



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND, MID-ATLANTIC
9742 MARYLAND AVENUE
NORFOLK, VIRGINIA 23511-3095

IN REPLY REFER TO:

5090
OPNEEV/lbf
15 October 2008

MEMORANDUM

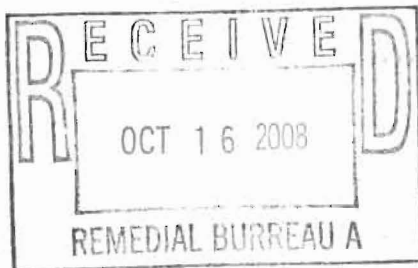
**FOR THE MEMBERS OF THE RESTORATION ADVISORY BOARD (RAB) FOR THE
INSTALLATION RESTORATION PROGRAM AT NAVAL WEAPONS INDUSTRIAL
RESERVE PLANT (NWIRP) BETHPAGE, NEW YORK**

The Navy would like to announce that a Restoration Advisory Board (RAB) meeting has been scheduled for Wednesday, November 5, 2008. This meeting is open to the general public and will begin at 7:00 PM. The location of the meeting is ***Bethpage Community Center, N. Grumman Road, Bethpage, NY***

Items that will be discussed during this meeting will include:

- Site 1 Soil Vapor Informational Session
- Site 1 Soil Vapor Investigation
- GM-75 Work Plan
- GM-38 Construction Status

Attached for your review are the minutes from the RAB meeting held on July 30, 2007. The Navy requests that you review the meeting minutes and provide comments that you have to either myself or to the RAB Community Co-Chair, Mr. Jim McBride. These minutes will be discussed and approved at the November 5th meeting. If you need additional information, I am available by telephone, 757-444-0781, or email, lora.fly@navy.mil



Sincerely,

Lora Fly
Remedial Project Manager
By direction of the Commanding Officer

Distribution:

NAVFAC Midlant, Lora Fly
NAVAIR, Richard Smith
NYSDEC (Albany), Steve Scharf
NYSDEC (Albany), Henry Wilkie
NYSDEC (Stony Brook), Walter Parrish
NYSDOH, Jacqueline Nealon
USEPA Region II, Carol Stein
USEPA Region II, Carla Struble
Public Repository
Town of Oyster Bay, Hon. John Venditto
Town of Oyster Bay, Richard Pfaender
Town of Oyster Bay DPW, Matt Russo
Tetra Tech NUS, David Brayack
ECOR Solutions, Al Taormina
Northrop Grumman, John Cofman
ARCADIS, David E. Stern
Community Co-Chair, Jim McBride
Community RAB Member, Mike Grello
Community RAB Member, Hon. Ed Mangano
Community RAB Member, Linda Mangano
Community RAB Member, Ed Resch
Community RAB Member, Charles Bevilacqua
Community RAB Member, Roy Tringali
Community RAB Member, Rosemary Styne

Non-RAB Member Mailing List:

Residence

FILE ON EDOC'S	_____	YES	_____	NO
SITE NAME	_____			
SITE #	_____			
COUNTY	_____	TOWN	_____	
FOILABLE	_____	YES	_____	NO
SC/PSA	_____	RI/FS	_____	
RD	_____	RA	_____	
SM	_____	OTHER	_____	
NAME DESCRIPTION:				

**RESTORATION ADVISORY BOARD MEETING
NAVAL WEAPONS INDUSTRIAL RESERVE PLANT (NWIRP), CALVERTON
CALVERTON COMMUNITY CENTER, CALVERTON, NEW YORK
THURSDAY, JULY 31, 2008**

The twenty-seventh meeting of the Restoration Advisory Board (RAB) was held at the Calverton Community Center. Meeting attendees included representatives from the Navy (Lora Fly and Nina Johnson), New York State Department of Environmental Conservation (NYSDEC) (Henry Wilkie and Larry Rosenmann), RAB Community members (Bill Gunther, Harry Histan, Lou Cork, and Sid Bail), Suffolk County Department of Health Services (SCDHS) (Andrew Rapiejko and Mary Hime), Tetra Tech NUS, Inc. (David Brayack and Debbie Cohen), ECOR Solutions, Inc. (Bob Ingram, Al Taormina, Will Torres, and Matt Lapp), and TAPP Consultant (Frank Anastasi). 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. The presentations for the meeting are included as Attachments 3 to 5.

DISTRIBUTION AND APPROVAL OF MINUTES

Ms. Fly asked whether the RAB members received the April 2008 minutes, which were distributed in June 2008, and asked whether there were questions or comments on the minutes. There were no questions or comments, and the minutes for the April 2008 RAB meeting were approved.

COMMUNITY UPDATE

Mr. Bill Gunther, RAB Community Co-chair, indicated that he preferred electronic copies of documents and wanted to poll other RAB Community members to see whether they also wanted electronic copies. The RAB Community members at the meeting also wanted electronic copies, so the Navy will start sending electronic copies of documents on CD to the RAB Community members. The Navy can provide hard copies of portions of documents (such as large-size maps), if needed.

The frequency of the RAB meetings was discussed to see whether the RAB members wanted to reduce meetings from three times a year to two times a year (fall and spring) with the option to have a summer meeting when needed. The RAB Community members would like to think about it and discuss it again at the November RAB meeting. During discussion of the technical progress, there was a suggestion to try to schedule RAB meetings so that the results of the semi-annual monitoring (see the General Program discussion) would be available for presentation at the RAB meeting.

TECHNICAL PROGRESS – GENERAL PROGRAM

Ms. Fly continued the meeting with a review of the Navy's program. The technical progress presentation handout is provided as Attachment 3.

Ms. Fly provided the schedule of projects and funding. Funded items and their status are as follows:

- The Navy has funded quarterly sampling at the PRSC well and semiannual groundwater sampling at sites 2, 6A, 10B, and the southern area for an additional two years (\$400,000).
- Site 7 Operation and Maintenance activities are continuing through the end of this year. It is expected to continue through next year, but a mechanism is not in place.
- The Site 2 removal action is funded (approximately \$1 million). The work was awarded in June 2008. Work related to traffic controls began, the work plan will be completed in October, and the removal action will start in November 2008. The Site 2 removal action is expected to be completed by April 2009.
- During the removal action at Site 2, oversight and sampling will be conducted at a cost of approximately \$120,000.
- The Site 10B removal action is funded (approximately \$1,000,000). The Site 10B removal action is expected to be completed by August 2009. Because the estimated costs are higher than originally expected, Ms. Fly indicated that Site 6A removal action funding is not available at this time. The Navy is anticipating that the Site 6A removal action will cost \$5 million, so it will need to be funded in stages. Part of the cost was associated with an electrical line that has to be moved before conducting the removal action.

Ms. Fly explained that the next year's budget is not available yet; however, the Navy will continue to prepare scopes of work so that projects can be funded more quickly once funding is available.

