gallons;

Collect samples: HPG-CB-21(126-130) analyzed for VOCs and metals

HPG-CB-21(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-21(96-100)

DATE: 11/9/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 100'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 85.00'

D: Volume of Water in Casing: ~0.6 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1302	1310	1320	1325								
Gallons	<1	~1	~2	~2.5								
Depth to Water (ft bgs)												
pH	6.36	6.18	6.19	5.96								
Conductivity (mohm/cm)	0.143	0.080	0.065	0.062								
Turbidity (ntu)	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	0.47	0.13	2.11	2.64								
Temperature (°C)	15.64	15.31	14.99	14.74								
Salinity	0.0	0.0	0.0	0.0								
TDS	0.09	0.05	0.04	0.04								
Redox (mV)	-203	-116	-17	6								

Notes: 1300 Initiate purge manually; 1325 purged ~2.5 gallons;

Collect samples: HPG-CB-21(96-100) analyzed for VOCs and metals

HPG-CB-21(96-100)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-12(116-120)

DATE: 11/10/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 120'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 82.00'

D: Volume of Water in Casing: ~1.5 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0922	0930	0940	0950	1000	1010	1020					
Gallons	<1	<1	~1	~1.5	~2.5	~3.5	~4.5					
Depth to Water (ft bgs)												
pH	6.44	6.46	6.31	5.94	5.95	6.05	5.97					
Conductivity (mohm/cm)	0.121	0.101	0.088	0.088	0.098	0.087	0.085					
Turbidity (ntu)	>800	>800	>800	>800	>800	>800	>800					
Disolved Oxygen (mg/l)	0.11	4.05	6.86	7.26	4.69	7.42	7.93					
Temperature (°C)	15.76	15.95	15.50	15.27	15.50	15.42	15.46					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.08	0.07	0.06	0.06	0.06	0.06	0.06					
Redox (mV)	-167	-31	21	50	17	32	52					

Notes: 0918 Initiate purge manually; 1020 purged ~4.5 gallons;

Collect samples: HPG-CB-12(116-120) analyzed for VOCs and metals

HPG-CB-12(116-120)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-12(101-105)

DATE: 11/10/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 105'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 82.00'

D: Volume of Water in Casing: ~0.9 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1045	1055	1105	1110									
Gallons	~1	~2	~3	~3.5									
Depth to Water (ft bgs)													
pH	6.10	5.84	5.84	5.75									
Conductivity (mohm/cm)	0.089	0.083	0.080	0.081									
Turbidity (ntu)	>800	>800	746	>800									
Disolved Oxygen (mg/l)	7.88	9.15	9.52	9.44									
Temperature (°C)	16.01	15.33	15.39	15.26									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.06	0.05	0.05	0.05									
Redox (mV)	38	60	84	91									

Notes: 1035 Initiate purge manually; 1110 purged ~3.5 gallons;

Collect samples: HPG-CB-12(101-105) analyzed for VOCs and metals

HPG-CB-12(101-105)F and HPG-CB-GW-X2F filtered sample; analyzed for metals

HPG-CB-GW-X2 analyzed for VOCs



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-12(86-90)

DATE: 11/10/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 90'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 82.00'

D: Volume of Water in Casing: ~0.3 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1140	1145	1150	1155									
Gallons	<1	~0.5	~1	~1.5									
Depth to Water (ft bgs)													
pH	6.02	6.33	6.22	6.23									
Conductivity (mohm/cm)	0.682	0.711	0.712	0.731									
Turbidity (ntu)	>800	>800	>800	954									
Disolved Oxygen (mg/l)	2.20	7.50	6.81	8.52									
Temperature (°C)	15.82	15.66	15.53	15.64									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.44	0.45	0.46	0.47									
Redox (mV)	-27	0	22	33									

Notes: 1135 Initiate purge manually; 1155 purged ~1.5 gallons;

Collect samples: HPG-CB-12(86-90) analyzed for VOCs and metals

HPG-CB-12(86-90)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-18(116-120)

DATE: 11/10/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 120'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 100.00'

D: Volume of Water in Casing: ~0.8 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1452	1502	1507	1512	1520								
Gallons	<1	~1	~1.5	~2	~2.5								
Depth to Water (ft bgs)													
pH	5.48	5.41	5.35	5.10	5.00								
Conductivity (mohm/cm)	0.468	0.438	0.430	0.429	0.429								
Turbidity (ntu)	>800	>800	>800	>800	>800								
Dissolved Oxygen (mg/l)	2.10	5.39	5.90	6.12	6.89								
Temperature (°C)	16.59	16.47	15.90	15.71	15.45								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.30	0.28	0.28	0.28	0.28								
Redox (mV)	42	81	102	136	154								

Notes: 1450 Initiate purge manually; 1520 purged ~2.5 gallons;

Collect samples: HPG-CB-18(116-120) analyzed for VOCs and metals

HPG-CB-18(116-120)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-18(101-105)

DATE: 11/11/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 105'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 100.00'

D: Volume of Water in Casing: ~0.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0800	0805	0810	0820									
Gallons	<1	<1	~1	~1.5									
Depth to Water (ft bgs)													
pH	6.28	6.16	6.11	5.88									
Conductivity (mohm/cm)	0.453	0.412	0.379	0.378									
Turbidity (ntu)	>800	>800	>800	>800									
Disolved Oxygen (mg/l)	0.00	2.53	5.93	6.43									
Temperature (°C)	14.04	13.97	13.97	13.35									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.29	0.27	0.25	0.25									
Redox (mV)	-122	-25	24	58									

Notes: 0758 Initiate purge manually; 0820 purged ~1.5 gallons;

Collect samples: HPG-CB-18(101-105) analyzed for VOCs and metals

HPG-CB-18(101-105)F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-05(126-130)

DATE: 11/11/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~118'

D: Volume of Water in Casing: ~0.5 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1125	1133	1140	1145	1155								
Gallons	<1	<1	~1	~1.5	~3								
Depth to Water (ft bgs)													
pH	6.41	6.23	5.97	5.95	5.89								
Conductivity (mohm/cm)	0.238	0.168	0.162	0.162	0.162								
Turbidity (ntu)	>800	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	0.27	5.76	6.67	6.69	6.69								
Temperature (°C)	14.92	14.78	14.71	14.35	14.47								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.15	0.11	0.11	0.11	0.11								
Redox (mV)	-177	-28	62	59	67								

Notes: 1120 Initiate purge manually; 1155 purged ~3 gallons;

Collect samples: HPG-CB-05(126-130) analyzed for VOCs, metals, chloride, nitrate, ammonia

HPG-CB-05(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-05(118-122)

DATE: 11/11/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 122'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: ~118'

D: Volume of Water in Casing: ~0.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1240	1250	1255									
Gallons	<1	~0.5	~1									
Depth to Water (ft bgs)												
pH	6.15	5.86	5.72									
Conductivity (mohm/cm)	0.193	0.135	0.132									
Turbidity (ntu)	>800	>800	917									
Disolved Oxygen (mg/l)	1.03	5.46	5.77									
Temperature (°C)	14.93	14.38	14.68									
Salinity	0.0	0.0	0.0									
TDS	0.13	0.09	0.09									
Redox (mV)	-52	49	65									

Notes: 1238 Initiate purge manually; 1255 purged ~1 gallons;

Collect samples: HPG-CB-05(118-122) analyzed for VOCs, metals, chloride, nitrate, ammonia

HPG-CB-05(118-122)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-17(101-105)

DATE: 11/12/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 105'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 99.00'

D: Volume of Water in Casing: ~0.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0740	0750	0755									
Gallons	<1	<1	~1									
Depth to Water (ft bgs)												
pH	6.34	6.33	6.08									
Conductivity (mohm/cm)	0.281	0.319	0.220									
Turbidity (ntu)	>800	>800	>800									
Disolved Oxygen (mg/l)	0.41	4.31	5.23									
Temperature (°C)	12.56	13.25	13.00									
Salinity	0.0	0.0	0.0									
TDS	0.18	0.21	0.14									
Redox (mV)	-70	-24	12									

Notes: 0737 Initiate purge manually; 0755 purged ~1 gallons;

Collect samples: HPG-CB-17(101-105) analyzed for VOCs and metals

HPG-CB-17(101-105)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-20(126-130)

DATE: 11/12/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 95.00'

D: Volume of Water in Casing: ~1.4 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1003	1015	1030	1040	1050	1055							
Gallons	<1	<1	~1.5	~2.5	~3.5	~4							
Depth to Water (ft bgs)													
pH	5.99	6.06	6.12	5.83	5.86	6.08							
Conductivity (mohm/cm)	0.200	0.231	0.205	0.201	0.203	0.202							
Turbidity (ntu)	>800	>800	>800	>800	>800	>800							
Disolved Oxygen (mg/l)	3.88	0.84	5.39	5.81	5.20	6.42							
Temperature (°C)	14.24	13.72	13.18	13.33	14.66	14.04							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.13	0.15	0.13	0.13	0.13	0.13							
Redox (mV)	83	-26	11	54	35	30							

Notes: 1000 Initiate purge manually; 1055 purged ~4 gallons;

Collect samples: HPG-CB-20(126-130) analyzed for VOCs and metals

HPG-CB-20(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-20(111-115)

DATE: 11/12/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 95.00'

D: Volume of Water in Casing: ~0.8 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1115	1125	1130	1140									
Gallons	<1	~1	~2	~2.5									
Depth to Water (ft bgs)													
pH	6.18	6.09	5.89	5.94									
Conductivity (mohm/cm)	0.226	0.204	0.190	0.186									
Turbidity (ntu)	>800	>800	>800	>800									
Disolved Oxygen (mg/l)	0.05	1.73	4.38	5.02									
Temperature (°C)	15.18	14.45	15.37	15.80									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.15	0.13	0.12	0.12									
Redox (mV)	-94	-31	11	21									

Notes: 1110 Initiate purge manually; 1140 purged ~2.5 gallons;

Collect samples: HPG-CB-20(111-115) analyzed for VOCs and metals

HPG-CB-20(111-115)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-20(97-101)

DATE: 11/12/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 101'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 95.00'

D: Volume of Water in Casing: ~0.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1200	1205	1210									
Gallons	<1	~1.5	~2									
Depth to Water (ft bgs)												
pH	6.21	6.22	6.35									
Conductivity (mohm/cm)	0.188	0.150	0.152									
Turbidity (ntu)	>800	>800	>800									
Disolved Oxygen (mg/l)	0.00	5.80	5.38									
Temperature (°C)	14.26	15.04	15.56									
Salinity	0.0	0.0	0.0									
TDS	0.12	0.10	0.10									
Redox (mV)	-103	-2	-6									

Notes: 1155 Initiate purge manually; 1210 purged ~2 gallons;

Collect samples: HPG-CB-20(97-101) analyzed for VOCs and metals

HPG-CB-20(97-101)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-24(126-130)

DATE: 11/16/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 70.00'

D: Volume of Water in Casing: ~2.4 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1138	1150	1200	1210	1220	1230							
Gallons	<1	~1	~2	~3	~4	~5							
Depth to Water (ft bgs)													
pH	5.79	5.67	5.65	5.64	5.56	5.60							
Conductivity (mohm/cm)	0.204	0.155	0.151	0.148	0.150	0.149							
Turbidity (ntu)	>800	>800	>800	599	789	984							
Disolved Oxygen (mg/l)	1.00	5.82	6.58	6.79	6.53	6.62							
Temperature (°C)	16.53	16.43	16.33	16.28	15.93	16.18							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.13	0.10	0.10	0.10	0.10	0.10							
Redox (mV)	-26	83	92	104	97	91							

Notes: 1135 Initiate purge manually; 1230 purged ~5 gallons;

Collect samples: HPG-CB-24(126-130) analyzed for VOCs and metals

HPG-CB-24(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-24(111-115)

DATE: 11/16/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 70.00'

