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RESTORATION ADVISORY BOARD MEETING MINUTES 4 NOVEMBER 2010 WITH TRANSMITTAL REGARDING 7 APRIL 2011 MEETING NWIRP CALVERTON NY
3/16/2011
TETRA TECH NUS

TETRA TECH

NOR-01018

March 16, 2011

Project Number 112G02045

Reference: Contract No. N62470-08-D-1001
Contract Task Order No. WE08

Subject: RAB Meeting Notification and Meeting Minutes
NWIRP Calverton, New York

MEMORANDUM

FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD (RAB) FOR THE INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP) CALVERTON, NEW YORK

The Navy would like to announce that a ***Restoration Advisory Board (RAB)*** meeting has been scheduled for Thursday, April 7, 2011. This meeting is open to the general public and will begin at 7:00 PM. The location of the meeting is the ***Calverton Community Center, Grumman Boulevard, Calverton, New York.***

Items that will be discussed during this meeting will include:

- Southern Area Field Investigations
- Southern Area Corrective Measures
- March 2011 Interagency Meeting

Attached for your review are the minutes from the RAB meeting held on November 4, 2011. The Navy requests that you review the meeting minutes and provide comments that you have to the Remedial Project Manager, Ms. Lora Fly or to the RAB Community Co-Chair, Mr. Bill Gunther. These minutes will be discussed and approved at the April 7, 2011 meeting. If you need additional information, please call Ms. Lora Fly at (757) 341-2012, or email, lora.fly@navy.mil.

Sincerely,

David D. Brayack
Project Manager

Distribution:
NAVFAC Mid-Atlantic, Lora Fly
NAVFAC Mid-Atlantic, Tom Kreidel
NAVAIR, Richard Smith
NYSDEC (Albany), Larry Rosenmann
NYSDEC (Albany), Henry Wilkie
NYSDEC (Stony Brook), Katy Murphy
NYSDEC (Stony Brook), Walter Parrish
NYSDOH, Steve Karpinski
SCDHS, Andrew Rapiejko
SCDHS, Amy Juchatz
USEPA Region II, Ellen Stein
USEPA Region II, Carla Struble
Town of Riverhead, Chris Kempner
Tetra Tech NUS, David Brayack
ECOR Solutions, Al Taormina
H&S, Patrick Schauble
NGC, John Cofman
NGC, Kent Smith
Community Co-Chair, Bill Gunther
Community RAB Member John Armentano
Community RAB Member, Sidney Bail
Community RAB Member, Art Binder
Community RAB Member, Louis Cork
Community RAB Member, Harry Histand
Community RAB Member, Jean Mannhaupt
Community RAB Member, Adrienne Esposito
Community RAB Member, Vincent Racaniello

Non-RAB Member Mailing List:
Frank Anastasi (SCA Associates)
Tony Muratore
Public Repository
Administrative Record

RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP), CALVERTON
CALVERTON COMMUNITY CENTER, CALVERTON, NEW YORK
THURSDAY, NOVEMBER 4, 2010

The thirty-third meeting of the Restoration Advisory Board (RAB) was held at the Calverton Community Center. Meeting attendees included representatives from the Navy (Lora Fly and Tom Kreidel), New York State Department of Environmental Conservation (NYSDEC) (Larry Rosenmann, Ajay Shah, Bill Spitz, and Henry Wilkie), New York State Department of Health (NYSDOH) (Steve Karpinski), RAB Community Members (Lou Cork, Bill Gunther, and Jean Mannhaupt), Suffolk County Department of Health Services (SCDHS) (Doug Feldman and Andrew Rapiejko), Peconic River Sportsman Club (PRSC) (Anthony Muratore), Tetra Tech (David Brayack, Debbie Cohen, and Robert Sok), ECOR Solutions, Inc. (Bob Ingram), H&S Environmental (Jill Ann Parrett), and Frank Anastasi (SCA Associates). The meeting sign-in sheet is provided as Attachment 1.

WELCOME AND AGENDA REVIEW

The Navy representative, Ms. Lora Fly, welcomed everyone to the RAB meeting and introduced the meeting agenda. The agenda for the meeting is included as Attachment 2.

DISTRIBUTION AND APPROVAL OF MINUTES

Ms. Fly asked whether the RAB members received the April 2010 RAB minutes, which were distributed in October 2010, and asked whether there were questions or comments on the minutes. There were no questions or comments, and the minutes for the April 2010 RAB meeting were approved. Ms. Fly provided a copy of the RAB charter to Mr. Bill Gunther, RAB Community Co-Chair, for his review. The RAB will need to decide whether to make any revisions to the charter.

COMMUNITY UPDATE

Mr. Gunther informed the RAB that Ms. Ann Miloski, one of the original RAB Community members, resigned. Mr. Gunther requested the Navy provide a letter of appreciation to Ms. Miloski for her service on the RAB. Ms. Fly will follow-up on this request.

TECHNICAL PROGRESS – GENERAL OVERVIEW OF INSTALLATION RESTORATION SITES

Ms. Fly reviewed fiscal year (FY) 10 actual funding, program overview, and FY11 planned funding for the NWIRP Calverton Installation Restoration (IR) sites. The presentation is provided in Attachment 3.

Ms. Fly explained that a total of $1.9 million was funded in FY10. Work is being conducted at Sites 2, 6A, 7, and 10B and at the Onsite/Offsite Southern Area. The program overview presentation in Attachment 3

provides a summary of the current and planned activities at each site. Because five 20mm projectiles were recently found at Site 2, Ms. Fly mentioned that the Navy needs to conduct additional safety activities as part of the additional soil removal planned for Site 2. The Navy does not know of any past operations at Site 2 that would have involved use or disposal of fire arms. However, because the projectiles were found, the Navy is required to do further survey to ensure that munitions are not present that could be a health and safety concern to people working at the site. Sites 6A and 10B are in the post-remedial monitoring stage. The Navy is continuing to operate the air sparge/soil vapor extraction (AS/SVE) system at Site 7 and conducting optimization of the system. Ms. Fly also provided an update on the October 2010 technical meeting that was attended by the Navy, NYSDEC, United States Environmental Protection Agency (USEPA), SCDHS, and the Technical Assistance for Public Participation (TAPP). The meeting was held to provide an update on the preliminary data from 2010, which will be used to develop a Corrective Measures Study (CMS)/Feasibility Study (FS) for the Southern Area. FY11 planned execution includes continued groundwater monitoring and investigation for Sites 2, 6A, and 10B, continued monitoring and operations and maintenance for the AS/SVE system at Site 7, and an investigation of Freon contamination at Site 7. The CMS/FS has already been funded and is therefore not included as an item for funding in FY11.

TECHNICAL PROGRESS – SCDHS PECONIC RIVER SAMPLING

Mr. Andrew Rapiejko, SCDHS, reviewed two figures and two tables showing the results of SCDHS split sampling. The figures and tables are included in Attachment 4. Mr. Rapiejko indicated that SCDHS split samples at select Navy sampling locations as a quality control and also to obtain additional data SCDHS typically collects and maintains. The figures only indicate locations where SCDHS collected split samples and do not indicate all Navy sampling locations.

TECHNICAL PROGRESS – 2010 GROUNDWATER INVESTIGATION SUMMARY

Mr. Rob Sok, Tetra Tech, provided a presentation on the status of 2010 groundwater investigations and the current understanding of groundwater contamination at NWIRP Calverton. The presentation is included in Attachment 3.

In 2010, the Navy conducted a temporary well program consisting of 39 locations and approximately 120 groundwater samples to better define the extent of VOC-contaminated groundwater. Piezometers were installed to confirm the temporary well results and to evaluate groundwater flow. A bio study and pumping tests were also conducted. The Navy continued the annual facility-wide groundwater monitoring that includes 13 monitoring wells at Site 2 – Fire Training Area, 13 monitoring wells at Site 6A – Old Fuel Calibration Area, 3 monitoring wells at Site 10B – Engine Test House, and approximately 37 monitoring wells and piezometers in the Southern Area. Work at the PRSC included four quarters of sampling and continued operation of a treatment system on the PRSC wells.