Mr. Brayack (Tetra Tech) provided a general review of NWIRP Calverton activities, including the following:

- Groundwater sampling for Sites 6A/10B/Southern Area will be completed in August and subsequent sampling will be conducted semiannually during wet and dry months (March and September). Site 2 onsite groundwater monitoring will also be conducted at the same time as groundwater monitoring at Sites 6A/10B.
- A new entrance will be constructed for Site 2 to support the removal action.

TECHNICAL PROGRESS – SITES 2 GROUNDWATER INVESTIGATION

Mr. Brayack presented the current status of the Site 2 groundwater investigation (Attachment 3) and indicated that the investigation was in the Remedial Investigation (RI/FS) stage. As discussed at the April 2008 RAB meeting, a source removal action is planned. This action is an interim measure at the site to remove accessible contaminated soil that is acting as a continuing source of groundwater contamination. The removal action design was completed in April 2008, a public comment period on the proposed removal action was held in May 2008, and a contractor for the work was selected in June 2008. Mr. Brayack explained the excavation plan for the removal action and the results of the January 2008 groundwater sampling, which was presented at the April 2008 RAB meeting.

Based on comments on the removal action design, the Navy will include SB-226 in the excavation area. Also, the Navy will collect confirmation samples to determine whether additional soil excavation is needed as part of the removal action.

As mentioned at the April 2008 RAB meeting, SCDHS completed sampling of groundwater on the Swan Lake Golf Course.

Mr. Andrew Rapiejko (SCDHS) presented the results and the presentation is included as Attachment 5. Mr. Rapiejko mentioned that SCDHS did the sampling because it was easier for

SCDHS to obtain access agreements for the sampling than the Navy. Several groundwater profile borings were installed to approximately 70 feet below ground surface (bgs). The profile borings were installed with geoprobes and groundwater samples were collected from the bottom of the profile, moving up the boring to collect groundwater samples at different depths. The final well screen is placed at the top of the boring. The results showed low and infrequent detections of volatile organic compounds (VOCs) at most locations. The greatest concentration was detected at SL/G-5 at 30 to 40 feet bgs. Lithology was not logged during installation of these borings; however, Mr. Brayack indicated that based on previous geological information there is a clay layer present at approximately 50 to 60 feet.

Several questions were raised concerning Site 2 groundwater. A question was asked about sampling in an area by the building north of the SL/G wells. Mr. Brayack explained that there are monitoring wells in this area and the wells do not show contamination. Also, Grumman sampled groundwater around this building and did not find contamination. In answer to a question regarding plans based on the SCDHS sampling, the Navy indicated that the Navy is planning to put in more groundwater wells.

TECHNICAL PROGRESS – SITES 6A AND 10B AND SOUTHERN AREA GROUNDWATER INVESTIGATION AND OFFSITE GROUNDWATER FEASIBILITY STUDY

Mr. Brayack presented the current status of Sites 6A and 10B and Southern Area groundwater since the April 2008 RAB meeting. As part of the removal action for Sites 6A and 10B, the Navy will excavate down to the water table to remove the majority (expected to be greater than 90 percent) of contamination and use ORC to treat residual soil contamination.

There was discussion regarding the groundwater flow directions for Sites 6A and 10B and the Southern Area. Mr. Brayack indicated that the general groundwater flow is the southeast, but once you get closer to the pond on the PRSC, the pond appears to be deflecting groundwater flow to the east toward the Peconic River. Groundwater contamination is tracking along the groundwater flow pathway from the source area.

Several questions were asked about investigation of contaminant sources. In particular, the figure showed a couple of features that may represent potential sources. Mr. Brayack indicated that the Navy has investigated contaminant sources in the past and believes that the major sources have been identified. Previous investigations included property record searches and

geophysical surveys (e.g., magnetometry survey). For the pond area, Mr. Brayack indicated that there does not appear to be a residual source in this area. No soil contamination and only low level groundwater contamination were found in this area. The groundwater is shallow in this area, with only a few feet from ground surface to the top of the groundwater table. However, now that an apparent plume has been identified, additional work may be warranted in that area.

There was discussion regarding having a comprehensive groundwater data set to evaluate groundwater contaminant sources, extent, and migration pathways. The Navy collected the first round of comprehensive groundwater data for NWIRP Calverton in January 2008 and the Navy will continue to conduct sampling to provide data to evaluate the nature, extent, and migration of groundwater contamination. In response to a concern that contamination is at the property boundary and remediation may be needed, Mr. Rosenmann explained that there could be draw backs to active remedies if the remedial activities mobilize contaminants that are immobile under current conditions. At this point, NYSDEC believes that comprehensive groundwater data will provide the information needed to evaluate whether monitored natural attenuation is the best remedy or whether other remediation action is needed to address the contamination. Mr. Anastasi added that potential exposure routes are well known, so that if there is a concern for exposure to contamination, the appropriate measures can be implemented to prevent unacceptable exposure. Mr. Brayack noted that there has been one public drinking water well identified with contamination and the Navy is monitoring this area. Also, the Navy has identified areas where additional monitoring wells are needed to understand what is occurring within the groundwater contaminant plume, including where the contaminant plume may be discharging into the river. The new wells will be included in the comprehensive groundwater monitoring program.

There was a concern that potential vapor intrusion into buildings has not been investigated. Mr. Rosenmann indicated that vapor intrusion into buildings is not likely a significant exposure pathway because buildings in the area do not have basements (because groundwater is too shallow) and the groundwater contaminant plume is not in the shallow groundwater. The groundwater contamination is 30 to 50 feet bgs. Mr. Rosenmann will see whether there is information on vapor intrusion concerns where there is a large buffer of clean groundwater between the house foundation and deeper groundwater contaminant plume.

Mr. Rapiejko presented the results of SCDHS' profile well sampling in locations along Grumman Boulevard (GB series profile wells), in the Southern Area plume. The presentation is provided in Attachment 5. Mr. Rapiejko indicated that profile borings did not go into the clay layer that was found at 55 to 60 feet bgs. Various VOCs were detected; however, 1,1-Dichloroethane (1,1-DCA) was most frequently detected at the greatest concentrations. GB-2 had the greatest concentration, with 1,1-DCA at 1,090 µg/L. Typically the greatest concentrations were detected around 30 to 40 feet bgs. Although some elevated levels of VOCs in a relatively large area was found, the groundwater in the Southern Area is not used for drinking, so there are no imminent exposure concerns. Mr. Brayack indicated that the Navy will review the SCDHS' sampling results to determine where additional monitoring wells are needed. The Navy is preparing a work plan to identify additional locations needed at Sites 6A and 10 B and in the Southern Area. Also, the Navy is planning to issue a report on the recent groundwater monitoring data that will provide the comprehensive data, discuss groundwater flow pathways and concentration trends, and identify data gaps where additional groundwater data are needed. At the next RAB meeting, the Navy is planning to provide a presentation on the results of the comprehensive data evaluation and the identified data gaps.