D: Volume of Water in Casing: ~1.8 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1310	1320	1330	1340	1350	1400							
Gallons	<1	~1	~2	~3	~4	~5							
Depth to Water (ft bgs)													
pH	6.10	5.97	5.88	5.78	5.76	5.76							
Conductivity (mohm/cm)	0.220	0.205	0.182	0.174	0.172	0.169							
Turbidity (ntu)	>800	>800	>800	>800	>800	>800							
Disolved Oxygen (mg/l)	0.93	0.10	1.75	2.60	2.90	3.60							
Temperature (°C)	16.29	16.01	16.28	15.94	16.12	16.00							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.14	0.13	0.12	0.11	0.11	0.11							
Redox (mV)	-103	-101	-20	5	13	22							

Notes: 1305 Initiate purge manually; 1400 purged ~5 gallons;

Collect samples: HPG-CB-24(111-115) analyzed for VOCs and metals

HPG-CB-24(111-115)F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-24(101-105)

DATE: 11/16/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 105'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 70.00'

D: Volume of Water in Casing: ~1.4 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1425	1435	1445	1455	1505								
Gallons	<1	~1	~2	~3	~4								
Depth to Water (ft bgs)													
pH	6.08	6.12	5.86	5.80	5.73								
Conductivity (mohm/cm)	0.256	0.211	0.195	0.193	0.184								
Turbidity (ntu)	>800	>800	>800	>800	>800								
Disolved Oxygen (mg/l)	0.80	0.32	0.81	0.71	1.81								
Temperature (°C)	16.43	16.57	16.27	16.32	16.25								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.17	0.14	0.13	0.13	0.12								
Redox (mV)	-108	-71	-22	-6	14								

Notes: 1421 Initiate purge manually; 1505 purged ~4 gallons;

Collect samples: HPG-CB-24(101-105) analyzed for VOCs and metals

HPG-CB-24(101-105)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-30(126-130)

DATE: 11/17/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 60.00'

D: Volume of Water in Casing: ~3 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0950	1000	1010	1030	1050	1100	1120					
Gallons	<1	~1	~2	~3.5	~5	~5.5	~7					
Depth to Water (ft bgs)												
pH	6.19	6.09	5.80	5.70	5.63	5.69	5.55					
Conductivity (mohm/cm)	0.192	0.155	0.149	0.147	0.148	0.147	0.148					
Turbidity (ntu)	>800	>800	>800	>800	>800	814	>800					
Disolved Oxygen (mg/l)	0.00	4.20	5.56	5.68	5.80	6.10	6.07					
Temperature (°C)	14.24	14.92	15.10	14.95	15.22	14.88	14.18					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.12	0.10	0.10	0.10	0.10	0.10	0.10					
Redox (mV)	-148	19	64	82	79	77	81					

Notes: 0942 Initiate purge manually; 1120 purged ~7 gallons;

Collect samples: HPG-CB-30(126-130) analyzed for VOCs and metals

HPG-CB-30(126-130)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-30(111-115)

DATE: 11/17/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 115'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 60.00'

D: Volume of Water in Casing: ~2.8 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1217	1230	1240	1255	1310	1320	1330					
Gallons	<1	~1.5	~2.5	~3.5	~4.5	~6	~7					
Depth to Water (ft bgs)												
pH	5.98	5.84	5.62	5.69	5.62	5.80	5.67					
Conductivity (mohm/cm)	0.178	0.159	0.159	0.159	0.164	0.159	0.159					
Turbidity (ntu)	>800	>800	>800	859	>800	>800	>800					
Disolved Oxygen (mg/l)	1.70	4.36	4.46	4.36	3.65	4.37	4.60					
Temperature (°C)	15.26	15.02	14.86	14.85	14.67	14.47	14.35					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.12	0.10	0.10	0.10	0.11	0.10	0.10					
Redox (mV)	-10	38	61	60	47	55	63					

Notes: 1214 Initiate purge manually; 1330 purged ~7 gallons;

Collect samples: HPG-CB-30(111-115) analyzed for VOCs and metals

HPG-CB-30(111-115)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-30(96-100)

DATE: 11/17/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 100'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 60.00'

D: Volume of Water in Casing: ~2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1355	1405	1420	1435	1450	1500							
Gallons	<1	~1	~2.5	~3.5	~5	~6							
Depth to Water (ft bgs)													
pH	6.42	6.25	5.67	5.71	5.72	5.60							
Conductivity (mohm/cm)	0.224	0.204	0.196	0.192	0.191	0.192							
Turbidity (ntu)	>800	>800	>800	>800	>800	>800							
Disolved Oxygen (mg/l)	0.00	3.50	4.80	5.31	5.54	4.90							
Temperature (°C)	14.4	14.61	14.53	14.34	14.09	14.07							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.15	0.13	0.13	0.12	0.12	0.13							
Redox (mV)	-189	-2	50	69	67	54							

Notes: 1350 Initiate purge manually; 1500 purged ~6 gallons;

Collect samples: HPG-CB-30(96-100) analyzed for VOCs and metals

HPG-CB-30(96-100)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-30(48-52)

DATE: 11/17/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 52'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 60.00'

D: Volume of Water in Casing: ~0.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1517	1522	1526	1531									
Gallons	<1	~0.5	~1	~2									
Depth to Water (ft bgs)													
pH	5.88	5.90	5.88	5.81									
Conductivity (mohm/cm)	0.386	0.395	0.394	0.395									
Turbidity (ntu)	>800	>800	>800	>800									
Disolved Oxygen (mg/l)	0.10	1.55	1.08	1.39									
Temperature (°C)	14.13	14.41	14.43	14.32									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.25	0.26	0.26	0.26									
Redox (mV)	-14	20	36	17									

Notes: 1515 Initiate purge manually; 1531 purged ~2 gallons;

Collect samples: HPG-CB-30(48-52) analyzed for VOCs and metals

HPG-CB-30(48-52)F filtered sample; analyzed for metals



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: HPG-CB-32(48-52)

DATE: 11/18/2009

PROJECT NAME: Hauppauge Area-Wide Groundwater Investigation

PROJECT NUMBER: 0266374

SAMPLERS: C. Thomas

A: Total Casing and Screen Length: 52'

B: Casing Internal Diameter: 1"

C: Water Level Below Top of Casing: 47.00'

D: Volume of Water in Casing: ~0.2 gallons

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0925	0928	0932	0937									
Gallons	~1	~1.5	~2	~3									
Depth to Water (ft bgs)													
pH	6.12	6.14	6.02	5.97									
Conductivity (mohm/cm)	0.199	0.185	0.177	0.171									
Turbidity (ntu)	>800	>800	>800	735									
Disolved Oxygen (mg/l)	3.61	5.90	6.82	7.39									
Temperature (°C)	14.16	14.93	14.91	14.95									
Salinity	0.0	0.0	0.0	0.0									
TDS	0.13	0.12	0.11	0.11									
Redox (mV)	24	55	84	97									

Notes: 0920 Initiate purge manually; 0937 purged ~3 gallons;

Collect samples: HPG-CB-32(48-52) analyzed for VOCs and metals

HPG-CB-32(48-52)F filtered sample; analyzed for metals

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-30i

DATE: 5-19-10

PROJECT NAME: Hauptauge

PROJECT NUMBER: _____

SAMPLERS: CET/PLG

A: Total Casing and Screen Length: 99'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 37.42'

D: Volume of Water in Casing: _____

$$V = 0.0408 (B)^2 \times (A-C) = D$$

$$V = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1202	1208	1213	1220	1225	1233	1240	1246	1251					
Gallons														
Depth to Water	37.42	37.40	37.41	37.41	37.41	37.41	37.41	37.41	37.41					
pH	5.90	5.64	5.55	5.53	5.53	5.53	5.53	5.53	5.52					
Conductivity (mohm/cm)	1254	0.242	0.237	0.236	0.235	0.236	0.236	0.236	0.238					
Turbidity (ntu)	7999	707	1040	505	498	401	300	282	290					
Disolved Oxygen (mg/l)	8.24	7.85	7.50	7.46	7.34	7.32	7.49	7.30	7.32					
Temperature (°C)	14.18	14.23	14.23	14.33	14.35	14.25	14.30	14.51	14.50					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15					
Redox (mV)	214	226	247	262	267	273	276	277	277					

Notes: Begin Purge 1157; purged ~ 1 gal
1251 collect sample MW-30E - VOCs, Metals
collected unpreserved metal bottle for lab to filter

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-30d

DATE: 5-19-10

PROJECT NAME: Hauptauge

PROJECT NUMBER: _____

SAMPLERS: CET / DLG

A: Total Casing and Screen Length: 2"

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 37.28

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0955	1000	1006	1011	1017	1022	1027	1032				
Gallons	36.71			2.15								
Depth to Water (ft Lwp)	37.43	37.26	37.50	37.78	37.81	37.81						
pH	6.14	6.34	6.45	6.47	6.48	6.49	6.48	6.48				
Conductivity (mohm/cm)	1.185	0.222	0.233	.223	.220	.220	.220	.220				
Turbidity (ntu)	393	780	711	623	452	223	213	201				
Dissolved Oxygen (mg/l)	4.84	1.71	1.06	0.72	0.54	.51	.54	.50				
Temperature (°C)	13.93	13.96	14.01	14.12	14.15	14.13	14.10	14.15				
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TDS	0.12	0.14	0.15	0.14	0.14	0.14	0.14	.14				
Redox (mV)	143	40	22	20	22	30	36	39				

Notes:

Begin Purge 0950. Collect sample 1032.
Purged ~ 0.75 gallons.

Analyze VOCs, TAL metals
filtered/unfiltered
↑
in lab

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-23d

DATE: 5-17-10

PROJECT NAME: Hauptauge

PROJECT NUMBER: 0266374

SAMPLERS: CET/ DL6

A: Total Casing and Screen Length: 134' - 5' screen

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 83.42

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1531	1537	1544	1549	1555	1800	1807					
Gallons							-1					
Depth to Water												
pH	5.55	5.60	5.60	5.59	5.60	5.59	5.59					
Conductivity (mohm/cm)	0.145	0.164	0.160	0.158	0.156	0.153	0.152					
Turbidity (ntu)	608	394	263	226	189	184	180					
Dissolved Oxygen (mg/l)	10.76	9.72	8.28	8.04	8.03	7.96	7.99					
Temperature (°C)	16.31	16.02	15.87	15.69	15.60	15.57	15.52					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.11	0.11	0.10	0.10	0.10	0.10	0.10					
Redox (mV)	344	353	351	350	349	350	349					
DTW	83.45	83.46	83.45	83.45	83.45							

Notes: Begin Purge 1720 Bladder Pump; purged ~1 gal
Analyze:
Collect Sample 1807. VOCs + Metals
Filtered metals.



WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-15D

DATE: 5-18-10

PROJECT NAME: Hawpance

PROJECT NUMBER: 0266374

SAMPLERS: LET. OLG

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 48.95

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1200	1205	1215	1220	1229	1234	1239	1244	1250					
Gallons														
Depth to Water (SA bsp)	49.45	50.14		50.41	50.28		50.24		50.24					
pH	6.51	6.50	6.95	6.94	6.93	6.87	6.77	6.69	6.67					
Conductivity (mohm/cm)	0.003	0.253	0.265	0.265	0.267	0.255	0.242	0.233	0.230					
Turbidity (ntu)	7800	7800	804	892	847	782	776	760	874					
Disolved Oxygen (mg/l)	10.86	2.84	0.95	0.92	1.05	1.15	1.68	1.72	1.78					
Temperature (°C)	14.42	14.55	14.52	14.53	14.59	14.58	14.57	14.52	14.57					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	1.63	0.17	0.17	0.17	0.17	0.16	0.16	0.15	0.15					
Redox (mV)	71	-16	-18	-15	-8	10	37	44	47					

Notes: # Begin Purge 1155, emptied H210A @ 1222, purged ~1 gal
1250 collect samples: MW-15D (VOLs, M+, Hexavalent Chromium)
MW-15D-F (Filtered sample, M+ only)

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-23i

DATE: 5-18-10

PROJECT NAME: Hanppauge

PROJECT NUMBER: _____
SAMPLERS: CET / DLG

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: _____

C: Water Level Below Top of Casing: 83.34

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	0853	0859	0906	912	0916	922	0928	0933				
Gallons			0.5			1		1.5				
Depth to Water	83.37		83.38		83.36							
pH	4.86	5.21	5.37	5.29	5.30	5.30	5.30	5.31				
Conductivity (mohm/cm)	0.112	0.089	0.087	0.087	0.087	0.087	0.087	0.087				
Turbidity (ntu)	774	489	311	217	182	105	99.0	101.0				
Disolved Oxygen (mg/l)	7.75	7.77	7.56	7.63	7.52	7.50	7.35	7.36				
Temperature (°C)	14.38	14.29	14.32	14.36	14.38	14.35	14.36	14.35				
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TDS	0.7	0.6	0.6	0.6	0.06	0.06	0.26	0.06				
Redox (mV)	255	226	227	229	229	232	234	234				

Notes:

Begin Purge 0950. Collected Sample 0933.
Purged 1.5 gal.