Mr. Sok reviewed groundwater flow maps for November 2009, April 2010, July 2010, to September 2010 that show fluctuations in groundwater flow. Mr. Sok indicated that there is a dynamic flow system that reflects varied influence of surface water on the groundwater flow contours. Under dry conditions the river and tributary are recharging groundwater and under wet conditions the river and tributary are discharge areas for groundwater. The April 2010 data were collected after significant rainfall resulting in a higher than normal groundwater table. In this figure, groundwater flow contours are flatter and more southerly. The July 2010 map includes some additional piezometer locations, and groundwater flow patterns are more similar to November 2009, however, the southern flow component can still be seen in July 2010. This southern flow component is towards PRSC. By September 2010, as the groundwater table has returned to more normal levels, the groundwater flow is more southeasternly and the river and tributary are showing more influence on groundwater contour patterns. The information on groundwater flow fluctuations assists in understanding the nature of contamination patterns and also whether there may be any other contaminant sources that were not previously identified.

The additional temporary well, piezometer, and monitoring well data are assisting in delineating the contaminant plume, particularly in the upper portion of the plume. Mr. Sok reviewed the DCA isoconcentration contour map. Based on the data, the plume is very narrow in the northern portion of the plume, near the former source area. The plume then becomes wider in the southern portion. The fluctuations in groundwater flow between southeasterly and southerly have spread the plume out particularly as the plume nears surface water. The change in flow pattern also results in fluctuations in contaminant concentrations in the southern portion of the plume. In answer to a question about the highest concentration in the plume, the Navy indicated that the maximum concentration is approximately 2,000 ug/L. The Navy is in the process of developing cross sections to show the vertical profile of the plume. However, it is difficult to appropriately depict the vertical profile because of the narrow and thin nature of the plume in the northern portion (as thin as 70 feet horizontally and 5 feet vertically). The shape of the northern portion of the plume supports that Site 6A is the source of contamination. The Navy will install a few additional temporary well points in November or December 2010 to confirm the upgradient edge of the plume. Data shows shifts in the plume because of influence from surface water and precipitation events.

There was some discussion whether there are sufficient data to understand the extent of the contaminant plume to determine appropriate remedial options. The Navy indicated that a good monitoring network is in place, but a few additional locations are planned for the central portion of the plume, near the river. The dotted lines on the isoconcentration map represent areas that need better delineation. NYSDEC indicate that they are reviewing work plans and data and that additional borings and wells will be installed to refine the location of the plume. However, the available data are sufficient to understand groundwater

flow. NYSDEC and SCDHS will be reviewing the upcoming reports and will work with the Navy to make sure that the foot print of the contaminant plume is sufficiently delineated.

TECHNICAL PROGRESS – SOUTHERN AREA CORRECTIVE MEASURES

Mr. Dave Brayack, Tetra Tech, provided a presentation on the evaluation of potential corrective measures for the Southern Area groundwater contamination. The presentation is included in Attachment 3.

The CMS will address the entire Southern Area groundwater contamination and will not spilt the areas into the onsite and offsite areas. Mr. Brayack explained that presentation of data for RAB meetings focused on the persistent chemicals that were found (chlorinated VOCs), but the CMS will evaluate remedial options for all contamination detected. The other contaminants are the petroleum-related constituents. The Navy is currently developing alternatives for evaluation in the CMS and the draft report is scheduled for submittal in March 2011. The Navy is conducting pilot-scale studies for enhanced insitu biodegradation (Bio Study) and groundwater extraction (Pumping Tests) to support remedial alternative development. The Navy is anticipates holding a technical meeting to discuss the CMS alternatives before submittal of the draft CMS. Based on the current schedule, the draft CMS would be presented at the next RAB meeting.

For the Bio Study, the Navy is evaluating the effectiveness of ethyl lactate (EL) injection to accelerate insitu anaerobic biodegradation of the VOC contamination. Monitoring locations for the system were installed in June 2010. Baseline sampling was conducted before injection of the EL, and then EL injection was conducted in July and October 2010. The first post-injection sampling event was conducted in October 2010 and additional sampling events are planned for December 2010 and March 2011. Mr. Anastasi indicated that he visited the site to see the pilot study and provided a trip report to the Community RAB members.

Pump tests were conducted to determine horizontal and vertical conductivity to support evaluation of remedial alternatives in the CMS. Two pump test wells were installed in the portion of the plume where the greatest levels of contamination are present. The pumping tests were conducted in July 2010. Mr. Brayack noted that the water extracted as part of the pump tests was treated before discharge by spray irrigation.

Mr. Brayack reviewed remedial options that the Navy is planning to evaluate in the CMS, indicated the general information needed to evaluate the remedial options, and showed a figure with the likely treatment locations. The remediation for the southern area will likely require several treatment options for the different portions of the plume. For example, insitu air sparging may be effective in the portion of the plume that is shallower (northern portion of plume), but would not be effective in the portion of the plume

where contamination is deeper. The treatment locations were identified based on the characteristics of the plume in the different locations. Mr. Brayack also showed the wetlands delineation map. The location of wetlands will need to be considered as part of evaluation of remedial options because there are specific requirements for conducting work within wetlands areas.

There was discussion about the Site 2 area, located upgradient and to the west of the southern area and west of McKay Lake. The Navy is conducting investigation of the groundwater contaminant plume from Site 2 to confirm that the removal action at Site 2 appropriately addressed the source area and whether there is additional contamination that may need to be addressed in the onsite portion of Site 2. The source area investigation at Site 2 is the last source area investigation that the Navy needs to conduct. During the discussion, there was mention of a 1977 Grumman Report related to removal of containers and past operations at Site 2. The Navy believes that the 1986 report that the Navy has summarizes the results of all past investigations, including the 1977 information. However, the Navy requested a copy of the report from NYSDEC and SCDHS. It was noted that the report discusses Plant B. Mr. Brayack indicated the Plant B is likely Plant 8.

CLOSING REMARKS

Ms. Fly thanked everyone for coming to the meeting and asked whether the RAB members had any other questions. Mr. Gunther appreciated the presentations of data and he is looking forward to seeing the CMS and other documents based on the data results. Ms. Fly indicated that the next RAB would be April 7, 2011. There were no further questions. The meeting was then adjourned.

ATTACHMENT 1

NOVEMBER 4, 2010 RAB MEETING SIGN-IN SHEET

33rd RAB Meeting for NWIRP Calverton
November 4, 2010
Sign-In List

Name	Address (if interested in being on mailing list)	Organization	How Did You Hear of Meeting?
Henry Wilkie		NYSDEC	
Steve Karpinski		NYSDOH	
Lou Cork		RAB	
Jill Ann Parrett		H&S Environmental	
[illegible]		PRSC	
Bob [illegible]		ECOR	
Bill Gunther		RAB	
Frank Anastasi		SCA Assoc. (CRAB T.A.)	
Jan Monthupt		RAB	
Andrew Radietko		SCDHS	
Larry Rosenmann		NYSDEC	
Bill Spitz		NYSDEC	
Tom Kreidel		NAVFAC	

33rd RAB Meeting for NWIRP Calverton
November 4, 2010
Sign-In List

Name	Address (if interested in being on mailing list)	Organization	How Did You Hear of Meeting?
Doug Feldman	—	SCDHS	—
Michael Maraviglia		SCDEC	
AJAY SHAH		NYSDEC	
David Brayock		TT	
Robert Sok		TT	
Debbie Cohen		TT	
Lora Fly		NAVFAC	

ATTACHMENT 2

NOVEMBER 4, 2010 RAB MEETING AGENDA

Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Calverton

November 4, 2010
Calverton Community Center, Calverton NY
7:00 p.m.