TECHNICAL PROGRESS – SITE 7 REMEDIAL ACTIVITIES

Mr. Will Torres (ECOR) presented the progress of the Site 7 remedial activities (Attachment 4). The presentation provided updated contaminant concentration trend maps and mass removal statistics since reactivating the Air Sparge/Soil Vapor Extraction System in April 2008. The future planned activities were also presented. Mr. Torres explained that the data showed several locations had elevated concentrations of several VOCs and naphthalene and the concentrations appear to be increasing. The Navy plans to conduct additional sampling to determine the cause for the elevated and potentially increasing concentrations. As part of the sampling, the treatment system will be shut down and groundwater and air samples will be collected from soil vapor extraction locations, existing monitoring wells, and additional groundwater sampling points. The Navy is expecting to install the additional groundwater sampling points and collect data before the next RAB meeting. The information will be used to determine whether modification to the existing treatment system or an alternative remedy is needed to address the contamination.

CLOSING REMARKS

Ms. Fly asked whether there were any questions or comments. With no other questions or comments Ms. Fly proposed that the next RAB meeting be held on November 6, 2008. This meeting date was agreed upon and the meeting was adjourned.

ATTACHMENT 1

JULY 31, 2008 RAB MEETING SIGN-IN SHEET

**27th RAB Meeting for NWIRP Calverton
July 31, 2008
Sign-In List**

Name	Address (if interested in being on mailing list)	Organization	How Did You Hear of Meeting?
Debbie Cohen	TENUS		
Bill Gunther	RAB		CD
Frank Anastasi	SCA Assoc.		
Leo Cork	R.A.B.		CD
Andrew RAPIETKO	SCD AS		
Harry H. Island	R.A.B.		CD
Sid Bail	RAB	Whiting River Civic	CD
Mary Hime	SCOHS		
Bob Degan	ECOR.		
Al TAORMINA	ECOR		
Nina Johnson	NAVFAC MidAtlantic		
HARRY ROSEMAN	NYSOCC		

ATTACHMENT 2

JULY 31, 2008 RAB MEETING AGENDA

Agenda

Restoration Advisory Board Naval Weapons Industrial Reserve Plant Calverton

July 31, 2008
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 Program
Lora Fly

Site 2 Groundwater Investigation
David Brayack, Tetra Tech

Sites 6A and 10B and Southern Area Groundwater Investigation and Offsite
Groundwater Feasibility Study
Dave Brayack
Frank Anastasi

Site 7 Remedial Activities
ECOR

Closing Remarks
Lora Fly

Presenters will be available after the program for questions.

ATTACHMENT 3

NAVY AND TETRA TECH NUS, INC. PRESENTATION



**Restoration Advisory Board
(RAB Meeting)**

**Naval Weapons Industrial Reserve Plant
(NWIRP) Calverton, New York
July 31, 2008**

AGENDA



Agenda

Restoration Advisory Board
Naval Weapons Industrial Reserve Plant Calverton

July 31, 2008
Calverton Community Center, Calverton NY
7:00 p.m.

Welcome and Agenda Review
Lora Fly, NAVFAC Mid-Atlantic

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Lora Fly

Site 2 Groundwater Investigation
David Brayack, Terra Tech

Sites 6A and 10B and Southern Area Groundwater Investigation and Offsite
Groundwater Feasibility Study
Dave Brayack
Frank Anastasi

Site 7 Remedial Activities
ECOR

Closing Remarks
Lora Fly

Presenters will be available after the program for questions.

WELCOME AND MEETING MINUTES

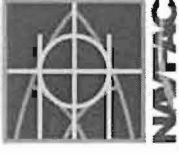


- **Meeting Minutes Approval – April 2008**

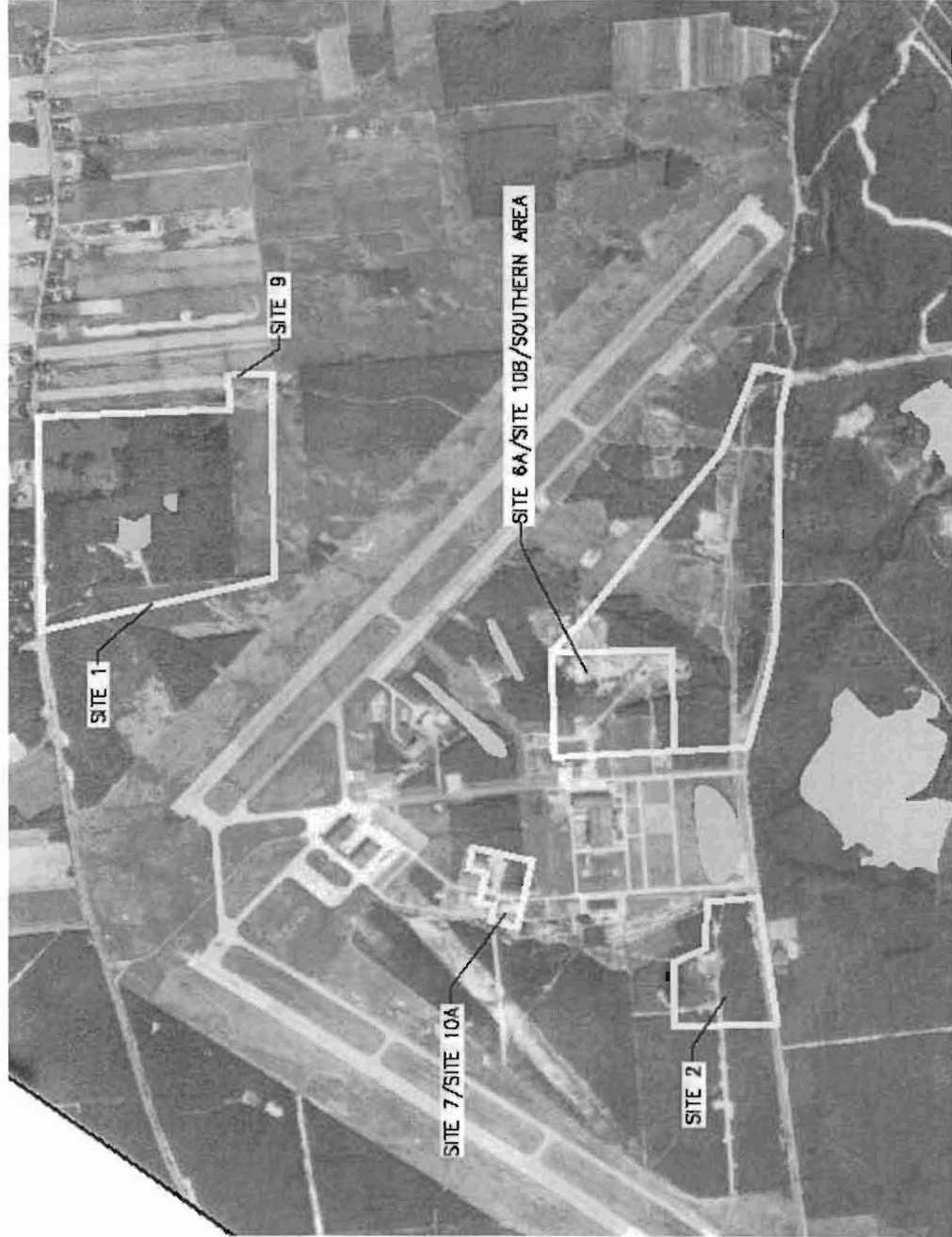
PROGRAM OVERVIEW



- **PRSC Quarterly Sampling – May 08, August 08, quarterly through 2010**
- **Sites 6A/10B and Southern Area Groundwater Sampling, including Peconic River – July/August 2008, Semiannual through 2010 (March and September)**
- **Sites 6A/10B Remedial Design – Complete**
- **Sites 6A/10B Remedial Action – 2009 to 2011**
- **Southern Area Offsite Feasibility Study (Ongoing)**
- **Site 2 – Removal Action – 2009**
- **Site 2 – Groundwater Monitoring – Semi-annual through 2010 (March and September).**
- **Site 2 – Feasibility Study 2010/2011**