VOCs Metals, (unfiltered + filtered)
Hex Chromium (unfiltered)

WELL DEVELOPMENT/ PURGING LOG
ms/msd

WELL NUMBER: MW-20i

DATE: 5-18-10

PROJECT NAME: Hanpauge

PROJECT NUMBER: 0206374

SAMPLERS: CE T / DLG

A: Total Casing and Screen Length: 125, 10' screen

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 89.16

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED									
Time	11003	11010	11016	11021	11026	11031	11036	11041		
Gallons				1				1.5		
Depth to Water		89.16						89.15		
pH	5.90	5.78	5.69	5.68	5.67	5.65	5.66	5.65		
Conductivity (mohm/cm)	0.161	0.156	0.155	0.155	0.155	0.154	0.155	0.155		
Turbidity (ntu)	2999	1041	419	309	253	242	235	223		
Dissolved Oxygen (mg/l)	7.67	7.93	7.78	7.63	7.73	7.57	7.59	7.61		
Temperature (°C)	14.24	14.48	14.88	14.98	14.88	14.96	15.01	15.04		
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
TDS	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10		
Redox (mV)	169	205	232	247	260	265	270	274		

Notes:

Begin Purge 1555. Emptied Horiba (too turbid) @ 11006
Collect Sample 11041. Purged ~ 1.5 gallons
Analyzed: VOCs, Metals (Filtered, unfiltered)
* ms/msd *

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: 30s

DATE: 5-19-10

PROJECT NAME: Hauptpauge

PROJECT NUMBER: _____

SAMPLERS: CET / DLG

A: Total Casing and Screen Length: _____

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 37.59

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED									
Time	0825	0830	0835	0840	0845	0850	0855	0900	0905	
Gallons				1						
Depth to Water	37.59		37.59		37.60	37.60	37.60			
pH	5.27	5.36	5.37	5.38	5.40	5.41	5.41	5.39	5.39	
Conductivity (mohm/cm)	282	266	259	255	252	248	246	242	243	
Turbidity (ntu)	406	171	103	61.1	56.2	53.3	32.6	30.5	29.8	
Dissolved Oxygen (mg/l)	6.55	6.07	6.05	6.06	6.02	6.05	5.99	5.97	5.99	
Temperature (°C)	13.67	13.76	13.76	13.79	13.79	13.78	13.80	13.80	13.79	
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
TDS	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	
Redox (mV)	374	378	378	376	374	373	372	373	373	

Notes:

Begin 0820. Collect Sample 0905.
Purged ~ 2.5 gallons.
Analyze VOCs, TAC metals

WELL DEVELOPMENT/ PURGING LOG

duplicate
MW-X

WELL NUMBER: MW-24i

DATE: 5-18-10

PROJECT NAME: Hampshire

PROJECT NUMBER: 02106374

SAMPLERS: CET / DLG

A: Total Casing and Screen Length: 108, 10'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 62.58

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED													
Time	1423	1428	1433	1438	1443	1448	1453	1458	1503					
Gallons				1		1.75			2.5					
Depth to Water		62.58		62.58		62.58								
pH	5.85	5.65	5.63	5.64	5.64	5.62	5.63	5.62	5.62					
Conductivity (mohm/cm)	.208	.210	.212	.213	.213	.213	.214	.214	.215					
Turbidity (ntu)	584	345	252	199	164	151	136	130	127					
Dissolved Oxygen (mg/l)	6.25	5.42	5.37	5.47	5.35	5.31	5.34	5.31	5.30					
Temperature (°C)	15.67	15.91	16.02	16.13	16.16	16.13	16.14	16.20	16.19					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14					
Redox (mV)	264	271	278	284	289	293	298	301	304					

Notes: Begin Purge at 1420. Collect Sample 1503.
Purged 2.5 gallons

VOCs, TAL Metals # / filtered / unfiltered,
Hex Chromium

MW-X DUPLICATE

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-34d

DATE: 5-18-10

PROJECT NAME: Hampshire

PROJECT NUMBER: 0266374

SAMPLERS: CET / DLG

A: Total Casing and Screen Length: 130'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 58.10'

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	10:28	10:33	10:40	10:47	10:53	11:01	11:06					
Gallons			58.28				21					
Depth to Water	58.32	58.32	58.32	58.26	58.24	58.24	58.24					
pH	6.25	6.55	6.70	6.80	6.79	6.71	6.68					
Conductivity (mohm/cm)	1.220	0.267	1.270	1.277	0.270	0.261	0.258					
Turbidity (ntu)	446	7800	7999	900	742	689	675					
Dissolved Oxygen (mg/l)	5.17	2.11	2.61	2.07	2.18	2.49	2.54					
Temperature (°C)	15.11	15.34	15.09	14.96	15.13	15.21	15.02					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	14	0.17	0.18	0.18	0.18	0.17	0.17					
Redox (mV)	326	317	313	309	309	310	310					

Notes: 10:20 initiated purge, purged ~1 gal, 11:06 collected samples
 MW-34D: Vals, M+
 MW-34D-F: M+, 1st filtered sample

**MALCOLM
PIRNIE**

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-305

DATE: 3/23/10

PROJECT NAME: Hauppauge

PROJECT NUMBER: 0266374

SAMPLERS: Jervid Shoemaker

Total Casing

A: Total Casing and Screen Length: 48' Screen = 38 - 48' by 55

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 38.73'

D: Volume of Water in Casing: 1.51

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (2)^2 \times (48 - 38.73) = 1.51 \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
	0905	0915	0930	0945	1000	1015							
Time	~~0900~~	0915	0930	0945	1000	1015							
Gallons	2.0	4.0	7.5	10	13	16							
Depth to Water	38.84	38.76	38.76	38.76	38.78	38.78							
pH	8.53	6.08	5.67	5.76	5.59	5.53							
Conductivity (mohm/cm)	0.663	0.512	0.486	0.496	0.488	0.481							
Turbidity (ntu)	—	44.2	45.4	74.2	48	35							
Dissolved Oxygen (mg/l)	7.65	7.33	7.30	7.30	7.24	6.84							
Temperature (°C)	14.29	14.44	14.44	14.08	14.26	14.42							
Salinity	0.0	0.0	0.0	0.0	0.0	0.0							
TDS	0.39	0.33	0.33	0.32	0.32	0.31							
Redox (mV)	126	210	227	221	227	238							

Notes: 0845: started development. Tying at 1.0' above well bottom.

0920: Moved ^{tubing} ~~plug~~ down 0.5' from bottom

0935: moved tubing to well bottom

0940: Emptied flow-through cell of sediment

0950: slightly increased rate

1015: Development complete. Purged 16 gallons total.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-30I

DATE: 3/23/10

PROJECT NAME: Haugpauge

PROJECT NUMBER: 0266374

SAMPLERS: Jerold Shoemaker

A: Total Casing and Screen Length: 99

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 38.60

D: Volume of Water in Casing: 9.86

$$V = 0.0408 (B)^2 \times (A-C) = D$$

60.4

$$V = 0.0408 (2)^2 \times (99 - 38.60) = 9.86 \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1235	1250	1300	1310	1340	1350						
Gallons		14	18		23							
Depth to Water		38.65	38.70		38.70							
pH		5.62	5.58		5.73							
Conductivity (mohm/cm)		0.307	0.300		0.324							
Turbidity (ntu)		99	47.4		169							
Dissolved Oxygen (mg/l)		9.84	9.88		9.41							
Temperature (°C)		13.96	13.91		13.53							
Salinity		0.0	0.0		0.0							
TDS		0.2	0.19		0.21							
Redox (mV)		215	216		175							

Notes: 1220: Started pump

* too turbid for V-22 Heciba

** 1305: Attempted to lower pump to 0.5' above well bottom - could not get pump to restart.

1330: Pump restarted. Tubing at 0.5' from well bottom.

1350: Water pumped to 45 NTU. Attempted to lower. Pump stopped

Stopped pumping with water. Will finish development tomorrow with Monsoon pump

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-301

DATE: 3/24/2010

PROJECT NAME: Hanppage

PROJECT NUMBER: 0266374

SAMPLERS: Ternid Shoemaker with Monsoon Pump.

A: Total Casing and Screen Length: 99

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 38.53

D: Volume of Water in Casing: 9.869

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (2)^2 \times (99 - 38.53) = 9.869 \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED									
Time	1130	1140	1150	1200	1210	1230	1255	1305	1315	
Gallons	Too	Too	Too			50	60			
Depth to Water						38.54	38.57			
pH	Turbid	Turbid	Turbid			5.63	5.85			
Conductivity (mohm/cm)						0.34	0.397			
Turbidity (ntu)	for	for	for			33.0	366			
Disolved Oxygen (mg/l)						8.67	8.67			
Temperature (°C)	U-22	U-22	U-22			14.63	15.28			
Salinity						0.0	0.0			
TDS						0.26	0.26			
Redox (mV)						204	194			
Surged	✓	✓	✓							

Notes: 1120: started purging. Too turbid for Horiba. Will surge for 5 min intervals. 1200: Pump slowed to stop due to high amounts of silt/sediment. 1210: Pump slowed to stop had to pull up and reset. Started at 1220. Pump 6" from bottom. 1235: Attempted to lower pump. Again pump slowed to stop due to sediment. stopped, pulled up, and reset at 6" above bottom. 1250: Pump started + running 8" above well bottom. 1303: Pump stopped. 1305: Pump restarted. 1306: Pump stopped. JDS called Christine Thomas who agreed well is as developed as we will get it.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-300

DATE: 3/24/2010

PROJECT NAME: Huppauge

PROJECT NUMBER: 0266374

SAMPLERS: Jernid Shoemaker

DTB: 126.8

A: Total Casing and Screen Length: 127.5

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 38.46

D: Volume of Water in Casing: 14.53

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (2)^2 \times (127.5 - 38.46) = 14.53 \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time												
Gallons												
Depth to Water												
pH												
Conductivity (mohm/cm)												
Turbidity (ntu)												
Disolved Oxygen (mg/l)												
Temperature (°C)												
Salinity												
TDS												
Redox (mV)												

Notes: - Pump set at 124'
- Monitor Pump unable to overcome well head.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-20

DATE: 3/24/2010

PROJECT NAME: Aauppage

PROJECT NUMBER: 0266374

SAMPLERS: Jeruid Shoemaker

A: Total Casing and Screen Length: 123

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 90.99

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (2)^2 \times (123 - 90.99) = 5.22 \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time												
Gallons												
Depth to Water												
pH												
Conductivity (mohm/cm)												
Turbidity (ntu)												
Disolved Oxygen (mg/l)												
Temperature (°C)												
Salinity												
TDS												
Redox (mV)												

Notes: - Monsoon pump unable to overcome well head - called Christine Thomas. Awaiting further instructions.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-300