Welcome and Agenda Review
Lora Fly, NAVFAC Mid-Atlantic

Distribution of Minutes
All Members

Community Update
Bill Gunther, RAB Co-chair

Technical Progress

General Overview of IR Sites
Lora Fly, NAVFAC Mid-Atlantic

October 2010 Interagency Meeting
Lora Fly, NAVFAC

SCDHS – Peconic River Sampling
Andy Rapiejko, SCDHS

2010 Groundwater Investigation Summary
Rob Sok, Tetra Tech

Southern Area Corrective Measures
Dave Brayack, Tetra Tech

Closing Remarks
Lora Fly

Presenters will be available after the program for questions.

ATTACHMENT 3

NAVY PRESENTATIONS

NAVFAC
Naval Facilities Engineering Command
NAVFAC MID-ATLANTIC

Restoration Advisory Board

ER Program Overview

Naval Weapons Industrial Reserve Plant (NWIRP) Calverton, New York
November 4, 2010

WELCOME

- **Meeting Minute Approvals needed for:**
  - **April 2010**

- **Review of RAB Charter**

FY-10 Actual Execution

Project	Funded	Remarks
Groundwater Investigation/ Monitoring – Sites 2, 6A and 10B	$ 639,941	On going
Optimization Project - Site 7	$ 60,000	Finalized
Operation and Maintenance – Site 7	$ 575,023	On going
Soil Characterization and Off-site Groundwater Delineation – Site 2	$ 392,476	Developing Work Plan
Remedial Action - Site 6A and 10B & Removal Action - Site 2	$ 51,326	Finalized
Water Line Design - PRSC	$ 69,000	On going
Support Costs (plus TAPP)	$ 124,950	On going
TOTAL	$ 1,912,716	

PROGRAM OVERVIEW

- Site 2 – Fire Training Area
- Site 6A – Fuel Calibration Area
- Site 7 – Former Fuel Storage Depot
- Site 10B – Engine Test House
- Onsite/Offsite Southern Area

PROGRAM OVERVIEW

- **Site 2 – Fire Training Area**
  - **Additional Soil Removal Planned (completion of 2008 Removal Action)**
    - **Five 20mm projectiles found**
    - **Developing safety plan**
  - **Characterization of on-site soils to prepare a Remedial Investigation Report and conduct risk assessment - evaluate the effectiveness of previous Removal Actions**
  - **Conduct Off-site Groundwater Investigation**
    - **Need access agreement for County Property**

PROGRAM OVERVIEW

- **Site 6A/10B**
  - **Remedial Action**
    - **Completed for Site 6A and 10B**
    - **Monitoring re-vegetation of sites**
    - **Monitoring groundwater**
    - **Complete source area determination**
    - **Add monitoring well to MW05 location**

PROGRAM OVERVIEW

- **Site 7 - Former Fuel Storage Depot**
  - **Continue operating AS/SVE**
    - Anticipated shutdown 2011
  - **Optimize system –**
    - Added new injection wells in August 2010

PROGRAM OVERVIEW

- **October 2010 Technical Meeting**
  - **Held on Oct 28, 2010**
  - **NYSDEC, EPA, Suffolk County, TAPP**
  - **Update of data (validated and unvalidated) collected during 2010**
  - **Date will be used to develop CMS/FS**

FY 11 Planned Execution

- Sites 2, 6A and 10B – Groundwater Monitoring Program
- Site 2 – Offsite Groundwater Monitoring
- Site 6A - Groundwater Investigation
- Site 6A - Construction of PRSC Water Line
- Site 7 - Long Term Monitoring AS/SVE Operation & Maintenance
- Site 7 – Freon Investigation

NAVFAC
Naval Facilities Engineering Command
NAVFAC MID-ATLANTIC

Restoration Advisory Board (RAB) Meeting

2010 Groundwater Investigation Summary

Naval Weapons Industrial Reserve Plant (NWIRP)
Calverton, New York
November 4, 2010

Summary of Work (2010)

Temporary Well (TW) Program:

- 39 locations and approximately 120 groundwater samples to better define the extent of VOC-contaminated groundwater

Piezometer Installation:

- 20 piezometers installed (onsite and offsite) to confirm TW results
- 2 additional piezometers installed along Peconic River to further evaluate groundwater flow into River

Bio Study:

- 18 additional monitoring wells and injection/extraction wells installed in June 2010

Pumping Tests:

- 11 piezometers and 2 pumping test wells installed in June 2010

Summary of Work (2010)

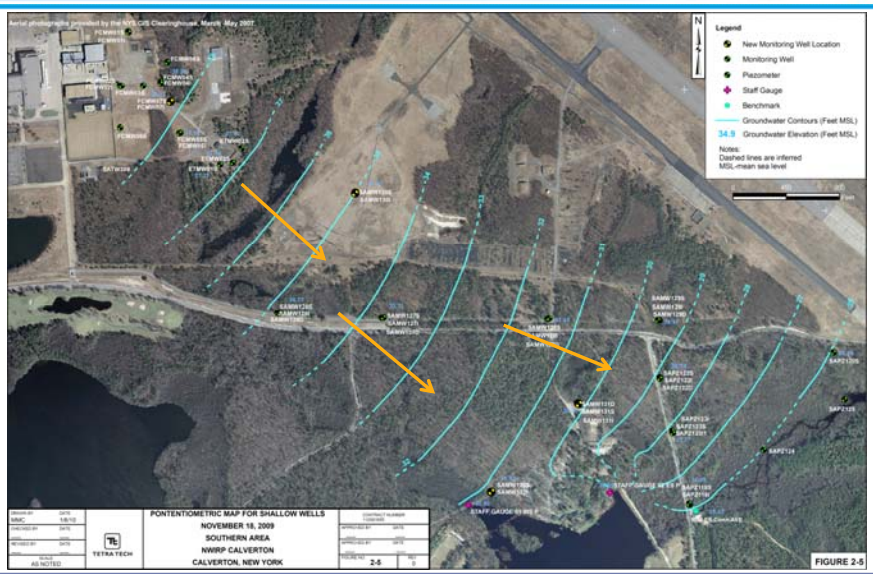
Annual Groundwater Monitoring Program (September 2010):

- 13 wells sampled at Site 2 – Former Fire Training Area
- 13 wells sampled at Site 6A – Former Fuel Calibration Area
- 3 wells sampled at Site 10B – Former Engine Test House
- 37 wells and piezometers sampled in Southern Area
- Semi-annual surface water and sediment sampling at 4 locations along the Peconic River

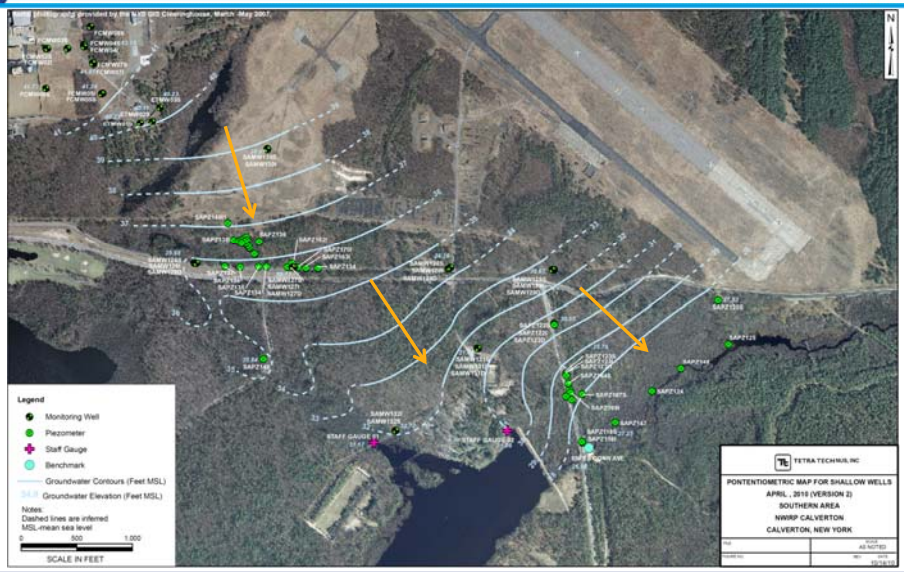
Peconic River Sportsman Club (PRSC):