FACILITY LAYOUT

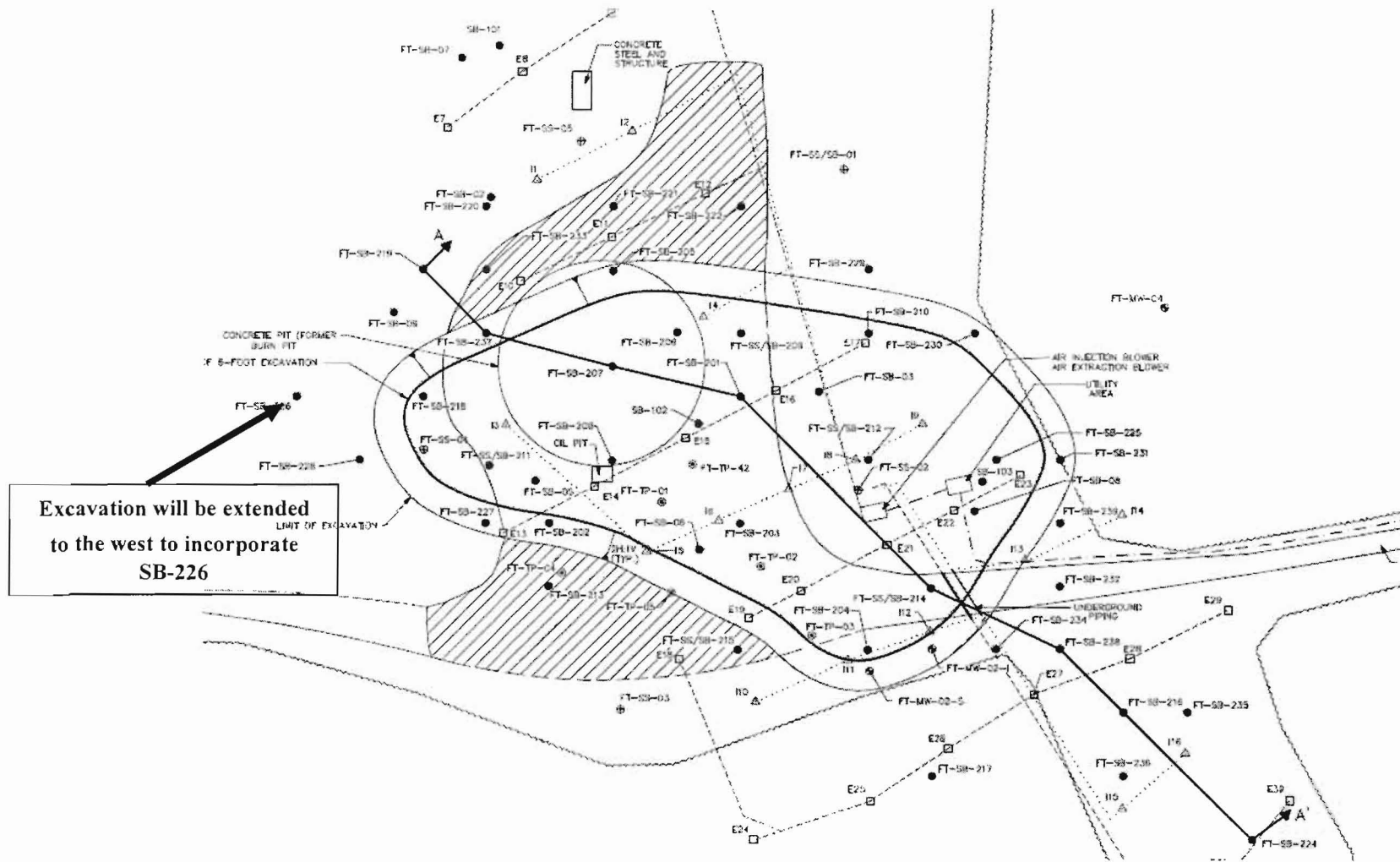


SITE 2 GROUNDWATER INVESTIGATION

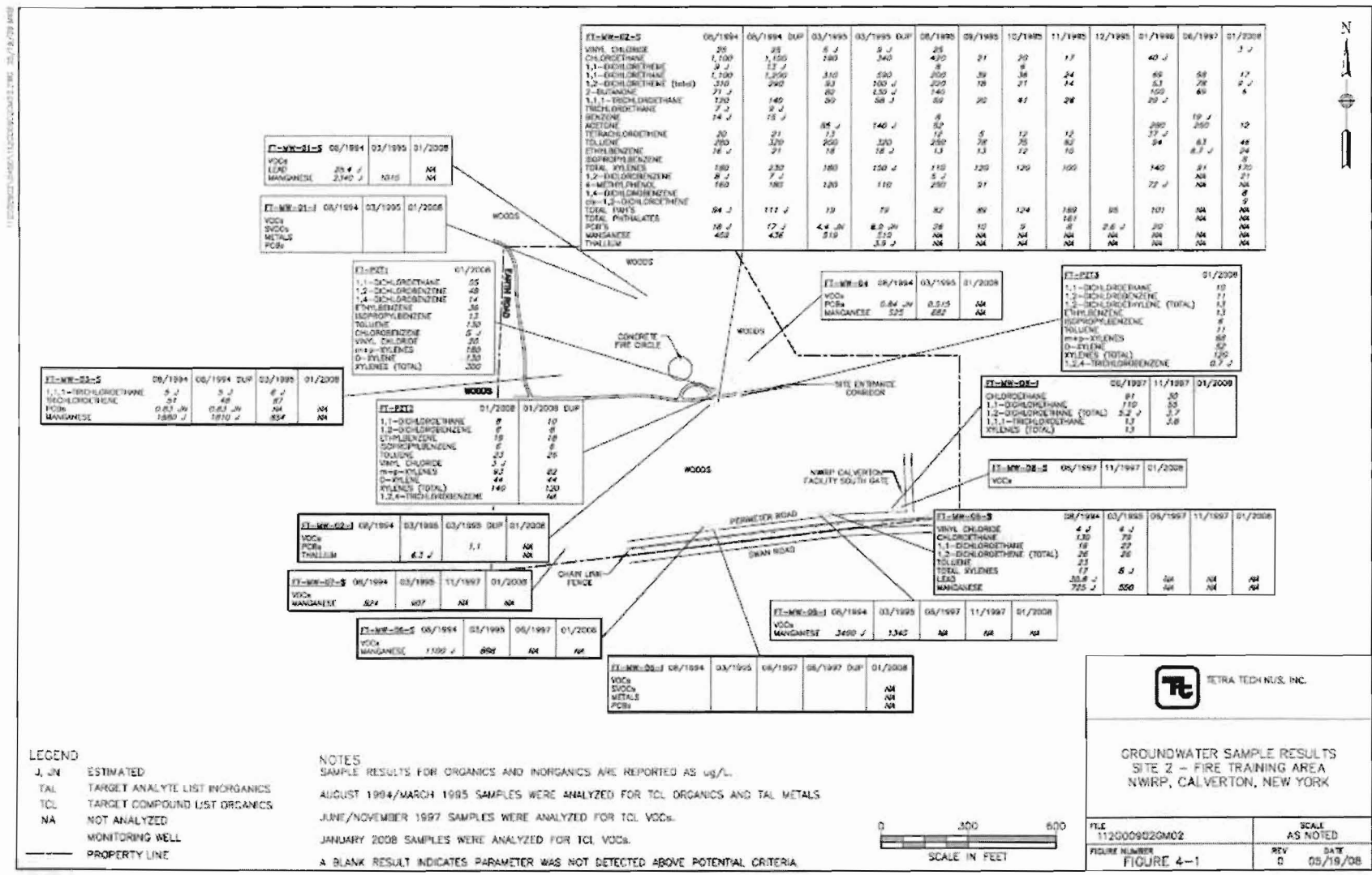


- **Fire Training Activities 1950s to mid-1990s.**
- **Free product recovery from late 1980s to mid-1990s.**
- **Free product and limited solvents present in soil and groundwater at site.**
- **Air sparging/soil vapor extraction was used to treat solvents (volatile organic compounds) in soils 1995 to 2001.**
- **Good success on groundwater, but did not address a continuing source of groundwater contamination above the groundwater.**
- **Removal action planned. Design is complete.**
- **Work was awarded to a contractor.**

SITE 2 REMOVAL ACTION – EXCAVATION PLAN



SITE 2 JANUARY 2008 GROUNDWATER RESULTS



LEGEND
 J, JN ESTIMATED
 TAL TARGET ANALYTE LIST INORGANICS
 TCL TARGET ANALYTE LIST ORGANICS
 NA NOT ANALYZED
 MONITORING WELL
 PROPERTY LINE

NOTES
 SAMPLE RESULTS FOR ORGANICS AND INORGANICS ARE REPORTED AS ug/L.
 AUGUST 1994/MARCH 1995 SAMPLES WERE ANALYZED FOR TCL ORGANICS AND TAL METALS
 JUNE/NOVEMBER 1997 SAMPLES WERE ANALYZED FOR TCL VOCs.
 JANUARY 2008 SAMPLES WERE ANALYZED FOR TCL VOCs.
 A BLANK RESULT INDICATES PARAMETER WAS NOT DETECTED ABOVE POTENTIAL CRITERIA



TC TETRA TECH NUS, INC.

GROUNDWATER SAMPLE RESULTS
 SITE 2 - FIRE TRAINING AREA
 NWRP, CALVERTON, NEW YORK

FILE	1120009020M02	SCALE	AS NOTED
FIGURE NUMBER	FIGURE 4-1	REV	0
		DATE	05/19/08

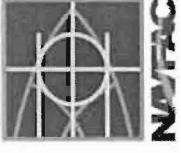
SCDHS 2008 RESULTS FROM GOLF COURSE



Suffolk County Department of Health Services
Profile Wells at Swan Lake Golf Course
Installed January 2008