DATE: 3/30/2010

PROJECT NAME: Hauptauge

PROJECT NUMBER: 0266374

SAMPLERS: Fluid Sucker

DTB: 124.9 (2.6' of sand/silt at bottom of well)

A: Total Casing and Screen Length: 127.5

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 38.27

D: Volume of Water in Casing: 14.6 gal

$$V = 0.0408 (B)^2 \times (A-C) = D$$

$$V = 0.0408 (2)^2 \times (127.5 - 38.27) = 14.56 \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	0945	1000	1015	1030	1045	1100	1115	1135	1150	1205	1220	1235	1250
Gallons													
Depth to Water	38.27	38.31	38.28	38.27	38.27			38.27	38.27	38.27	38.27	38.27	
pH	7.65	8.00	7.99	7.61	7.21			7.27	7.01	6.61	6.61	6.52	
Conductivity (mohm/cm)	0.196	0.198	0.266	0.268	0.289			0.236	0.250	0.234	0.244	0.259	
Turbidity (ntu)	488.0												
Dissolved Oxygen (mg/l)	7.76	7.52	3.55	3.07	4.06			7.46	6.42	6.01	6.07	6.45	
Temperature (°C)	11.61	13.14	13.44	13.35	12.79			12.01	11.64	11.84	12.28	12.23	
Salinity	0.0	0.0	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	
TDS	0.13	0.13	0.17	0.18	0.19			0.15	0.16	0.15	0.16	0.17	
Redox (mV)	73	71	70	83	98			110	116	127	126	131	

Notes: - started purging at 0930. Pump set at 123'
 - 1015 Turbidity too high for reading
 - 1050 * Bladder pump stopped due to silt/sand clogging intake, cleared, restarted
 - 1115 Pump clogged - unclogged - restarted. Pump set at 117'
 - 1250 Pump clogged. JDS measured DTB in MW-300 at 110.7'. JDS stopped pump and called Christine

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-300

DATE: 3/31/2010

PROJECT NAME: Hauptange

PROJECT NUMBER: 0266374

SAMPLERS: Jerold Shoemaker

A: Total Casing and Screen Length: 127.5

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 38.4

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1040	1050	1100	1130	1145	1200						
Gallons	25	30	35	45		55						
Depth to Water	55.03	54.20	54.06	41.65	43.90	43.00						
pH	5.87	5.87	5.86	5.84	5.54	5.84						
Conductivity (mohm/cm)	0.228	0.221	0.220	0.219	0.21	0.24						
Turbidity (ntu)	10.5	0.0	0.0	0.0	0.0	0.0						
Dissolved Oxygen (mg/l)	8.57	8.95	8.98	9.02	8.99	8.99						
Temperature (°C)	13.74	13.76	13.76	13.93	13.92	13.91						
Salinity	0.0	0.0	0.0	0.0	0.0	0.0						
TDS	0.15	0.14	0.14	0.14	0.14	0.14						
Redox (mV)	170	165	165	165	167	167						

Notes: 0955: Started purging at approx. 0.5 gpm. Pump set at 95' bgs
 1105: Pump stopped to extend wire + tubing
 1115: Pump started DTW 41.60
 1200 purged 55 gallons H₂O

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-230

DATE: 3/31/2010

PROJECT NAME: Hauptange

PROJECT NUMBER: 0266374

SAMPLERS: Jecuid Shormaker

DTA : 133.52

A: Total Casing and Screen Length: 134

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 85.24

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1345	1400	1415	1430	1445	1500						
Gallons	5	6	6.5	7.0	7.5	8.0						
Depth to Water	85.13	85.21	85.22	85.22	85.22	85.22						
pH	6.94	6.94	6.88	6.85	6.91	6.93						
Conductivity (mohm/cm)	0.229	0.226	0.222	0.216	0.218	0.218						
Turbidity (ntu)	60.9	43.3	41.2	42.2	41.7	44.9						
Disolved Oxygen (mg/l)	15.77	16.31	11.41	11.09	11.28	11.16						
Temperature (°C)	13.91	13.67	13.72	13.63	14.08	14.11						
Salinity	0.0	0.0	0.0	0.0	0.0	0.0						
TDS	0.15	0.15	0.14	0.14	0.14	0.14						
Redox (mV)	136	132	131	128	126	123						

Notes: Started pumping at 1200
- Pump set at 133
- Stopped pump at 1500

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-23T

DATE: 3/31/2010

PROJECT NAME: Hauppauge

PROJECT NUMBER: 0266374

SAMPLERS: Teru'd Shoemaker + Christine Thomas

A: Total Casing and Screen Length: 114

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 85.10

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1600	1615	1630	1645	1700								
Gallons	~2	~2.5			~5								
Depth to Water	85.10	85.10	85.10	85.10	85.10								
pH	6.28	85.10	5.97	5.85	5.86	5.77							
Conductivity (mohm/cm)	0.150	0.149	0.146	0.144	0.142								
Turbidity (ntu)	158	89.1	33.0	13.1	0.0								
Dissolved Oxygen (mg/l)	9.99	9.40	9.40	9.53	9.52								
Temperature (°C)	14.41	14.24	14.15	14.15	14.07								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.10	0.10	0.10	0.09	0.09								
Redox (mV)	74	115	138	139	153								

Notes: 1530 - started pump (AED bladder pump)

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-20D

DATE: 3/31/2010

PROJECT NAME: Hawppauge

PROJECT NUMBER: 0266374

SAMPLERS: LET

A: Total Casing and Screen Length: 123.5'

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 90.78'

D: Volume of Water in Casing: ~~32.7~~ 5.5 gal

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad - \quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
Time	1710	1715	1725	1730	1745	1755	1805					
Gallons	~6	~7.5	~10	~11	~14	~15	~16					
Depth to Water	90.78				90.66							
pH	6.15	5.50	5.41	5.51	5.40	5.40	5.50					
Conductivity (mohm/cm)	0.264	0.261	0.261	0.265	0.266	0.267	0.266					
Turbidity (ntu)	53.8	67.6	132	85.7	51.2	56.2	51.6					
Dissolved Oxygen (mg/l)	7.18	9.14	8.94	9.36	8.63	8.79	9.14					
Temperature (°C)	17.77	18.12	18.02	17.45	17.90	17.74	17.82					
Salinity	0.0	0.0	0.0	0.0	0.0	0.0	0.0					
TDS	0.17	0.17	0.17	0.17	0.17	0.17	0.17					
Redox (mV)	62	83	97	88	102	105	102					

Notes: 1330 Begin purging w/ bailer. string is too thin, gets tangled need
thicker string. 4/1/10 0930 began purging w/ bailer. 1000 purge 5 gal.
1700 begin bailer again; 1805 purge ~16 gal

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-150

DATE: 4/1/2010

PROJECT NAME: Hauptange

PROJECT NUMBER: 0266374

SAMPLERS: Sevaid Sheemakur + Christine Thomas

DTB: 130.00 Below well casing

A: Total Casing and Screen Length: 130.00

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 50.71

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED											
	1615	1615	1620									
Time	1600	1615	1620									
Gallons	~6	~7	~8									
Depth to Water	54.89	55.22	55.35									
pH	7.71	7.89	7.14									
Conductivity (mohm/cm)	0.194	0.193	0.211									
Turbidity (ntu)	51.8	102.0	120.2									
Dissolved Oxygen (mg/l)	13.89	10.56	9.26									
Temperature (°C)	14.99	14.72	15.32									
Salinity	0.0	0.0	0.0									
TDS	0.13	0.13	0.14									
Redox (mV)	-30	0	0									

Notes: 1440: Initiated development of MW-150. Pump set at 129' below well casing.
1445: Surged + lowered pump to 129.5 below well casing.
1455: Pump stopped. Well let rest for 5 min.
1550: Megapurge did not restart. switched to OED micropurge bladder pump. Surged + pumped thoroughly while pumping with megapurge. Well was pumping clear w/in 5-10 min.
1620 Purged ~8 gal.

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-34

DATE: 4/1/2010

PROJECT NAME: Hauptmann

PROJECT NUMBER: 0266374

SAMPLERS: Jerrid Shoemaker & Christine Thomas

DTB: 130.00 (soft)

A: Total Casing and Screen Length: 130

B: Casing Internal Diameter: 2"

C: Water Level Below Top of Casing: 58.84

D: Volume of Water in Casing: _____

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\quad)^2 \times (\quad) = \quad \text{gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED												
Time	1300	1315	1330	1340	1350								
Gallons	~5	~10	~15	~20	~25								
Depth to Water (ft bgs)	67.16	67.82	69.22	69.94	70.19								
pH	6.49	6.87	6.90	6.56	6.40								
Conductivity (mohm/cm)	0.413	0.390	0.384	0.351	0.339								
Turbidity (ntu)	98.4	6.8	2.4	0.0	0.0								
Dissolved Oxygen (mg/l)	7.06	6.01	6.26	6.48	6.54								
Temperature (°C)	15.27	15.03	14.91	14.89	14.86								
Salinity	0.0	0.0	0.0	0.0	0.0								
TDS	0.26	0.25	0.25	0.23	0.22								
Redox (mV)	52	77	81	96	103								

Notes: 1240: Initiated purge of MW-34. Pump set at 129'
1350 Purged ~25 gal. H₂O

WELL DEVELOPMENT/ PURGING LOG

WELL NUMBER: MW-24

DATE: 4/1/2010

PROJECT NAME: Hauptage

PROJECT NUMBER: 0266374

SAMPLERS: Terrill Shoemaker + Christine Thomas

DTB: ~~107.80~~
107.80

A: Total Casing and Screen Length: 108

B: Casing Internal Diameter: 2

C: Water Level Below Top of Casing: 63.81

D: Volume of Water in Casing: 7.21

$$v = 0.0408 (B)^2 \times (A-C) = D$$

$$v = 0.0408 (\overset{0.1632}{2})^2 \times (\overset{44.19}{108} - 63.81) = \underline{7.21} \text{ gal.}$$

Well I.D.	Vol. Gal./ft.
1"	0.04
2"	0.17
3"	0.38
4"	0.66
5"	1.04
6"	1.50
8"	2.60

PARAMETER	ACCUMULATED VOLUME PURGED									
Time	0815	0910	0920	0930	0940	0945 ³⁰	1000			
Gallons		12	14	17	21	23	25			
Depth to Water	63.83	63.83	63.79	63.80	63.80	63.82	63.82			
pH		5.87	5.72	5.64	5.59	5.67	5.61			
Conductivity (mohm/cm)		0.408	0.349	0.337	0.327	0.340	0.330			
Turbidity (ntu)		288.0	79.8	55.4	35.3	453.0	78.4			
Dissolved Oxygen (mg/l)		5.23	5.43	5.46	5.44	5.40	5.39			
Temperature (°C)		17.85	17.66	17.66	17.78	17.72	17.73			
Salinity		0.0	0.0	0.0	0.0	0.0	0.0			
TDS		0.26	0.23	0.22	0.21	0.22	0.22			
Redox (mV)		159	164	170	172	169	169			

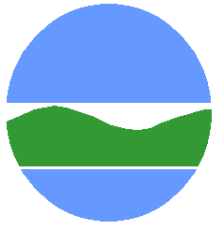
Notes: 0800 Initiate purge w/ mega purge pump

0910: Pump set at 106.5 bgs

0930: Pump lowered to 106.5 bgs

0945: Surged for 5 min and lowered pump to 1 inch off bottom

1005: Pump stopped.