- Four quarters of sampling in 2010
- 6 water samples collected each quarter
- Granular activated carbon (GAC) change out on treatment system in April 2010

Groundwater Flow (November 2009)



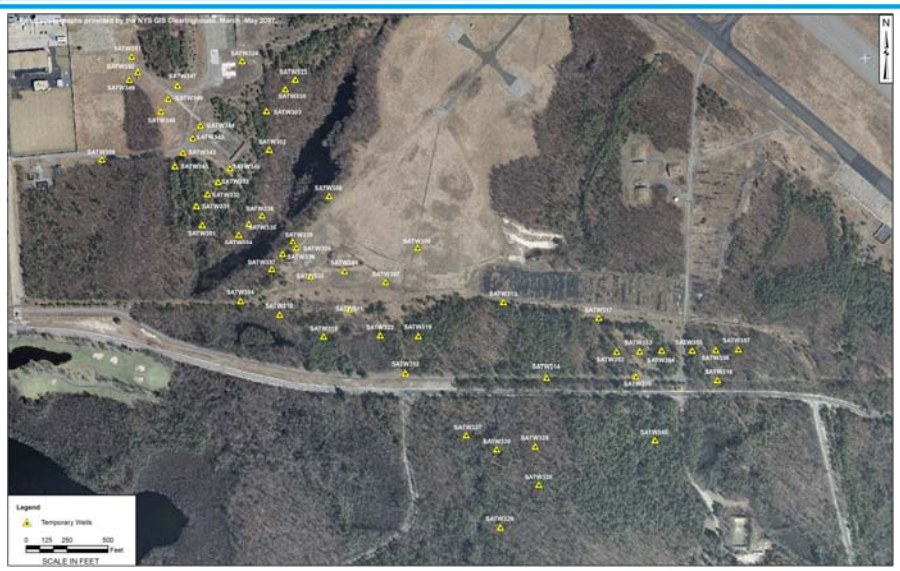
Groundwater Flow (April 2010)



Groundwater Flow (July 2010)

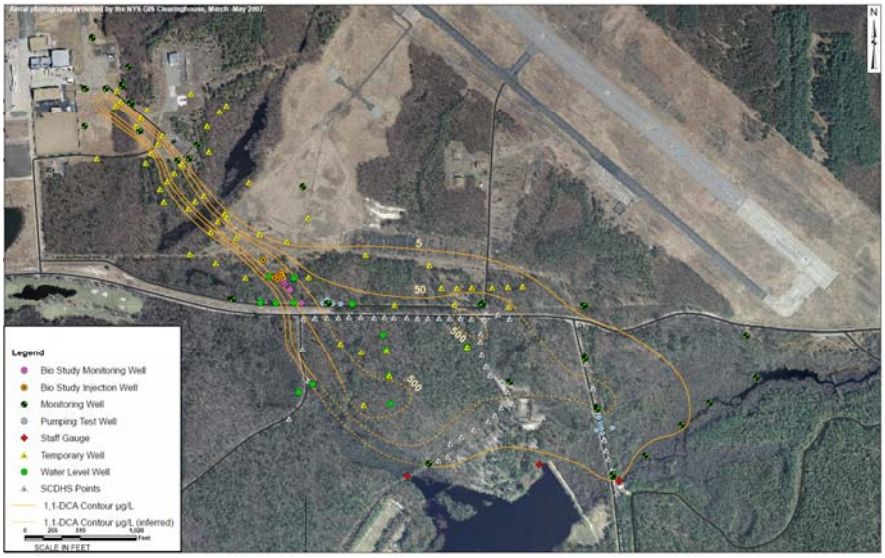
Groundwater Flow (September 2010)

TW Location Map (2009 and 2010)



PZ and MW Location Map

DCA - IsoConcentration Contour Map



Summary of Groundwater Results

- **Plume boundary is reasonably well defined:**
  - Site 6A is probable source, additional temporary well points planned to confirm upgradient edge (November or December 2010)
  - Although data supports southern edge of plume shifts to the East because of the PRSC Pond
- **North of River Road:**
  - Plume is approximately: 2,700 feet long, 100 to 200 feet wide, and 5 to 10 feet thick
  - Primary VOCs consist of 1,1-DCA, 1,1,1-TCA, 1,1-DCE, and Chloroethane
  - Predominant flow is to the southeast, based on narrow plume, flow pathway is relatively constant
  - Near River Road, based on precipitation rates, plume footprint appears to shift east and west

Summary of Groundwater Results (Cont.)

- **South of River Road:**
  - Plume is approximately: 3,500 feet long, 2,000 feet wide, and 10 to 40 feet thick
  - Primary VOCs consists of 1,1-DCA. 1,1,1-TCA, 1,1-DCE, and Chloroethane also present, but decrease with distance
  - Predominate flow is to the east-southeast; but near PRSC Pond, flow is also to the northeast and east
  - PRSC Pond and Northwest tributary affect groundwater flow pathway locally. During 10-inch rain event in March 2010, flow was to the south-southeast
- **Near Peconic River:**
  - 1,1-DCA concentrations range from ND to 38 µg/L.
  - Plume footprint appears to shift northeast and southwest, based on precipitation events

Summary of Groundwater Results (Cont.)

- Questions on Groundwater Results

Corrective Measures Study

- Currently developing alternatives
- Draft submittal in March 2011
- Pilot-scale studies for enhanced insitu biodegradation (Bio Study) and groundwater extraction (Pumping Tests) to support alternative development

Bio Study

- Bio Study wells installed June 2010
- Baseline sampling conducted in July 2010
- Injection events conducted July and October 2010
- Additional injection event planned for March 2011
- First post-injection sampling event conducted in October 2010
- Addition sampling events planned for December 2010 and March 2011