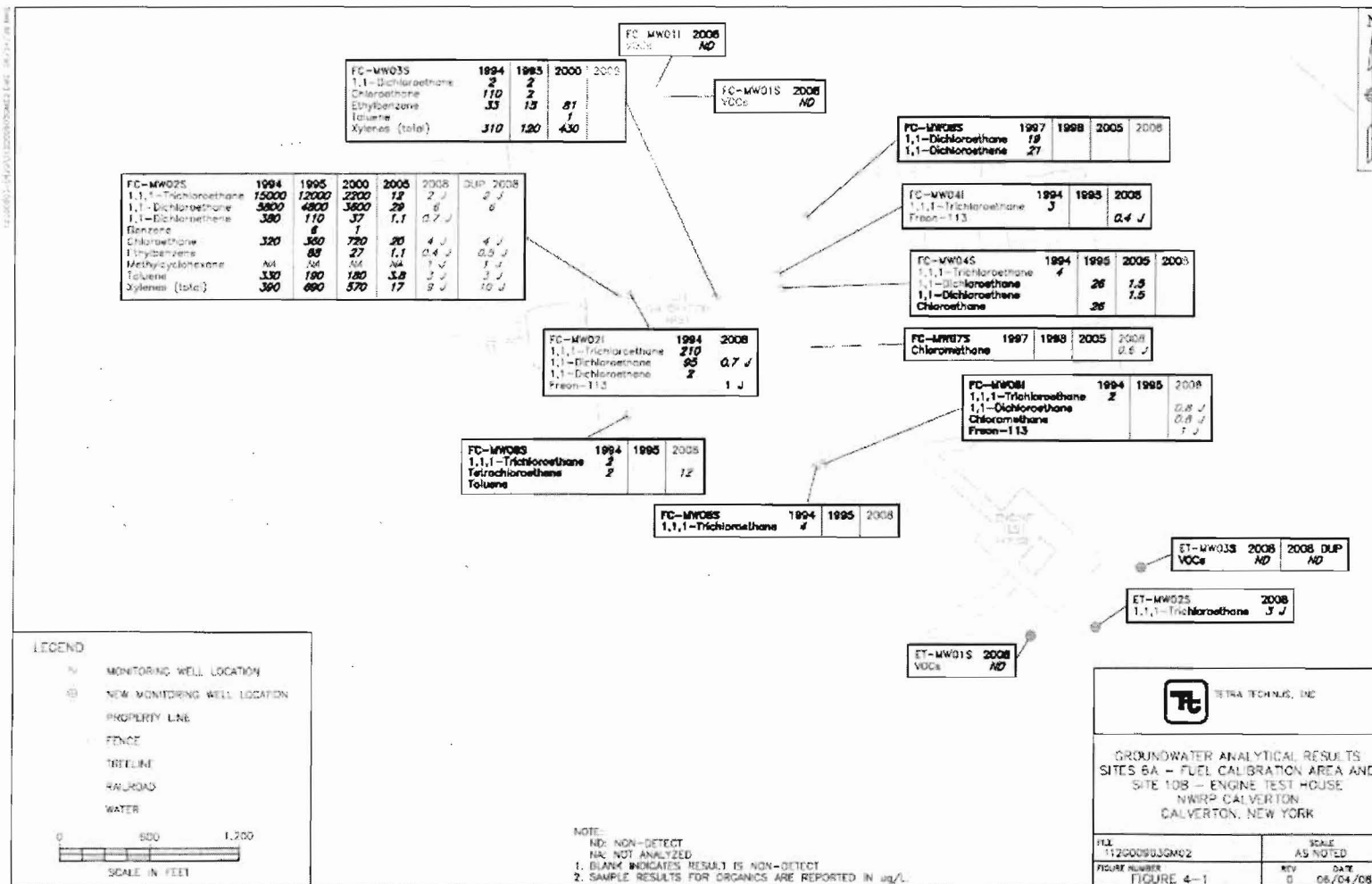


SITE 2 QUESTIONS/DISCUSSION

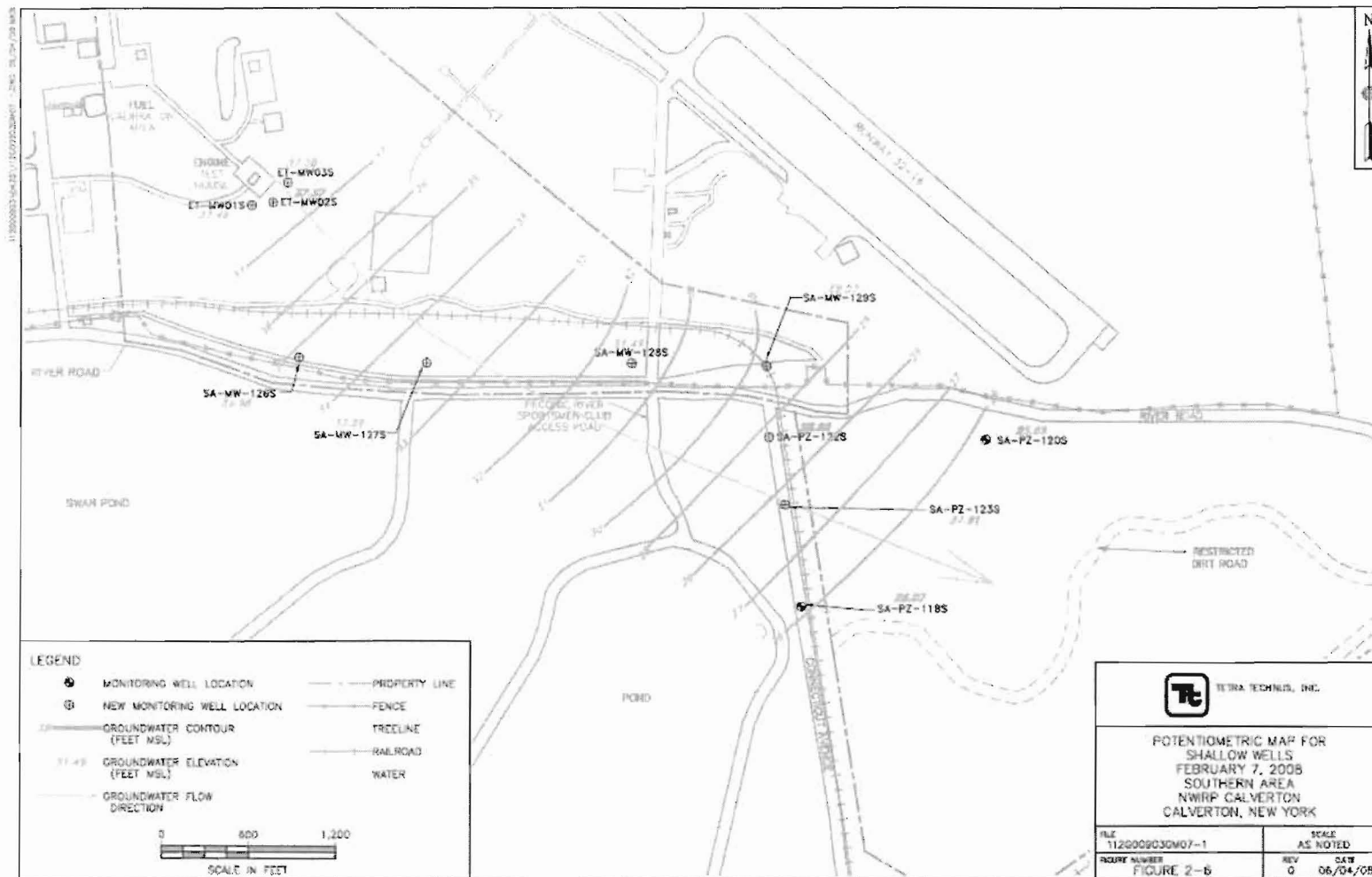


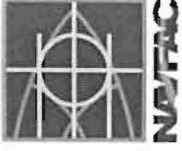
•Questions/Discussion