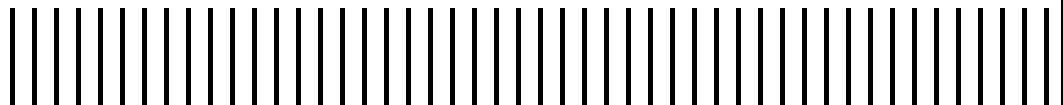


New York State Department of Environmental Conservation
Site Characterization Report

APPENDIX

C

Boring Logs



MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-06	
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 1 OF 1		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DRILLING CONTRACTOR Zebra Environmental Corp.						MEAS. PT. ELEV.		
PURPOSE Area-Wide Groundwater Study						GROUND ELEV.		
WELL MATERIAL						DATUM		
DRILLING METHOD(S) Direct Push			SAMPLE	CORE	CASING	DATE STARTED 12/3/09		
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 12/3/09		
GROUND WATER DEPTH '			DIA.	"		DRILLER L. Caballero		
MEASURING POINT			WEIGHT	#		PIRNIE STAFF C. Thomas		
DATE OF MEASUREMENT			FALL	"				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Brown SILT and fine SAND; compact, wet.			
2	2'		0		Brown medium SAND, trace silt, trace subrounded gravel; compact, moist.	0.5		
4			0					
6			Broken		Light brown medium SAND, trace subrounded gravel; loose grading to compact, moist.	5.0		Bottom of the macrocore is obstructed with ~2" by 1.5" piece of quartz gravel.
8	3'							
10					No Recovery.	10.0		
12	0'							
14								
						15.0		Refusal at 15' bgs. Moved Geoprobe ~5' and tried again. Refusal at 10' bgs.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-11	
PROJECT Hauppauge				LOCATION Smithtown, NY			SHEET 1 OF 2	
CLIENT New York State Department of Environmental Conservation							PROJECT No. 0266374	
DRILLING CONTRACTOR Zebra Environmental Corp.							MEAS. PT. ELEV.	
PURPOSE Area-Wide Groundwater Study							GROUND ELEV.	
WELL MATERIAL							DATUM	
DRILLING METHOD(S) Direct Push				SAMPLE	CORE	CASING	DATE STARTED 12/3/09	
DRILL RIG TYPE Geoprobe				TYPE			DATE FINISHED 12/3/09	
GROUND WATER DEPTH '				DIA.	"		DRILLER L. Caballero	
MEASURING POINT				WEIGHT	#		PIRNIE STAFF C. Thomas	
DATE OF MEASUREMENT				FALL	"			
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	1.5'		0		Dark brown Silty SAND; compact, moist.			
			0		Sub-angular to sub-rounded Sandy GRAVEL; compact, moist.	0.5		
4			0					
6	0'				No recovery.	5.0		
8								
10								
12	1.5'		0		Subrounded Gravelly light brown medium SAND; compact, dry.	10.0		
14			0					
16			0					
18	2.5'		0					
			0					
			0					

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-11					
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 2					
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS			
22 24 26 28 30 32 34	3'		0		Subrounded Gravelly light brown medium SAND; loose grading to compact, dry grading to wet.	20.0					
			0								
			0								
	3.5'		0		Light brown medium SAND with subrounded gravel; compact, moist.	25.0					
			0								
			0								
	2.5'		0		Subrounded Gravelly light brown medium to coarse SAND; compact, moist.	30.0					
			0								
			0								
				0					35.0		Refusal at 35' bgs.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-12		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 1 OF 1			
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374			
DRILLING CONTRACTOR Zebra Environmental Corp.						MEAS. PT. ELEV.			
PURPOSE Area-Wide Groundwater Study						GROUND ELEV.			
WELL MATERIAL						DATUM			
DRILLING METHOD(S) Direct Push			SAMPLE	CORE	CASING	DATE STARTED 12/2/09			
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 12/2/09			
GROUND WATER DEPTH '			DIA.	"		DRILLER L. Caballero			
MEASURING POINT			WEIGHT	#		PIRNIE STAFF C. Thomas			
DATE OF MEASUREMENT			FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS	
2 4 6 8 10 12 14	3'		0		Dark brown Silty fine SAND; compact, wet.			Top of the macrocore is obstructed with quartz gravel.	
			0		Brown fine to medium SAND with silt; compact, wet.	0.5			
			0		Light brown medium SAND, trace subrounded gravel; compact, moist.	3.0			
			0		Light brown medium SAND with subrounded gravel; compact, dry.	5.0			
	0'		0		No recovery.	10.0			
					15.0		Refusal at 15' bgs. Moved Geoprobe ~5' west for second attempt; refusal at 19' bgs. Move Geoprobe ~ 5' east of first boring for third attempt; refusal at 8' bgs.		

MALCOLM PIRNIE				TEST BORING LOG				BORING No.CB-17																																																																																																																																							
PROJECT Hauppage				LOCATION Smithtown, NY				SHEET 1 OF 2																																																																																																																																							
CLIENT New York State Department of Environmental Conservation								PROJECT No. 0266374																																																																																																																																							
DRILLING CONTRACTOR Zebra Environmental Corp.								MEAS. PT. ELEV.																																																																																																																																							
PURPOSE Area-Wide Groundwater Study								GROUND ELEV.																																																																																																																																							
WELL MATERIAL								DATUM																																																																																																																																							
DRILLING METHOD(S) Direct Push				SAMPLE		CORE		CASING		DATE STARTED 12/1/09																																																																																																																																					
DRILL RIG TYPE Geoprobe				TYPE						DATE FINISHED 12/1/09																																																																																																																																					
GROUND WATER DEPTH '				DIA.		"				DRILLER L. Caballero																																																																																																																																					
MEASURING POINT				WEIGHT		#				PIRNIE STAFF C. Thomas																																																																																																																																					
DATE OF MEASUREMENT				FALL		"																																																																																																																																									
<table border="1"> <thead> <tr> <th>DEPTH FT.</th> <th>SAMPLE TYPE, RECOVERY, NUMBER</th> <th>BLOWS ON SAMPLE SPOON PER 6"</th> <th>PID</th> <th>GRAPHIC LOG</th> <th>GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.</th> <th>ELEV. DEPTH</th> <th>WELL Constr.</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>0</td> <td></td> <td>Brown SILT and fine SAND; compact, moist.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td rowspan="3">2.5'</td> <td></td> <td>0</td> <td rowspan="3"></td> <td rowspan="3">Light brown medium SAND, trace subrounded gravel; compact, dry grading to moist.</td> <td rowspan="3">0.5</td> <td rowspan="3"></td> <td rowspan="3"></td> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr> <td>4</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td rowspan="3">3'</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr> <td>8</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>12</td> <td rowspan="3">3'</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr> <td>14</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>16</td> <td rowspan="3">3'</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr> <td>18</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS				0		Brown SILT and fine SAND; compact, moist.				2	2.5'		0		Light brown medium SAND, trace subrounded gravel; compact, dry grading to moist.	0.5									4			0						6	3'		0												8			0						10			0						12	3'		0												14			0						16	3'		0												18			0									0					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS																																																																																																																																							
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PROJECT **Hauppauge**LOCATION **Smithtown, NY**SHEET **2** OF **2**CLIENT **New York State Department of Environmental Conservation**PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	3.5'		0					
			0					
24			0					
	3'		0		Brown fine to medium SAND and SILT; compact, moist.	24.0		
			0		Light brown coarse SAND; loose, dry.	24.2		
26			0		Light brown medium SAND, trace subrounded gravel; compact, dry grading to moist.	24.4		
			0		Brown SILT; compact, moist.	27.0		
28	2.5'		0		Light brown medium to coarse SAND; loose, moist.	27.2		
			0		Layers of light brown and brown medium SAND with subrounded gravel; compact, moist.	27.4		
30			0		Layers of light brown and brown medium SAND, trace subrounded gravel; loose grading to compact, moist.	30.0		
			0					At 30.1' bgs ~1cm thick layer of brown/black SILT.
32	2.5'		0					
34			0					
			0					
36			0					
	2.5'		0					
38			0					
			0					
40			0			40.0		Refusal at 40' bgs. Quartz gravel stuck in shoe of macrocore.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-18		
PROJECT Hauppauge				LOCATION Smithtown, NY			SHEET 1 OF 2		
CLIENT New York State Department of Environmental Conservation				PROJECT No. 0266374					
DRILLING CONTRACTOR Zebra Environmental Corp.				MEAS. PT. ELEV.					
PURPOSE Area-Wide Groundwater Study				GROUND ELEV.					
WELL MATERIAL				DATUM					
DRILLING METHOD(S) Direct Push			SAMPLE	CORE	CASING	DATE STARTED 12/1/09			
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 12/1/09			
GROUND WATER DEPTH '			DIA.	"		DRILLER L. Caballero			
MEASURING POINT			WEIGHT	#		PIRNIE STAFF C. Thomas			
DATE OF MEASUREMENT			FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS	
2 4 6 8 10 12 14 16 18	2.5'		0		Brown SILT and fine SAND; compact, moist.				
			0			Light brown medium SAND, some subrounded gravel; compact, moist grading to dry.			0.5
			0						
			0						
			0						
			0						
	3'		0		Light brown medium SAND, trace subrounded gravel; compact, moist.	10.0			
			0						
			0						
			0						
			0						
			0						
	3'		0						
			0						
			0						
			0						
			0						
			0						

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-18		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 2		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	3'		0					
			0					
24			0					
	3'		0		Light brown medium SAND, some subrounded gravel; compact, moist.	25.0		
26			0					
28			0					
	3'		0					
30			0					
32			0					
	2.5'		0		White gravel; compact, dry.	33.0		
34			0					
			0					
			0		Brown/black SILT; compact, dry.	33.1		
			0					
			0					
			0		Light brown medium SAND, some subrounded gravel; compact, moist.	33.3		
			0					
			0					
			0		Light brown medium SAND with subrounded gravel; compact, dry.	35.0		
36			0					
38			0					
40			0			40.0		Refusal at 40' bgs. Quartz gravel obstructed shoe of macrocore sampler.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-23	
PROJECT Hauppauge			LOCATION Smithtown, NY				SHEET 1 OF 3	
CLIENT New York State Department of Environmental Conservation			PROJECT No. 0266374					
DRILLING CONTRACTOR Zebra Environmental Corp.			MEAS. PT. ELEV.					
PURPOSE Area-Wide Groundwater Study			GROUND ELEV.					
WELL MATERIAL			DATUM					
DRILLING METHOD(S) Direct Push		SAMPLE		CORE		CASING		
DRILL RIG TYPE Geoprobe		TYPE				DATE STARTED 12/2/09		
GROUND WATER DEPTH '		DIA. "				DATE FINISHED 12/2/09		
MEASURING POINT		WEIGHT #				DRILLER L. Caballero		
DATE OF MEASUREMENT		FALL "				PIRNIE STAFF C. Thomas		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	4'		0		Brown Silty fine SAND; compact, moist.			
			0					
4			0					
	3'		0		Light brown medium SAND, trace subrounded gravel; compact, moist.	4.5		
6			0					
8			0					
	2.5'		0		Red crushed gravel; compact, dry.	14.5		
10			0					
12			0					
	3'		0		Subrounded GRAVEL and medium light brown sand;compact, dry.	14.6		
14			0					
16			0					
			0		Light brown medium SAND, trace subrounded gravel; compact, moist.	15.0		
18			0					
			0					

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-23		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 3		
CLIENT New York State Department of Environmental Conservation					PROJECT No. 0266374			
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	2.5'		0					Layers of light and dark brown banding in sand from 43 to 44' bgs.
			0					
24			0					
		0						
26	3.5'		0					
			0					
28			0					
		0						
30	3'		0					
			0					
32			0					
		0						
34			0					
			0					
36			0					
	3'		0					
38			0					
			0					
40			0					
			0					
42			0					
	3'		0					
44			0					
			0					
					Subrounded Gravelly SAND; compact, moist.	44.0		
					No recovery.	45.0		