Bio Study - Injection/Extraction System

Bio Study Location Map

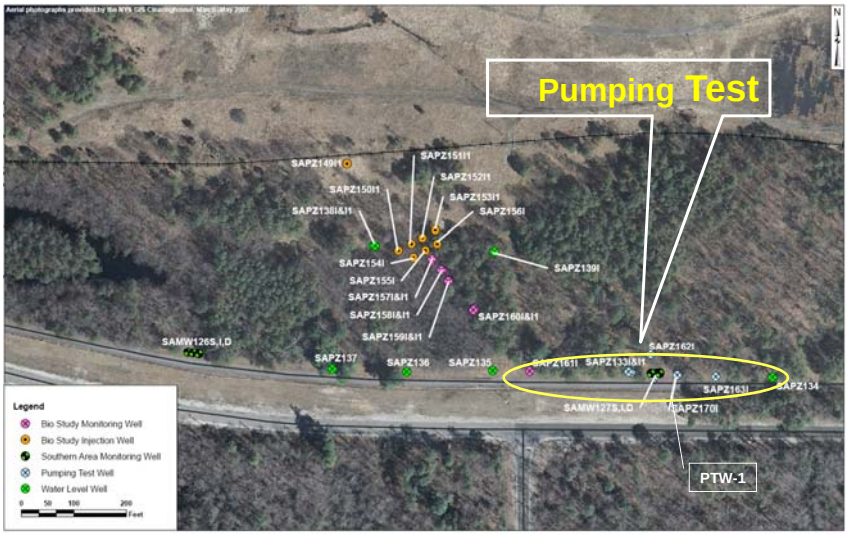
Pumping Tests

- **Tests conducted in July 2010**

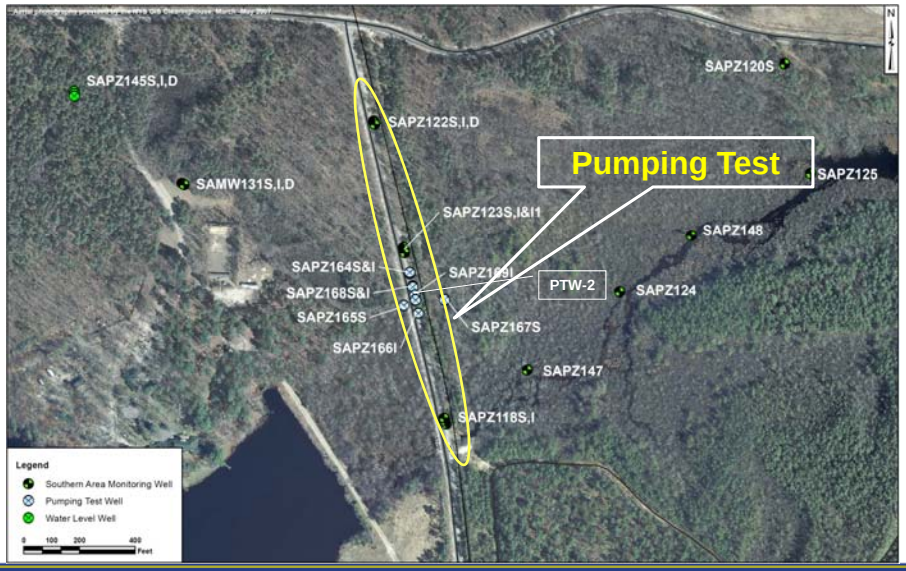
- **Pumping Test No. 1 (River Road)**
  - Step draw down test: 58 to 210 gallon per minute (GPM)
  - Long-term test: 29 hours at 120 GPM
  - Total of 260,000 gallon of groundwater extracted and treated

- **Pumping Test No. 2 (Connecticut Avenue)**
  - Step draw down test: 65 to 118 GPM
  - Long-term test: 9.5 hours at 100 GPM
  - Total of 90,000 gallons of groundwater extracted and treated

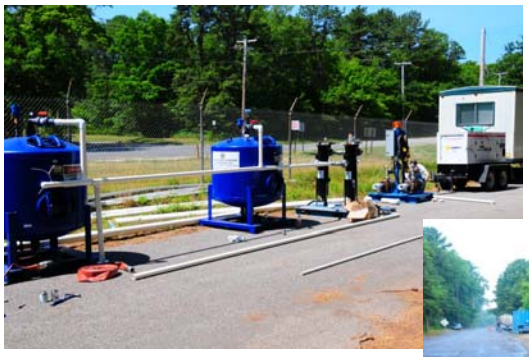
Pump Test #1 Location Map



Pumping Test #2 Location Map



Pumping Test Photos



Pumping Tests - Results Summary

- **Pumping Test No. 1:**
  - Groundwater flow rate - 640 feet per year
  - VOC concentration: 22 micrograms per liter
- **Pumping Test No. 2:**
  - Groundwater flow rate - 190 feet per year
  - VOC concentration: 49 micrograms per liter

Corrective Measures - Remedial Options

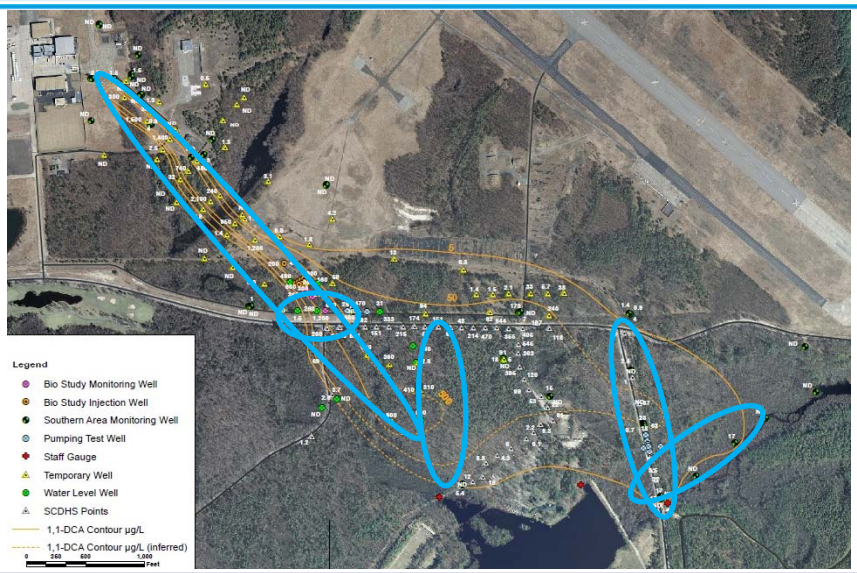
- **Remedial Options:**
  - Natural Attenuation with Monitoring
  - Groundwater Extraction and Treatment
    - Hydraulic containment
    - Contaminant removal
  - Enhanced In-situ Anaerobic Biological Treatment
  - In-situ Air Sparging/Biosparging (Aerobic Process)

- **General information needed to evaluate option:**
  - Extent of contamination (width, depth, and length)
  - Flow characteristics – hydraulic and contaminant
  - Point of compliance and cleanup goals

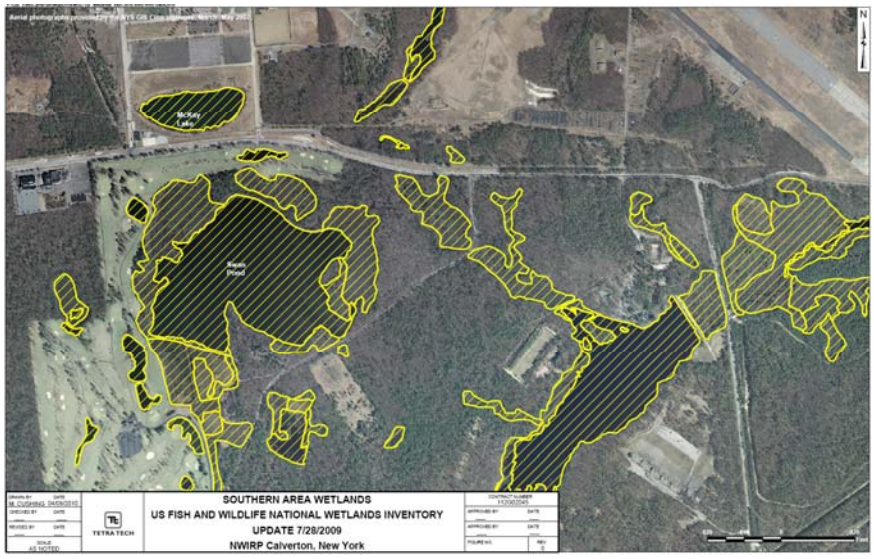
Remedial Options

- **Treatment Locations:**
  - Navy property
  - Offsite – County Property
  - Connecticut Avenue
  - Adjacent to Peconic River