SITE 6A/10B JANUARY 2008 GROUNDWATER RESULTS

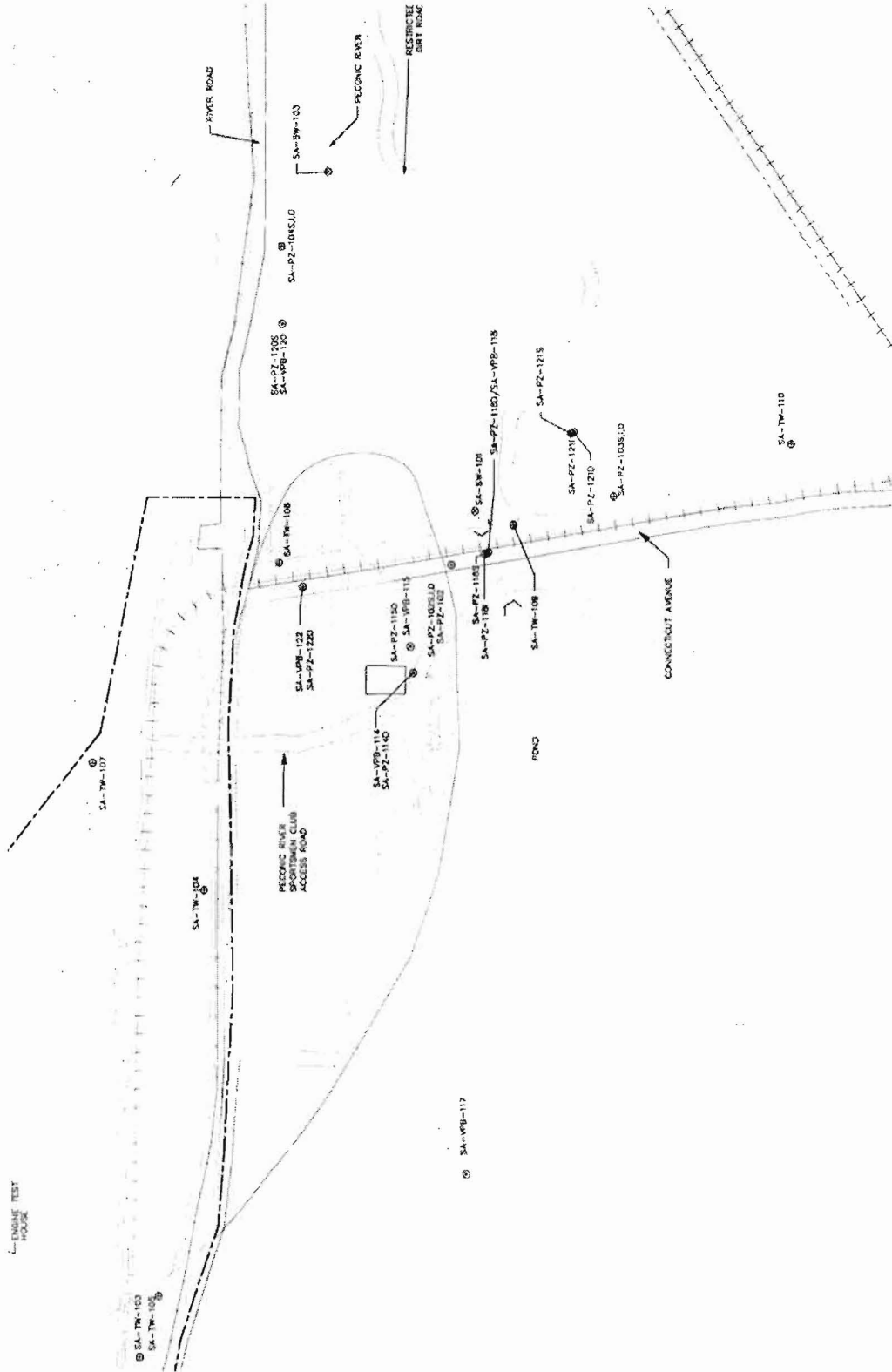


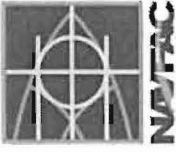
SITE 6A/10B JANUARY 2008 GROUNDWATER FLOW