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-23		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 3 OF 3		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
48	0'					49.0		Refusal at 49' bgs.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-27	
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 1 OF 2		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DRILLING CONTRACTOR Zebra Environmental Corp.						MEAS. PT. ELEV.		
PURPOSE Area-Wide Groundwater Study						GROUND ELEV.		
WELL MATERIAL						DATUM		
DRILLING METHOD(S) Direct Push			SAMPLE	CORE	CASING	DATE STARTED 12/2/09		
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 12/2/09		
GROUND WATER DEPTH 30.0'			DIA.	"		DRILLER L. Caballero		
MEASURING POINT			WEIGHT	#		PIRNIE STAFF C. Thomas		
DATE OF MEASUREMENT			FALL	"				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
			0		Brown Silty fine SAND; loose, moist.			
2	3'		0		Brown medium SAND; compact, wet.	1.0		
4			0		Brown Silty fine SAND; compact, moist.	4.0		
6	2.5'		0		Light brown medium SAND, trace subrounded gravel; compact, moist grading to dry.	4.5		
8			0					
10			0					
12	2.5'		0					
14			0					
16			0					
18	3'		0					
			0					

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-27		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 2		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	3'		0					1330 collected samples: HPG-CB-27(26.5-29.5) and HPG-X-3. ▼
			0					
24			0					
26	3.5'		0	Light brown medium SAND, trace subrounded gravel; compact, moist.	25.0			
			0					
28			0					
30	2.5'		0	Light brown medium SAND, trace subrounded gravel; compact, wet.	30.0			
			0					
32			0					
34			0		Gravelly light brown medium SAND; compact, wet.	33.0		
		0						
			0			35.0		

MALCOLM PIRNE				TEST BORING LOG			BORING No.CB-28	
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 1 OF 2		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DRILLING CONTRACTOR Zebra Environmental Corp.						MEAS. PT. ELEV.		
PURPOSE Area-Wide Groundwater Study						GROUND ELEV.		
WELL MATERIAL						DATUM		
DRILLING METHOD(S) Direct Push			SAMPLE	CORE	CASING	DATE STARTED 12/2/09		
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 12/2/09		
GROUND WATER DEPTH 30.0'			DIA.	"		DRILLER L. Caballero		
MEASURING POINT			WEIGHT	#		PIRNE STAFF C. Thomas		
DATE OF MEASUREMENT			FALL	"				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2	3'		0		Brown Silty fine SAND; compact, wet.			
			0		Light brown medium SAND, trace subrounded gravel; compact, wet.	2.5		
4			0					
	3'		0		Gravelly light brown medium to coarse SAND; loose, dry.	5.0		
6			0		Light brown medium SAND, trace subrounded gravel; loose, dry.	7.0		
8			0					
10	3'		0					
12			0					
14			0					
	3'		0		Gravelly light brown medium to coarse SAND; loose, dry.	14.5		Layers of light and dark brown banding in sand from 14.3 to 14.5' bgs.
16			0		Light brown medium SAND, trace subrounded gravel; loose, dry.	15.0		
18			0					

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-28		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 2		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	3'		0					Layers of light and dark brown banding in sand from 22.5 to 27' bgs.
			0					
24			0					
	3.5'		0					1130 collected samples: HPG-CB-28(26.5-29.5) and HPG-CB-28(26.5-29.5) MS/MSD.
26			0					
28			0					
	4'		0		Light brown medium SAND, trace subrounded gravel; loose, wet.	30.0		▼
30			0					
32			0					
34			0					
			0			35.0		

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-30	
PROJECT Hauppauge				LOCATION Smithtown, NY			SHEET 1 OF 2	
CLIENT New York State Department of Environmental Conservation				PROJECT No. 0266374				
DRILLING CONTRACTOR Zebra Environmental Corp.				MEAS. PT. ELEV.				
PURPOSE Area-Wide Groundwater Study				GROUND ELEV.				
WELL MATERIAL				DATUM				
DRILLING METHOD(S) Direct Push		SAMPLE		CORE		CASING		
DRILL RIG TYPE Geoprobe		TYPE				DATE STARTED 11/30/09		
GROUND WATER DEPTH 42.0'		DIA.		"		DATE FINISHED 11/30/09		
MEASURING POINT		WEIGHT		#		DRILLER L. Caballero		
DATE OF MEASUREMENT		FALL		"		PIRNIE STAFF M. Jones		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
			0		Top soil.			
2	3.2'		0		Brown fine to medium SAND, trace subrounded gravel; moist.	0.5		
4			0					
6								
8	1.8'							
10								
12	3'							
14								
16								
18								

MALCOLM PIRNIE				TEST BORING LOG			BORING No.CB-32	
PROJECT Hauppauge			LOCATION Smithtown, NY				SHEET 1 OF 3	
CLIENT New York State Department of Environmental Conservation							PROJECT No. 0266374	
DRILLING CONTRACTOR Zebra Environmental Corp.							MEAS. PT. ELEV.	
PURPOSE Area-Wide Groundwater Study							GROUND ELEV.	
WELL MATERIAL							DATUM	
DRILLING METHOD(S) Direct Push			SAMPLE	CORE	CASING	DATE STARTED 11/30/09		
DRILL RIG TYPE Geoprobe			TYPE			DATE FINISHED 11/30/09		
GROUND WATER DEPTH 47.0'			DIA.	"		DRILLER L. Caballero		
MEASURING POINT			WEIGHT	#		PIRNIE STAFF M. Jones		
DATE OF MEASUREMENT			FALL	"				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Brown fine to medium SAND, trace subrounded gravel; moist.			
2	3.4'		0					
4			0					
6	2.75'		0					
8			0					
10			0					
12	2.75'		0					
14			0					
16			0					
18	2.3'		0					
			0					

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-32		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 3		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	2.5'		0		Light brown fine to medium SAND, trace subrounded gravel; moist.	20.0		
			0					
24			0					
			0					
26	3.2'		0		Light brown fine to medium SAND, trace subrounded gravel; lenses of brown fine to medium sand ~1" thick; moist.	25.0		
			0					
28			0					
			0					
30	1.3'		0		Light brown fine to medium SAND, trace subrounded gravel; moist.	30.0		
			0					
32			0					
			0					
34	2'		0		Brown fine to medium SAND, trace subrounded gravel; moist.	31.4		
			0					
36			0					
			0					
38	2'		0					
			0					
40			0					
			0					
42	2'		0		Light brown fine to medium SAND, with subrounded gravel; moist grading to wet.	40.0		
			0					
44			0					
			0					
			0					1240 collected sample: HPG-CB-32(44.5-46.5).

MALCOLM PIRNIE				TEST BORING LOG		BORING No.CB-32		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 3 OF 3		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
48			0			50.0		▼
			0					
50			0					

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **4** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
74								
76								
78		30	0		Light brown medium SAND; loose, wet.	78.0		
	1.2'	42	0		Subangular to subrounded GRAVEL with brown medium to coarse sand; loose, wet.	78.7		
		48	0					
80		41	0		Light brown medium SAND with fine to medium subrounded gravel; loose, wet.	78.8		
						80.0		
82								
84								
86								
88		43	0		Light brown medium SAND; loose, wet.	88.0		
	1.4'	46	0					
		42	0		Subangular to subrounded GRAVEL.	89.0		
90		42	0		Light brown medium SAND with fine to medium subrounded gravel; loose, wet.	89.3		
						90.0		
92								
94								
96								

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
126								
128	1'	50 47 50/3"	0 0 0		Light brown medium SAND with fine to medium subrounded gravel; loose, wet.	128.0		
130					Refusal.	129.3		
132						130.0		130.0 132.0

BORING No.MW-20I

PROJECT **Hauppauge**

CLIENT **New York State Department of Environmental Conservation**

DRILLING CONTRACTOR **Aztech Technologies, Inc.**

PURPOSE **Area-Wide Groundwater Study**

WELL MATERIAL

DRILLING METHOD(S) **Rotary**DRILL RIG TYPE **4.25" HSA**

GROUND WATER DEPTH

MEASURING POINT

DATE OF MEASUREMENT

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Brown medium SAND, trace subrounded gravel, trace silt. [From soil cuttings]			Hand clear to 5' bgs.
2								
4								
6	2'	11	0		Brown medium SAND with fine to medium subrounded gravel; loose, moist.	5.0		
		17	0					
		16	0		Brown mottled with orange brown medium SAND with fine to medium subrounded gravel, trace silt; loose, moist.	6.0		
		15	0			7.0		
8								
10	2'	4	0		Gray SILT, some fine sand; compact, moist.	10.0		
		4	0		Reddish brown medium SAND; loose, wet.			
		3	0		Gray SILT, some fine sand; compact, moist.	10.6		
		4	0		Layers of gray SILT and reddish brown medium SAND; grading from mostly silt to mostly sand; compact grading to loose, wet.	10.8		
12						11.0		
14						12.0		
16	1'	16	0		Brown medium SAND with fine to coarse subrounded gravel, trace silt; loose, dry.	15.0		
		24	0					
		34	0					
		50				17.0		
18								

Hand clear to 5' bgs.

Standard sampling procedure used.

MALCOLM PIRNIE				TEST BORING LOG			BORING No.MW-20I	
PROJECT Hauppauge				LOCATION Smithtown, NY			SHEET 2 OF 6	
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	1.3'	15	0		Brown grading to dark brown medium SAND	20.0		Large piece of quartzite gravel filling spilt spoon from 31.5' - 31.65'.
		34	0		and fine to coarse subrounded GRAVEL, trace silt; loose, dry.	21.3		
		50/4"	0		Refusal.	22.0		
26	1.5'	15	0		Brown medium SAND and fine to coarse subrounded GRAVEL; loose, dry. 26.6'-26.7' sand mottled with dark reddish brown.	25.0		
		19	0			26.7		
		30	0		Light brown medium SAND and fine to medium subrounded GRAVEL; loose, dry.	27.0		
30	1.3'	19	0		Light brown medium grading to coarse SAND and fine to medium subrounded GRAVEL; loose, dry.	30.0		
		34	0		Refusal.	31.3		
		50/4"	0			32.0		
36	1'	34	0		Light brown mottled with dark reddish brown medium SAND and fine to coarse subrounded GRAVEL; loose, moist.	35.0		
		30	0		Refusal.	36.3		
		50/3"	0			37.0		
40	1.4'	39	0		Light brown with layers of dark reddish brown medium SAND with fine to medium subrounded gravel; loose, moist.	40.0		
		48	0		Refusal.	41.4		
		50/4"	0			42.0		
44	0.8'	48	0		Light brown with layers of dark reddish brown medium SAND with fine to medium	45.0		
		48	0					

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **3** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
48		50/2"	0		subrounded gravel; loose, moist.	45.8		
					Sandy fine to medium subrounded GRAVEL; compact, dry.	46.2		
					Refusal.	47.0		
50	0.9'	34	0		Sandy fine to medium subrounded GRAVEL; compact, dry.	50.0		
		50/3"	0		Light brown with layers of dark reddish brown medium SAND with fine to medium subrounded gravel; loose, moist.	50.3		
52					Sandy fine to medium subrounded GRAVEL; compact, dry.	50.6		
					Refusal.	50.9		
54						52.0		
56	1.4'	35	0		Light brown medium SAND with fine to coarse subrounded gravel; loose, dry.	55.0		
		50	0		Refusal.	56.4		
		50/4"	0			57.0		
58								
60	1.5'	20	0		Fine to coarse subrounded GRAVEL with light brown medium sand; compact, dry.	60.0		
		34	0		Layers of light brown and dark reddish brown fine to medium SAND with fine to coarse subrounded gravel; loose, dry.	61.0		
62		46	0		Fine to medium brown silty SAND; compact, dry.	61.3		
		50/4"			Layers of light brown and dark reddish brown fine to medium SAND with fine to coarse subrounded gravel; loose, dry.	61.6		
64					Refusal.	61.8		
						62.0		
66	1.2'	20	0		Fine to coarse subrounded GRAVEL with light brown medium sand; compact, dry.	65.0		
		34	0		Refusal.	66.2		
		50/2"	0			67.0		
68								
70	1'	40	0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	70.0		
		46	0					
		50/3"	0		Refusal.	71.3		

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **4** OF **6**

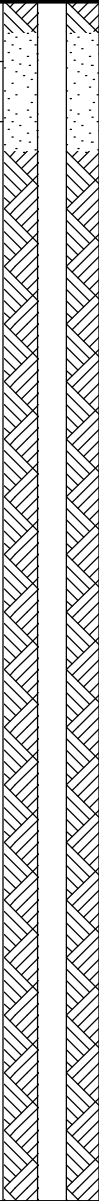
CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
74						72.0		
	0.8'	67 50/3"	0 0 0		Fine to coarse subrounded GRAVEL with light brown medium sand; compact, dry.	75.0		
76					Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	75.6		
					Refusal.	75.8		
78						77.0		
80	0.8'	47 50/3"	0 0 0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	80.0		
					Refusal.	80.8		
82						82.0		
84								
86	1.3'	38 49 50/3"	0 0 0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	85.0		
					Refusal.	86.3		
88						87.0		
90	1.3'	45 47 50/3"	0 0 0		Light brown medium SAND, some fine to medium subrounded gravel; loose, dry.	90.0		
					Refusal.	91.3		
92						92.0		
94								
96	1'	29 50/4"	0 0		Light brown medium SAND with fine to medium subrounded gravel; loose, wet.	95.0		
					Refusal.	95.8		
						97.0		

▼ Stopped sampling at 97' bgs due to running sands. Augered to 125' bgs.