Remedial Options – Potential Treatment Locations



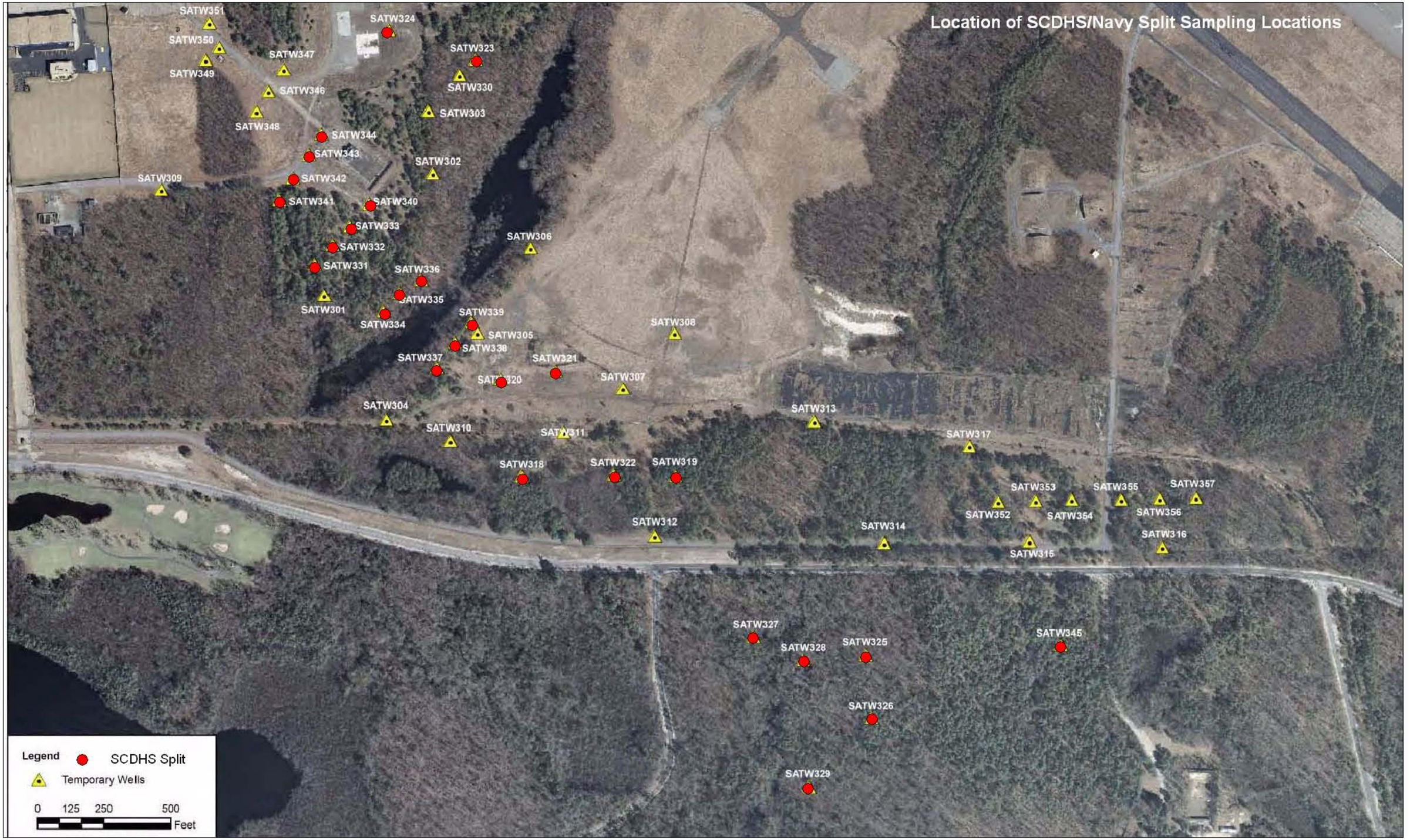
Remedial Options – Wetlands



QUESTIONS ?

ATTACHMENT 4

SCDHS FIGURE/RESULTS


Location of SCDHS/Navy Split Sampling Locations
SATW351
SATW350
SATW349
SATW347
SATW346
SATW348
SATW324
SATW323
SATW330
SATW303
SATW344
SATW343
SATW342
SATW341
SATW340
SATW302
SATW309
SATW333
SATW332
SATW331
SATW336
SATW335
SATW301
SATW334
SATW306
SATW339
SATW305
SATW338
SATW337
SATW321
SATW307
SATW308
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SATW322
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SATW356
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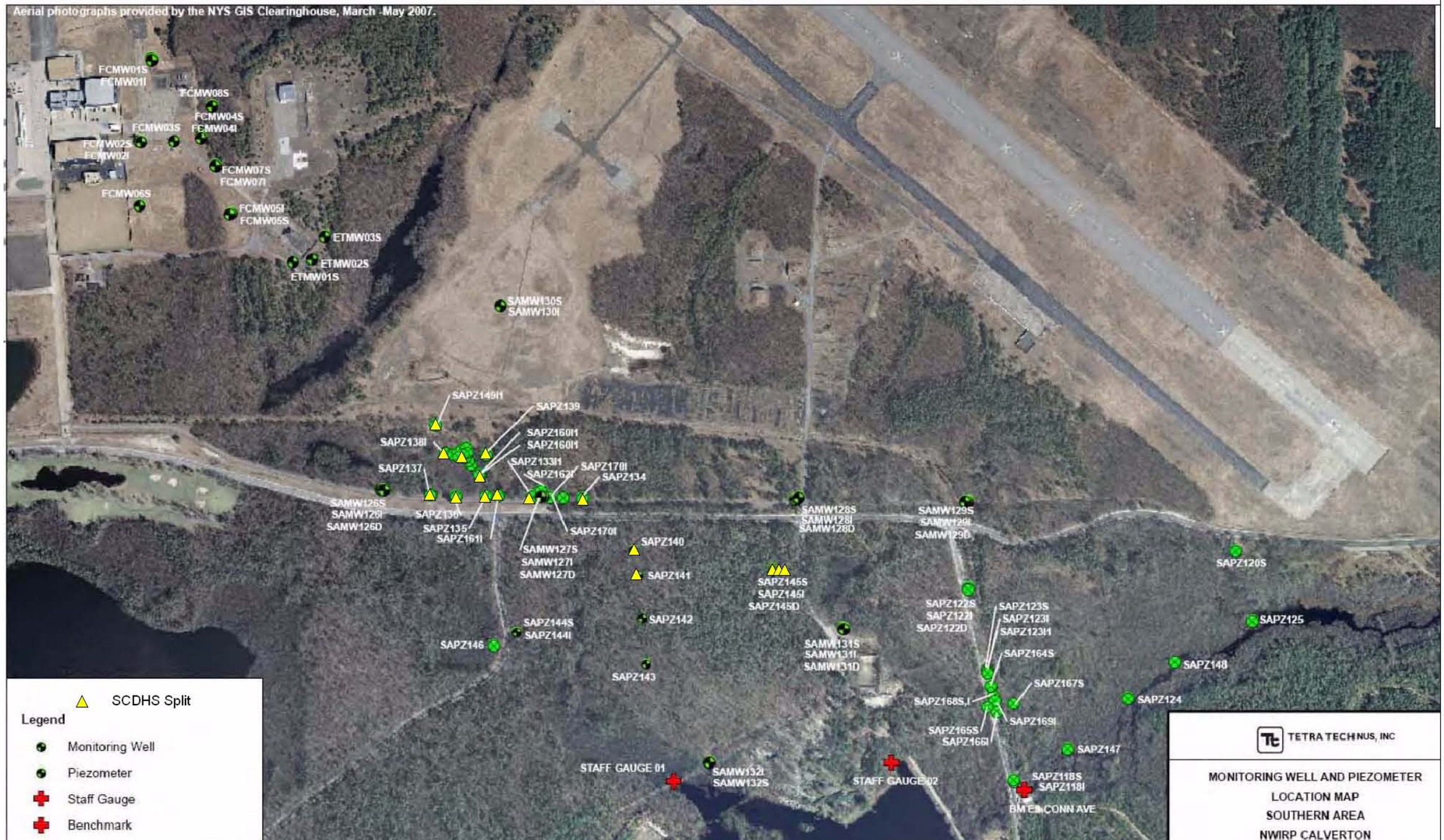
SATW329
Legend
SCDHS Split
Temporary Wells
0 125 250 500
Feet