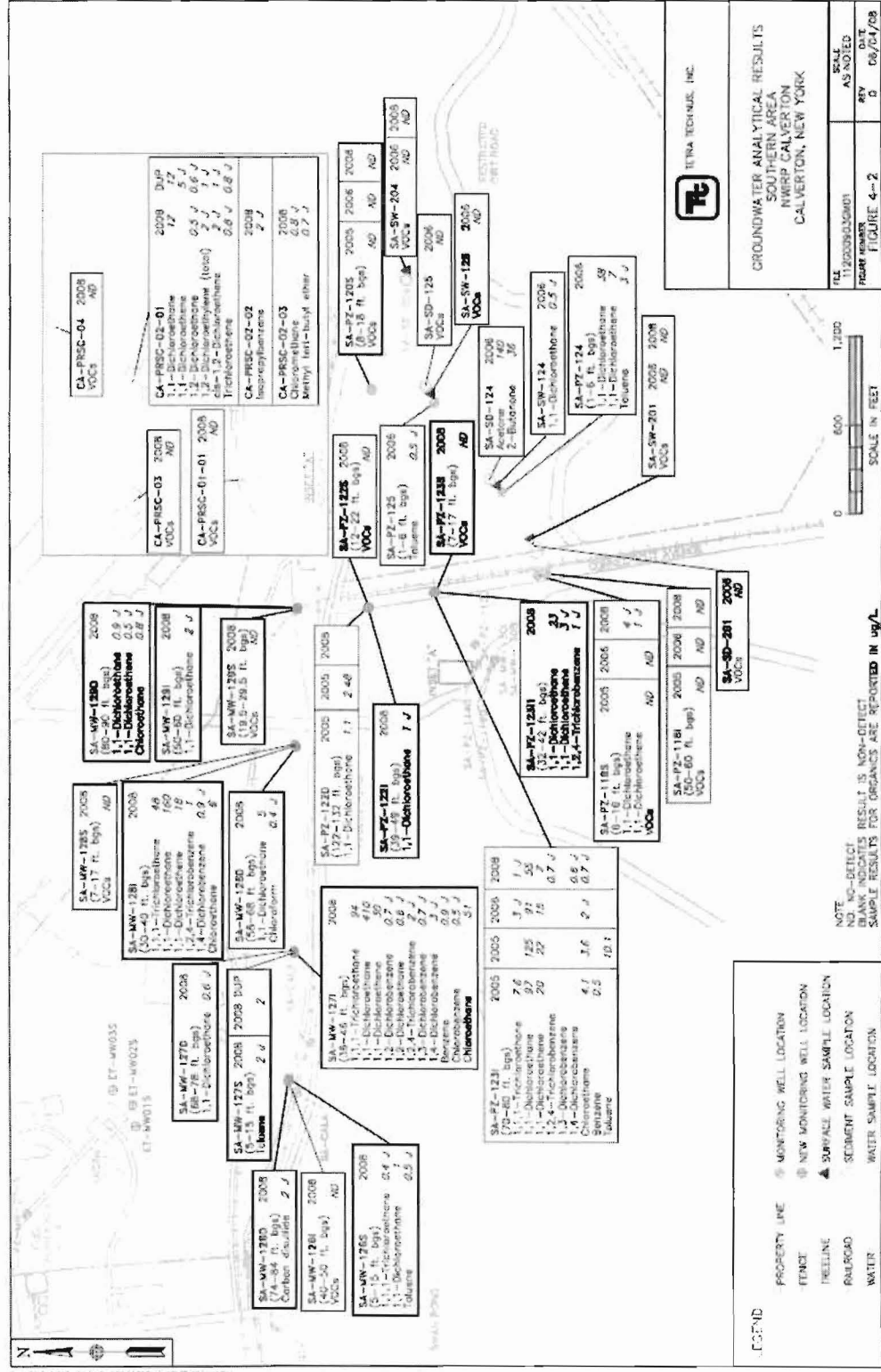


SOUTHERN AREA GROUNDWATER

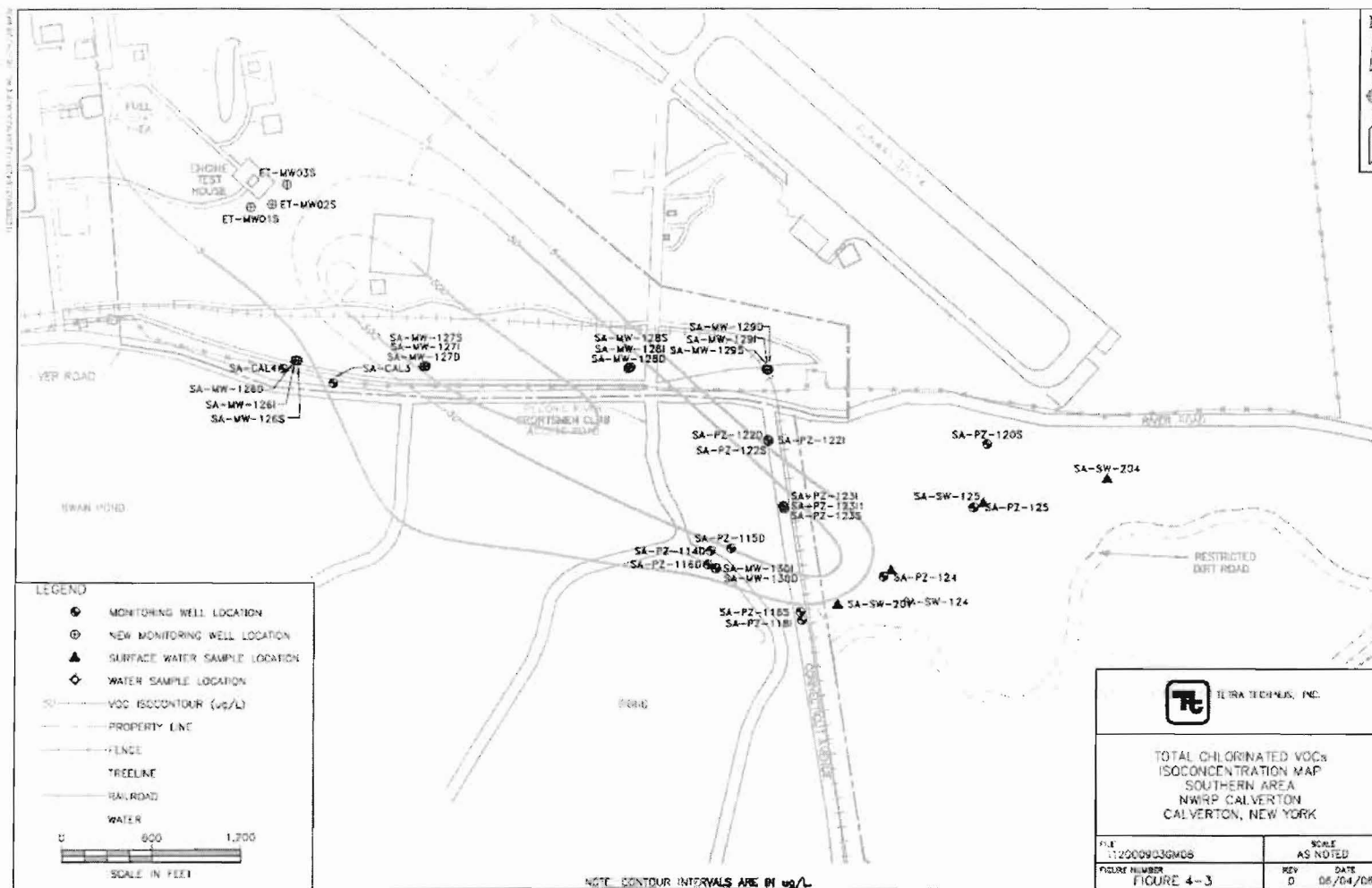