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-20I		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 6 OF 6		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
								125.0

MALCOLM PIRNIE				TEST BORING LOG				BORING No.MW-23D			
PROJECT Hauppauge				LOCATION Smithtown, NY				SHEET 1 OF 6			
CLIENT New York State Department of Environmental Conservation								PROJECT No. 0266374			
DRILLING CONTRACTOR Aztech Technologies, Inc.								MEAS. PT. ELEV.			
PURPOSE Area-Wide Groundwater Study								GROUND ELEV.			
WELL MATERIAL								DATUM			
DRILLING METHOD(S) Rotary				SAMPLE		CORE		CASING		DATE STARTED 3/3/10	
DRILL RIG TYPE 4.25" HSA				TYPE				PVC		DATE FINISHED 3/4/10	
GROUND WATER DEPTH 87.0'				DIA.		"		2"		DRILLER M. Harrington	
MEASURING POINT				WEIGHT		#				PIRNIE STAFF C. Thomas	
DATE OF MEASUREMENT				FALL		"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.		ELEV. DEPTH	WELL Constr.	REMARKS		
2			0		PAVEMENT. [From soil cuttings]				0.5		
					ROAD BASE, angular medium gravel. [From soil cuttings]		1.0		Hand clear to 5' bgs.		
4			0		Brown medium SAND with subrounded fine to coarse gravel. [From auger cuttings]		2.0		2.5		
6							Auger to 50' bgs, lithology described on boring log for CB-23.				
8			0								
10											
12			0								
14											
16			0								
18											

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-23D		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 6		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22			0					
24								
26								
28								
30								
32								
34								
36								
38								
40			0					
42								
44								

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **3** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
48								Standard sampling procedure used.
50	2'	30	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	50.0		
		60	0					
		25	0					
52		65	0					
54								
56	2'	22	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	55.0		
		32	0					
		42	0					
		36	0					
58								
60	2'	29	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	60.0		
		56	0					
		55	0					
62		69	0					
64								
66	1.5'	25	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	65.0		
		33	0					
		37	0					
		46	0					
68								
70	2'	20	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	70.0		
		50	0					
		50	0		Fine to medium subrounded GRAVEL with light brown medium sand; compact, dry.	70.5		
		50	0					

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **4** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
74					Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	71.0		
						72.0		
76	2'	29	0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	75.0		
		53	0					
		56	0					
		62	0					
78						77.0		
80	1.4'	35	0		Light brown medium SAND, trace fine to medium subrounded gravel; loose, moist.	80.0		
		50	0					
		100/4"	0					
82					Refusal.	81.4		
						82.0		
84								
86	2'	30	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist grading to wet.	85.0		
		27	0					
		25	0					
		35	0					
88						87.0		
90	2'	7	0		Light brown medium SAND with fine to medium subrounded gravel; loose, wet.	90.0		
		12	0					
		15	0					
92		20	0			92.0		
94								
96								

Collect samples:
HPG-CB-23D(75-77) and
HPG-MW-X5.



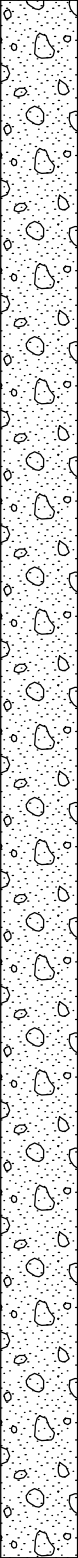
~1' of sand came in augers at 90' bgs, blow counts not representative.

Stopped sampling at 92' bgs due to running sands. Augered to 135' bgs.

MALCOLM PIRNIE						TEST BORING LOG	BORING No.MW-23D	
PROJECT Hauppage				LOCATION Smithtown, NY		SHEET 6 OF 6		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
126								
128								
130								
132								
134								

MALCOLM PIRNIE				TEST BORING LOG				BORING No.MW-23I			
PROJECT Hauppauge				LOCATION Smithtown, NY				SHEET 1 OF 5			
CLIENT New York State Department of Environmental Conservation								PROJECT No. 0266374			
DRILLING CONTRACTOR Aztech Technologies, Inc.								MEAS. PT. ELEV.			
PURPOSE Area-Wide Groundwater Study								GROUND ELEV.			
WELL MATERIAL								DATUM			
DRILLING METHOD(S) Rotary				SAMPLE		CORE		CASING		DATE STARTED 3/3/10	
DRILL RIG TYPE 4.25" HSA				TYPE				PVC		DATE FINISHED 3/3/10	
GROUND WATER DEPTH '				DIA.		"		2"		DRILLER M. Harrington	
MEASURING POINT				WEIGHT		#				PIRNIE STAFF C. Thomas	
DATE OF MEASUREMENT				FALL		"					

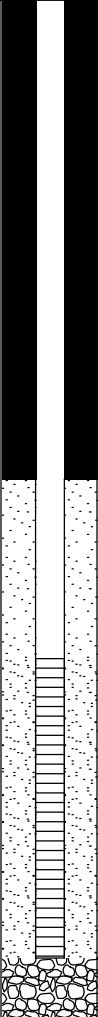
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
0			0		Brown medium SAND with subrounded fine to coarse gravel; [from auger cuttings].	0.5		Hand clear to 5' bgs.
2			0			2.5		
4			0					
6			0					Put plug in augers and drill to 115' bgs.
8			0					
10			0					
12			0					
14			0					
16			0					
18			0					

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-23I		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 5		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22			0					
24								
26								
28								
30			0					
32								
34								
36								
38								
40			0					
42								
44								

PROJECT **Hauppauge**LOCATION **Smithtown, NY**SHEET **3** OF **5**CLIENT **New York State Department of Environmental Conservation**PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
48			0					
50			0					
52			0					
54			0					
56			0					
58			0					
60			0					
62			0					
64			0					
66			0					
68			0					
70			0					

[illegible]

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
100			0					
102								
104								
106								
108								
110			0					
112								
114						115.0		
						114.0		
						106.0		

MALCOLM PIRNIE				TEST BORING LOG			BORING No.MW-24I	
PROJECT Hauppauge				LOCATION Smithtown, NY			SHEET 1 OF 5	
CLIENT New York State Department of Environmental Conservation				PROJECT No. 0266374				
DRILLING CONTRACTOR Aztech Technologies, Inc.				MEAS. PT. ELEV.				
PURPOSE Area-Wide Groundwater Study				GROUND ELEV.				
WELL MATERIAL				DATUM				
DRILLING METHOD(S) Rotary			SAMPLE	CORE	CASING	DATE STARTED 3/9/10		
DRILL RIG TYPE 4.25" HSA		TYPE			PVC	DATE FINISHED 3/9/10		
GROUND WATER DEPTH 66.5'		DIA.	"		2"	DRILLER M. Harrington		
MEASURING POINT		WEIGHT	#			PIRNIE STAFF C. Thomas		
DATE OF MEASUREMENT		FALL	"					

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2			0		Brown medium SAND, trace subrounded gravel, trace silt. [From soil cuttings]			Hand clear to 5' bgs.
4			0					Standard sampling procedure used.
6	1.5'	4	0		Brown fine to medium SAND, trace silt; loose, moist .	5.0		
		7	0					
		10	0					
		11	0			7.0		
8								
10		7	0		Light brown medium SAND; loose, wet.	10.0		
	2'	11	0					
		14	0		Brown to light brown fine to medium SAND with silt; compact, wet.	11.0		1" thick silt lens at 11.6' bgs.
12		15	0			12.0		
14								
16	1.4'	9	0		Brown to light brown fine to medium SAND with silt; compact, wet.	15.0		
		15	0					
		50/5"	0		Light brown coarse grading to fine SAND, trace fine to medium subrounded gravel; compact, moist.	15.4		
						16.4		
18					Refusal.	17.0		

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **2** OF **5**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
20		20	0		Brown medium SAND, trace silt, trace fine to medium subrounded gravel; compact, moist.	20.0		
22	1.5'	26	0					
		40	0					
		45	0					
24						22.0		
26	1.5'	15	0		Brown medium SAND, trace silt, trace fine to medium subrounded gravel; loose, wet.	25.0		
		17	0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	26.0		
		22	0		Brown medium SAND, trace silt, trace fine to medium subrounded gravel; loose, moist.	26.5		
28						27.0		
30	1.5'	15	0		Brown medium SAND, with fine to medium subrounded gravel, trace silt; loose, moist.	30.0		
		18	0					
		24	0					
32		29	0		Silty brown fine to medium SAND, trace subrounded gravel; compact, wet.	31.5		
						32.0		
34								
36	1.75'	11	0		Brown medium SAND, with fine to medium subrounded gravel, trace silt; loose, moist.	35.0		
		19	0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	35.5		
		41	0		Refusal.	36.8		
		50/3"				37.0		
38								
40	2'	11	0		Light brown medium SAND with fine to medium subrounded gravel, trace silt; loose, dry.	40.0		
		21	0					
		43	0					
42		50	0			42.0		
44								
	1.4'	21	0		Light brown medium SAND, some fine to medium subrounded gravel; loose, dry.	45.0		
		43	0					

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **3** OF **5**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
		50/4"	0		Refusal.	46.5		
48						47.0		
50	0.8'	23	0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	50.0		
		50/2"	0		Refusal.	50.8		
52						52.0		
54								
56	2'	28	0		Light brown medium SAND, trace fine subrounded gravel; loose, dry.	55.0		
		41	0					
		48	0		Light brown medium SAND with fine to medium subrounded gravel; loose, dry.	56.0		
		46	0					
58			0			57.0		
60	2'	25	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	60.0		
		30	0		Brown to light brown fine to medium SAND with silt; compact, moist.	60.5		
62		30	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	60.8		
		35	0			62.0		
64								
66	1.5'	13	0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	65.0		
		15	0					
		28	0		Light brown to brown fine to medium SAND and fine to medium subrounded GRAVEL; compact, wet.	66.5		
		35	0			67.0		
68								
70	2'	4	0		Brown medium SAND and fine to medium subrounded GRAVEL; compact, wet.	70.0		
		12	0					
		34	0					
		51	0					

Collect samples: HPG-MW-24I (55-57) and HPG-MW-24I (55-57) MS/MSD.