Aerial photographs provided by the NYS GIS Clearinghouse, March -May 2007.
FCMW01S
FCMW01I
FCMW08S
FCMW04S
FCMW04I
FCMW03S
FCMW02S
FCMW02I
FCMW07S
FCMW07I
FCMW06S
FCMW05I
FCMW05S
ETMW03S
ETMW02S
ETMW01S
SAMW130S
SAMW130I
SAPZ149I
SAPZ139
SAPZ160I
SAPZ138I
SAPZ160I
SAPZ133I
SAPZ137
SAPZ162I
SAPZ170I
SAPZ134
SAMW126S
SAMW126I
SAMW126D
SAPZ136
SAPZ135
SAPZ161I
SAPZ170I
SAMW127S
SAMW127I
SAMW127D
SAPZ140
SAPZ141
SAMW128S
SAMW128I
SAMW128D
SAMW129S
SAMW129I
SAMW129D
SAPZ120S
SAPZ145S
SAPZ145I
SAPZ145D
SAPZ122S
SAPZ122I
SAPZ122D
SAPZ123S
SAPZ123I
SAPZ123I1
SAPZ125
SAPZ144S
SAPZ144I
SAPZ142
SAPZ146
SAMW131S
SAMW131I
SAMW131D
SAPZ164S
SAPZ148
SAPZ143
SAPZ167S
SAPZ168S,I
SAPZ124
SAPZ169I
SAPZ165S
SAPZ166I
SAPZ147
STAFF GAUGE 01
SAMW132I
SAMW132S
STAFF GAUGE 02
SAPZ118S
SAPZ118I
BM ELCONN AVE
SCDHS Split
Legend
Monitoring Well
Piezometer
Staff Gauge
Benchmark
TETRA TECH NUS, INC
MONITORING WELL AND PIEZOMETER
LOCATION MAP
SOUTHERN AREA
NWIRP CALVERTON

Suffolk County Department of Health Services
Summary of Detected VOCs

Sample Information			VOC Concentrations (ppb)																																
Monitoring Well ID	Location (Screen opening)	Sample Date	Benzene	Trichloroethene	Tetrachloroethene	Chloroethane	Vinyl chloride	1,1 Dichloroethene	cis-1,2-Dichloroethene	1,1 Dichloroethane	1,2-Dichloroethane	Chlorobenzene	1,2-Dichlorobenzene (o)	1,3-Dichlorobenzene (m)	1,4-Dichlorobenzene (p)	Ethylbenzene	p-Diethylbenzene	sec-Butylbenzene	tert-Butylbenzene	n-Butylbenzene	n-Propylbenzene	Isopropylbenzene	1,1,1- Trichloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2,4,5-Tetramethylbenzene	p-Isopropyltoluene	Freon 113	Naphthalene	MTBE	Total Xylene
TW- 325	18' - 22'	6/21/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	32'-36'	6/21/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	50' - 54'	6/21/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW- 326	18' - 22'	6/18/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	32' - 36'	6/18/2010	<0.5	<0.5	<0.5	**1.2**	<0.5	**1.5**	<0.5	**27**	<0.5	<0.5	**1**	**0.6**	**2.6**	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	**2.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	42' - 46'	6/18/2010	<0.5	<0.5	<0.5	**23**	<0.5	**19**	<0.5	**280**	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**35**	<0.5	**0.6**	**2.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW-327	10'-14'	6/22/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26'-30'	6/22/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	41'- 45'	6/22/2010	<0.5	<0.5	<0.5	**23**	<0.5	**19**	<0.5	**299**	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**63**	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW- 328	23'- 27'	6/17/2010	**0.7**	<0.5	<0.5	**27**	<0.5	**17**	<0.5	**353**	<0.5	<0.5	**1.2**	**0.7**	**3**	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	**1.2**	**16**	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	36'- 40'	6/17/2010	<0.5	<0.5	<0.5	**11**	<0.5	**13**	<0.5	**149**	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**24**	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW- 329	10'-14'	6/18/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**5.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26'-30'	6/18/2010	<0.5	<0.5	<0.5	**3.1**	<0.5	**2.6**	<0.5	**38**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	40'-44'	6/18/2010	**1.5**	<0.5	<0.5	**46**	<0.5	**55**	<0.5	**808**	**0.8**	<0.5	**0.8**	<0.5	**0.6**	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5	**0.9**	**171**	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	**6.6**	<0.5	<0.5
TW- 331	11'-15'	6/2/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21'-25'	6/2/2010	<0.5	<0.5	**120**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31'-35'	6/2/2010	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW - 332	11'-15'	6/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21'-25'	6/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31'-35'	6/1/2010	<0.5	<0.5	<0.5	**8.6**	<0.5	**1.1**	<0.5	**26**	<0.5	<0.5	**1.4**	<0.5	<0.5	<0.5	<0.5	**1.5**	<0.5	<0.5	<0.5	<0.5	**8.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW - 333	11'-15'	6/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21'-25'	6/1/2010	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<0.5	**2.6**	**0.6**	<0.5	**0.6**	**1.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31'-35'	6/1/2010	**1.8**	**0.5**	<0.5	**173**	<0.5	**32**	<0.5	**620**	<0.5	<0.5	**1.7**	<0.5	<0.5	<0.5	<0.5	**3**	**0.9**	<0.5	**0.7**	**7**	**182**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.4**	<0.5	<0.5	<0.5
TW-334	31'-35'	6/3/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW-335	11'-15'	6/2/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21'-25'	6/2/2010	**1.1**	<0.5	<0.5	**59**	<0.5	**15**	<0.5	**241**	<0.5	<0.5	**1.4**	<0.5	<0.5	<0.5	<0.5	**4**	**1.2**	<0.5	<0.5	**4.5**	**54**	**1.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31'-35'	6/2/2010	**5.1**	**1.2**	<0.5	**336**	**0.5**	**53**	**0.9**	**1880**	**1.1**	<0.5	**3.2**	<0.5	**0.5**	<0.5	<0.5	**7.5**	**2.2**	<0.5	**1.2**	**7.9**	**464**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**9.1**	<0.5	<0.5
TW- 336	11-15	6/2/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21-25	6/2/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	**1.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31-35	6/2/2010	**0.8**	<0.5	<0.5	**87**	<0.5	**13**	<0.5	**215**	<0.5	**0.6**	**1.7**	**1.2**	**5.1**	**0.7**	<0.5	**3.4**	**1.2**	<0.5	**3.3**	**9.8**	**43**	<0.5	**1**	**4**	<0.5	<0.5	<0.5	<0.5	**3.5**	<0.5	<0.5
TW- 337	11-15	6/3/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21'-25'	6/3/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31'-35'	6/3/2010	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW - 338	11'-15'	6/3/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21'-25'	6/3/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31'-35'	6/3/2010	**2.6**	<0.5	<0.5	**202**	<0.5	**32**	<0.5	**890**	<0.5	<0.5	**1.9**	<0.5	**1.6**	<0.5	<0.5	**3.6**	**1.1**	<0.5	<0.5	**5.5**	**101**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Suffolk County Department of Health Services
Summary of Detected VOCs

Sample Information			VOC Concentrations (ppb)																																
Monitoring Well ID	Location (Screen opening)	Sample Date	Benzene	Trichloroethene	Tetrachloroethene	Chloroethane	Vinyl chloride	1,1 Dichloroethene	cis-1,2-Dichloroethene	1,1 Dichloroethane	1,2-Dichloroethane	Chlorobenzene	1,2-Dichlorobenzene (o)	1,3-Dichlorobenzene (m)	1,4-Dichlorobenzene (p)	Ethylbenzene	p-Diethylbenzene	sec-Butylbenzene	tert-Butylbenzene	n-Butylbenzene	n-Propylbenzene	Isopropylbenzene	1,1,1- Trichloroethane	1,1,2-Trichloroethane	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2,4,5-Tetramethylbenzene	p-Isopropyltoluene	Freon 113	Naphthalene	MTBE	Total Xylene
TW - 339	11-15	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21-25	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31-35	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW-340	31-35	6/30/2010	**2.5**	<0.5	<0.5	**198**	<0.5	**19**	**0.5**	**417**	<0.5	**0.8**	**1.8**	**1.6**	**7.9**	**5.1**	<0.5	**6.7**	**1.9**	**1.4**	**2.9**	**18**	**57**	<0.5	**1**	**2.1**	<0.5	<0.5	<0.5	<0.5	**30**	<0.5	<0.5
	41-45	6/30/2010	<0.5	<0.5	<0.5	**8.9**	<0.5	**1.4**	<0.5	**2.6**	<0.5	<0.5	**0.5**	<0.5	**0.5**	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	**2.2**	**0.8**	<0.5	**0.7**	**3**	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5
TW-341	11-15	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21-25	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31-35	6/29/2010	<0.5	<0.5	**26**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	41-45	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW-342	11-15	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21-25	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31-35	6/29/2010	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	**2.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	41-45	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW-343	11-15	6/29/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	21-25	6/29/2010	<0.5	<0.5	<0.5	**8.4**	<0.5	**0.8**	<0.5	**23**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	31- 35	6/29/2010	**3.1**	**1.3**	<0.5	**626**	**0.6**	**44**	<0.5	**1270**	<0.5	<0.5	**5.1**	<0.5	<0.5	**19**	<0.5	**5.9**	**1.7**	<0.5	**14**	**16**	**110**	<0.5	<0.5	<0.5	**11**	**5.7**	**0.8**	<0.5	**74**	<0.5	**6.8**
TW-344	21-25	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.3**	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1**	<0.5
	31-35	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5	**0.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TW-345	41-45	6/28/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ-133 I	42-47	7/8/2010	<0.5	<0.5	<0.5	**6.4**	<0.5	**6.9**	<0.5	**107**	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**19**	<0.5	<0.5	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ- 138 I	49-54	7/8/2010	<0.5	<0.5	<0.5	**1.1**	<0.5	**1.3**	<0.5	**13**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**4.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5	**0.5**
PZ-139 I	43-48	7/8/2010	<0.5	<0.5	<0.5	**1.1**	<0.5	**0.9**	<0.5	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 140	47-52	6/30/2010	<0.5	<0.5	<0.5	**16**	<0.5	**8.1**	<0.5	**133**	<0.5	<0.5	**0.7**	**0.7**	**2.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**16**	<0.5	<0.5	**1.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 141	53-58	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 145 S	10'-18'	6/30/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 145 I	33-38	6/30/2010	<0.5	<0.5	<0.5	**4**	<0.5	**8.5**	<0.5	**84**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**8.5**	<0.5	<0.5	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 145 D	53-58	6/30/2010	<0.5	<0.5	<0.5	**0.8**	<0.5	**1.2**	<0.5	**18**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 149 I	34-39	7/8/2010	<0.5	<0.5	<0.5	**9.5**	<0.5	**3.3**	<0.5	**36**	<0.5	**1**	**1.6**	**1.1**	**5.4**	<0.5	<0.5	**1.8**	**0.6**	<0.5	<0.5	<0.5	**7.4**	<0.5	<0.5	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 151 I	34-39	7/7/2010	<0.5	<0.5	<0.5	**59**	<0.5	**21**	<0.5	**402**	<0.5	<0.5	**1.4**	**0.6**	**2.5**	<0.5	<0.5	**2.1**	**0.7**	<0.5	<0.5	<0.5	**88**	<0.5	**0.7**	**2.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 155 I	43-48	7/7/2010	<0.5	<0.5	<0.5	**12**	<0.5	**6.7**	<0.5	**142**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**31**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 157 I	34-39	7/7/2010	<0.5	<0.5	<0.5	**36**	<0.5	**15**	<0.5	**282**	<0.5	<0.5	**1**	<0.5	**1.6**	<0.5	<0.5	**1.9**	**0.6**	<0.5	<0.5	<0.5	**63**	<0.5	<0.5	**1.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 158 I	34-39	7/7/2010	<0.5	<0.5	<0.5	**33**	<0.5	**14**	<0.5	**263**	<0.5	<0.5	**0.6**	<0.5	**1.0**	<0.5	<0.5	**1.5**	<0.5	<0.5	<0.5	<0.5	**52**	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 159 I	42-47	7/7/2010	<0.5	<0.5	<0.5	**24**	<0.5	**16**	<0.5	**270**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**60**	<0.5	<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 160 I	42-47	7/7/2010	<0.5	<0.5	<0.5	**17**	<0.5	**12**	<0.5	**201**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**45**	<0.5	<0.5	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ - 161 I	43-48	7/7/2010	<0.5	<0.5	<0.5	**28**	<0.5	**16**	<0.5	**422**	<0.5	<0.5	**0.7**	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5	<0.5	<0.5	**79**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Sample Information			VOC Concentrations (ppb)															
Monitoring Well ID	Location	Sample Date	Benzene	Trichloroethene	Chloroethane	Vinyl chloride	1,1 Dichloroethene	1,1 Dichloroethane	1,2-Dichloroethane	1,2-Dichlorobenzene (o)	1,4-Dichlorobenzene (p)	tert-Butylbenzene	sec-Butylbenzene	Isopropylbenzene	1,1,1- Trichloroethane	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	Freon 113
SA-TW-318	46-50	4/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SA-TW-319	38-42	4/1/2010	<0.5	<0.5	3.9	<0.5	0.7	18.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	45-49	4/1/2010	<0.5	<0.5	4.0	<0.5	2.4	46.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.2	<0..5	<0.5	<0.5
SA-TW-320	30-34	4/1/2010	4.3	0.7	229.0	0.8	57.0	1430.0	0.6	2.3	<0.5	1.6	5.8	7.2	380.0	0.6	<0.5	<0.5
	51-55	4/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	1.1
SA-TW-321	11-15	4/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	30-34	4/1/2010	<0.5	<0.5	1.3	<0.5	<0.5	6.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	49-53	4/1/2010	<0.5	<0.5	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SA-TW-322	11-15	4/2/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	26-30	4/2/2010	<0.5	<0.5	7.3	<0.5	1.2	18.0	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5
	38-42	4/2/2010	1.7	0.6	156.0	<0.5	52.0	946.0	0.6	1.4	1.1	<0.5	1.6	<0.5	199.0	2.8	0.7	<0.5
	45-49	4/2/2010	<0.5	<0.5	5.5	<0.5	4.0	67.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12.0	<0.5	<0.5	<0.5

Sample Information			VOC Concentrations (ppb)															
Monitoring Well ID	Location	Sample Date	Benzene	Trichloroethene	Chloroethane	Vinyl chloride	1,1 Dichloroethene	1,1 Dichloroethane	1,2-Dichloroethane	1,2-Dichlorobenzene (o)	1,4-Dichlorobenzene (p)	tert-Butylbenzene	sec-Butylbenzene	Isopropylbenzene	1,1,1- Trichloroethane	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	Freon 113
SA-TW-323	14-18	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	30-34	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	52-56	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SA-TW-324	12-16	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	30-34	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	45-49	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ-133I	45.2-50.2	3/31/2010	0.9	<0.5	40.0	<0.5	26.0	439.0	<0.5	0.9	1.8	<0.5	1.2	<0.5	85.0	0.9	3.4	<0.5
	37.42-43.42	3/31/2010	<0.5	<0.5	3.3	<0.5	1.2	20.0	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	1.4	<0.5	1.0	<0.5
PZ-134	41.74-46.74	3/31/2010	<0.5	<0.5	3.1	<0.5	2.1	33.0	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	5.0	<0.5	1.0	,0.5
PZ-135	43.71-48.71	3/31/2010	<0.5	<0.5	19.0	<0.5	14.0	235.0	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	57.0	<0.5	<0.5	<0.5
PZ-136	46.02-51.02	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ-137	51.45-56.45	3/31/2010	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PZ-138	51.29-56.29	4/1/2010	<0.5	<0.5	0.7	<0.5	<0.5	8.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	0.6
PZ-139	45.2-50.2	4/1/2010	<0.5	<0.5	16.0	<0.5	7.8	125.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	22.0	<0.5	0.9	<0.5