				TEST BORING LOG		BORING No.MW-24I	
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 4 OF 5	
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374	
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH WELL Constr.	REMARKS
74			0			72.0	Stopped sampling at 72' bgs due to running sands. Augered to 110' bgs.
76							
78							
80			0				
82							
84							
86						85.5	
88							
90			0				
92							
94							
96						95.5	

MALCOLM PIRNIE						TEST BORING LOG		BORING No.MW-24I	
PROJECT Hauppage				LOCATION Smithtown, NY				SHEET 5 OF 5	
CLIENT New York State Department of Environmental Conservation								PROJECT No. 0266374	
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS	
100			0						
101									
102									
103									
104									
105									
106									
107									
108			0						
109									
110									
111									
112									
113									
114									
115									
116									
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170									
171									
172									
173									
174									
175									
176									

MALCOLM PIRNIE				TEST BORING LOG			BORING No.MW-30D	
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 1 OF 6		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DRILLING CONTRACTOR Aztech Technologies, Inc.						MEAS. PT. ELEV.		
PURPOSE Area-Wide Groundwater Study						GROUND ELEV.		
WELL MATERIAL						DATUM		
DRILLING METHOD(S) Mud Rotary			SAMPLE	CORE	CASING	DATE STARTED 2/18/10		
DRILL RIG TYPE 4.25" HSA		TYPE			PVC	DATE FINISHED 2/22/10		
GROUND WATER DEPTH 40.0'		DIA.	"		2"	DRILLER M. Harrington		
MEASURING POINT		WEIGHT	#			PIRNIE STAFF C. Thomas		
DATE OF MEASUREMENT		FALL	"					
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2			0		Brown medium SAND with silt, trace subrounded gravel. [From soil cuttings]			Hand clear to 5' bgs.
4			0					
6	1.5'	2 1 3 6	0 0 0 0		Brown medium SAND, some silt; loose, wet grading to moist.	5.0		
8	1'	5 4 2 3 3	0 0 0 0 0		Brown medium SAND, trace silt; loose grading to compact, dry.	7.0		
10	1.5'	2 2 2 9	0 0 0 0					
12	1.5'	16 21 24 6	0 0 0 0		Subrounded medium GRAVEL, some brown medium sand; loose, dry.	12.3		
14	1'	2 4 21	0 0 0		Brown medium SAND with fine subrounded gravel; loose, dry.	12.6		
16	1'	12 13 16 17 12	0 0 0 0 0		Subrounded fine GRAVEL with brown medium sand; loose, dry.	14.5		
18	1.5'	13 14 18 7 18	0 0 0 0 0		Light brown medium SAND and fine to coarse subrounded gravel; compact grading to loose, dry.	15.0		

MALCOLM PIRNIE				TEST BORING LOG			BORING No.MW-30D			
PROJECT Hauppauge				LOCATION Smithtown, NY			SHEET 2 OF 6			
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374				
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS		
22	1'	26	0					Large subrounded cobble stuck in shoe at 21' bgs.		
		25	0							
		10	0							
		21	1.5'						21	0
21	0									
24	1'	23	0							
		21	0							
		26	0							
		35	0							
26	1.5'	39	0							
		25	0							
		28	0							
		38	0							
28	1'	28	0							
		16	0							
		20	0							
		23	0							
30	2'	21	0							
		15	0							
		8	0							
		20	0							
32	1.5'	20	0							
		19	0							
		21	0							
		21	0							
34	0'	21	0							
		31	0							
		41	0							
		40	0							
36	1.5'	43	0							
		13	0							
		21	0							
		24	0							
38	1.5'	28	0							
		10	0							
		20	0							
		31	0							
40	2'	24	0							
		22	0							
		21	0							
		20	0							
42	2'	22	0							
		9	0							
		11	0							
		14	0							
44	2'	14	0							
		10	0							
		9	0							
		14	0							
		10	0			Subrounded fine to medium GRAVEL with light brown medium to coarse sand; compact, wet.		44.0		Collect sample: HPG-MW-30D (38-39). ▼
		10	0					45.0		
		24				Light brown medium to coarse SAND and				

MALCOLM PIRNIE				TEST BORING LOG			BORING No.MW-30D		
PROJECT Hauppauge				LOCATION Smithtown, NY				SHEET 3 OF 6	
CLIENT New York State Department of Environmental Conservation								PROJECT No. 0266374	
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS	
48	2' 1.5'	32	0		fine to medium subrounded gravel; loose grading to compact, wet.			Switch to mud rotary drilling methods at 51' bgs due to running sands.	
		48	0						
		8	0						
		9	0						
		11	0						
50	1'	14	0		Subrounded fine to medium GRAVEL with light brown medium sand; compact, wet.	48.5			
		7	0						
		11	0		Light brown medium to coarse SAND, trace fine subrounded gravel; loose, wet.	49.0			
		14	0						
52		20	0			51.0			
			0						
			0						
			0						
54	1'	34	0		Subrounded fine to medium GRAVEL with light brown medium to coarse sand; compact, wet.	53.0			
		30	0						
		33	0		Light brown medium to coarse SAND with fine to medium subrounded gravel; loose, wet.	54.0			
		35	0						
56			0			55.0			
			0						
			0						
			0						
58	1'	11	0		Light brown medium to coarse SAND with fine to medium subrounded gravel; loose, wet.	58.0			
		11	0						
		7	0						
		18	0						
60			0			60.0			
			0						
			0						
			0						
62			0			63.0			
			0						
			0						
			0						
64	1'	45	0		Light brown medium to coarse SAND with fine to medium subrounded gravel; loose, wet.	63.0			
		35	0						
		33	0						
		42	0						
66			0			65.0			
			0						
			0						
			0						
68	1'	48	0		Light brown medium to coarse SAND with fine to medium subrounded gravel; loose, wet.	68.0			
		73	0						
		50	0						
		50	0						
70			0			70.0			
			0						
			0						
			0						

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **4** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
74	2'	28	0		Subrounded fine to medium GRAVEL with light brown medium to coarse sand; compact, wet.	73.0		
		51	0			74.0		
		51	0		Light brown medium to coarse SAND with fine to medium subrounded gravel; loose, wet.	75.0		
76								
78								
80			0					
82								
84								
86								
88								
90			0					
92								
94								
96								

				TEST BORING LOG		BORING No.MW-30D	
PROJECT Hauppauge				LOCATION Smithtown, NY		SHEET 6 OF 6	
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374	
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH WELL Constr.	REMARKS
126							
128							
130							
132							
134							
136							
138							

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-30I		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 2 OF 5		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22			0					
24								
26								
28								
30								
32								
34								
36								
38								
40			0					
42								
44								

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-30I		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 3 OF 5		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
48			0					
50			0					
52			0					
54			0					
56			0					
58			0					
60			0					
62			0					
64			0					
66			0					
68			0					
70			0					

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **4** OF **5**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
74			0					
76								
78								
80								
82								
84								
86								
88								
90			0					
92								
94								
96								

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-30I		
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 5 OF 5		
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374		
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
100			0					99.0 Large baseball size subrounded gravel near bottom of boring. [From auger cuttings]
102								
104								
106								
108								
110						110.0		110.0

MALCOLM PIRNIE						TEST BORING LOG			BORING No.MW-30S		
PROJECT Hauppage						LOCATION Smithtown, NY			SHEET 1 OF 3		
CLIENT New York State Department of Environmental Conservation									PROJECT No. 0266374		
DRILLING CONTRACTOR Aztech Technologies, Inc.									MEAS. PT. ELEV.		
PURPOSE Area-Wide Groundwater Study									GROUND ELEV.		
WELL MATERIAL									DATUM		
DRILLING METHOD(S) Rotary						SAMPLE	CORE	CASING			
DRILL RIG TYPE 4.25" HSA						TYPE		PVC			
GROUND WATER DEPTH 40.5'						DIA.	"	2"			
MEASURING POINT						WEIGHT	#				
DATE OF MEASUREMENT						FALL	"				
									DRILLER M. Harrington		
									PIRNIE STAFF C. Thomas		

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
2			Too wet for PID		Brown medium SAND with subrounded gravel, some silt. [From auger cuttings]			Auger to 35' bgs.

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **2** OF **3**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22								
24								
26								
28								
30								
32								
34								
36	1'	21 21 25 38 28			Light brown to brown medium SAND with fine to medium subrounded gravel; loose grading to compact, moist.	35.0		
38	2'	34 25 35 31						
40	1.5'	39 36 52			Light brown coarse SAND with subrounded gravel; loose, wet.	40.5		
42	1.5'	28 23 32			Light brown coarse to medium SAND with subrounded gravel; loose, wet.	41.0		
44						43.0		

MALCOLM PIRNIE				TEST BORING LOG		BORING No.MW-30S	
PROJECT Hauppauge			LOCATION Smithtown, NY			SHEET 3 OF 3	
CLIENT New York State Department of Environmental Conservation						PROJECT No. 0266374	
DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH WELL Constr.	REMARKS
48						48.0	

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **2** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
22	1'	6 6 7 9	0 0 0 0		Brown fine to medium SAND with fine to medium subrounded gravel, trace silt; loose, moist.	20.0		
24						22.0		
26	1.3'	12 14 15 22	0 0 0 0		Light brown fine to medium SAND with fine to medium subrounded gravel; loose, moist.	25.0		
28						27.0		
30	1.35'	13 19 20 22	0 0 0 0		Light brown fine to medium SAND with fine to medium subrounded gravel; loose, moist.	30.0		
32						32.0		
34								
36	1.35	15 16 24 24	0 0 0 0		Light brown fine to medium SAND with fine to medium subrounded gravel; loose, dry.	35.0		
38						37.0		
40	1.45'	14 21 35 50	0 0 0 0		Light brown medium SAND with fine to medium subrounded gravel; loose, moist.	40.0		
42						42.0		
44								
		25 30	0		Light brown fine to medium SAND, trace fine to medium subrounded gravel; loose,	45.0		

PROJECT **Hauppauge**LOCATION **Smithtown, NY**SHEET **3** OF **6**CLIENT **New York State Department of Environmental Conservation**PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
	1.6'	40	0		moist.	46.0		
		40	0		Brown to light brown fine to medium SAND with fine to medium subrounded gravel; loose, moist.	47.0		
48								
50		20	0		Brown medium SAND with fine to medium subrounded gravel; loose, moist.	50.0		
	0.9'	31	0					
		50/4"	0		Refusal.	51.3		
52						52.0		
54								
		26	0		Light brown fine to medium SAND with fine to medium subrounded gravel; loose, moist.	55.0		Collect sample: HPG-MW-34D(55-57).
56	1.55'	31	0					
		40	0					
		45	0					
						57.0		
58								
60		10	0		Light brown medium SAND with fine to medium subrounded gravel; loose, wet.	60.0		▼
	2	13	0					
		15	0					
62		18	0			62.0		
64								
66								Switch to mud rotary drilling method at 70' bgs due to running sands.
68								
70		10	0		Light brown medium SAND with fine to medium subrounded gravel; wet.	70.0		At 70' bgs began modified standard sampling.
	2'	12	0					
		15	0					
		23	0					

PROJECT **Hauppauge**

LOCATION **Smithtown, NY**

SHEET **4** OF **6**

CLIENT **New York State Department of Environmental Conservation**

PROJECT No. **0266374**

DEPTH FT.	SAMPLE TYPE, RECOVERY, NUMBER	BLOWS ON SAMPLE SPOON PER 6"	PID	GRAPHIC LOG	GEOLOGIC DESCRIPTION KEY - Color, Major, Minor Moisture, Etc.	ELEV. DEPTH	WELL Constr.	REMARKS
72.0								
74								
76								
78	1'	36	0		Brown medium SAND, trace fine to medium subrounded gravel, trace silt; wet.	78.0		
		56	0		Fine to medium subrounded GRAVEL; wet.	78.6		
		50/4"	0		Brown medium SAND with fine to medium subrounded gravel, trace silt; wet.	78.7		
80					Refusal.	79.3		
82						80.0		
84								
86								
88	0.8'	50	0		Light brown medium SAND, trace fine to medium subrounded gravel; wet.	88.0		
		50/2"	0		Fine to medium subrounded GRAVEL; wet.	88.3		
90					Brown medium SAND with fine to medium subrounded gravel, trace silt; wet.	88.4		
92						88.8		
94								
96								