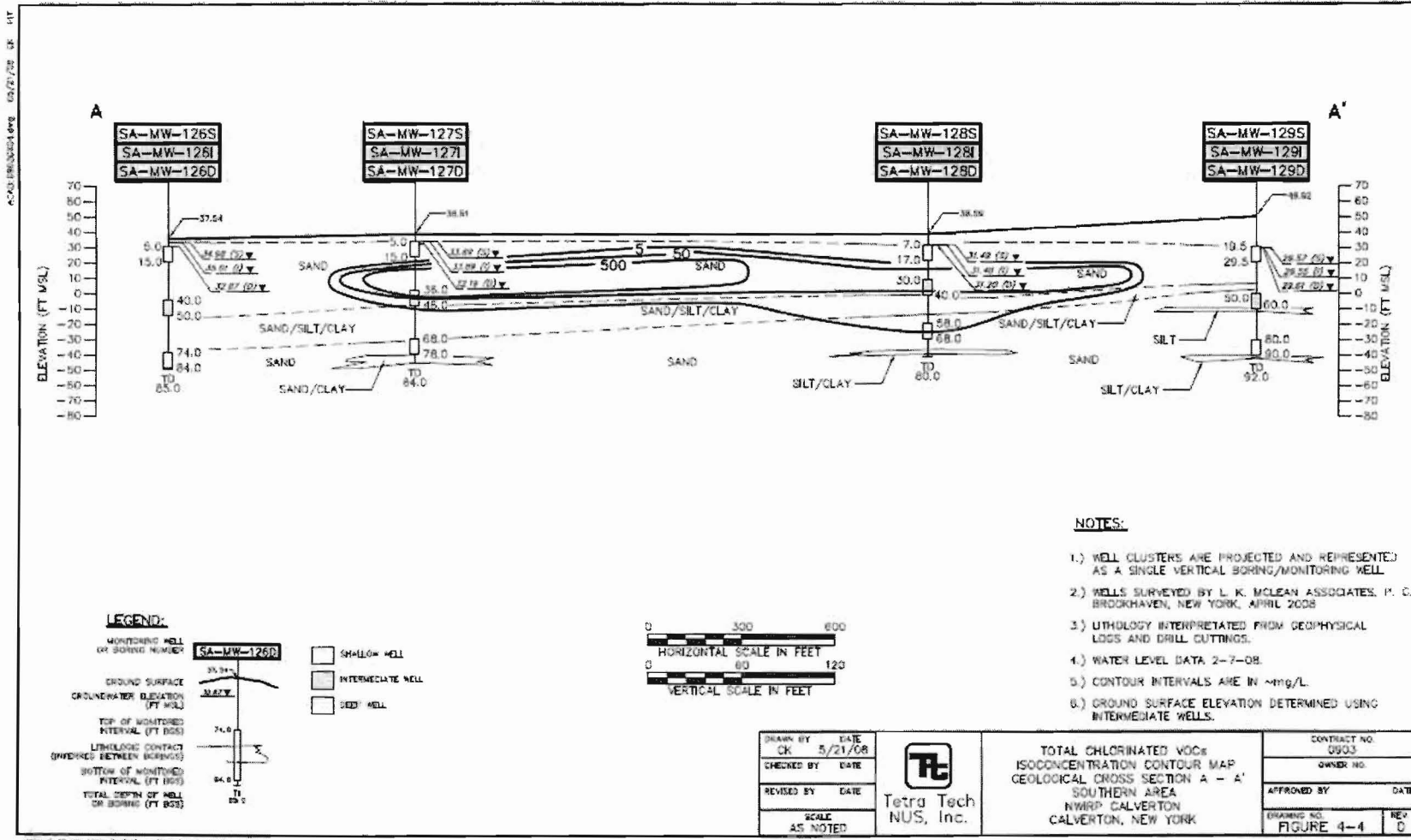
SOUTHERN AREA GROUNDWATER RESULTS



SOUTHERN AREA GROUNDWATER CONTOURS

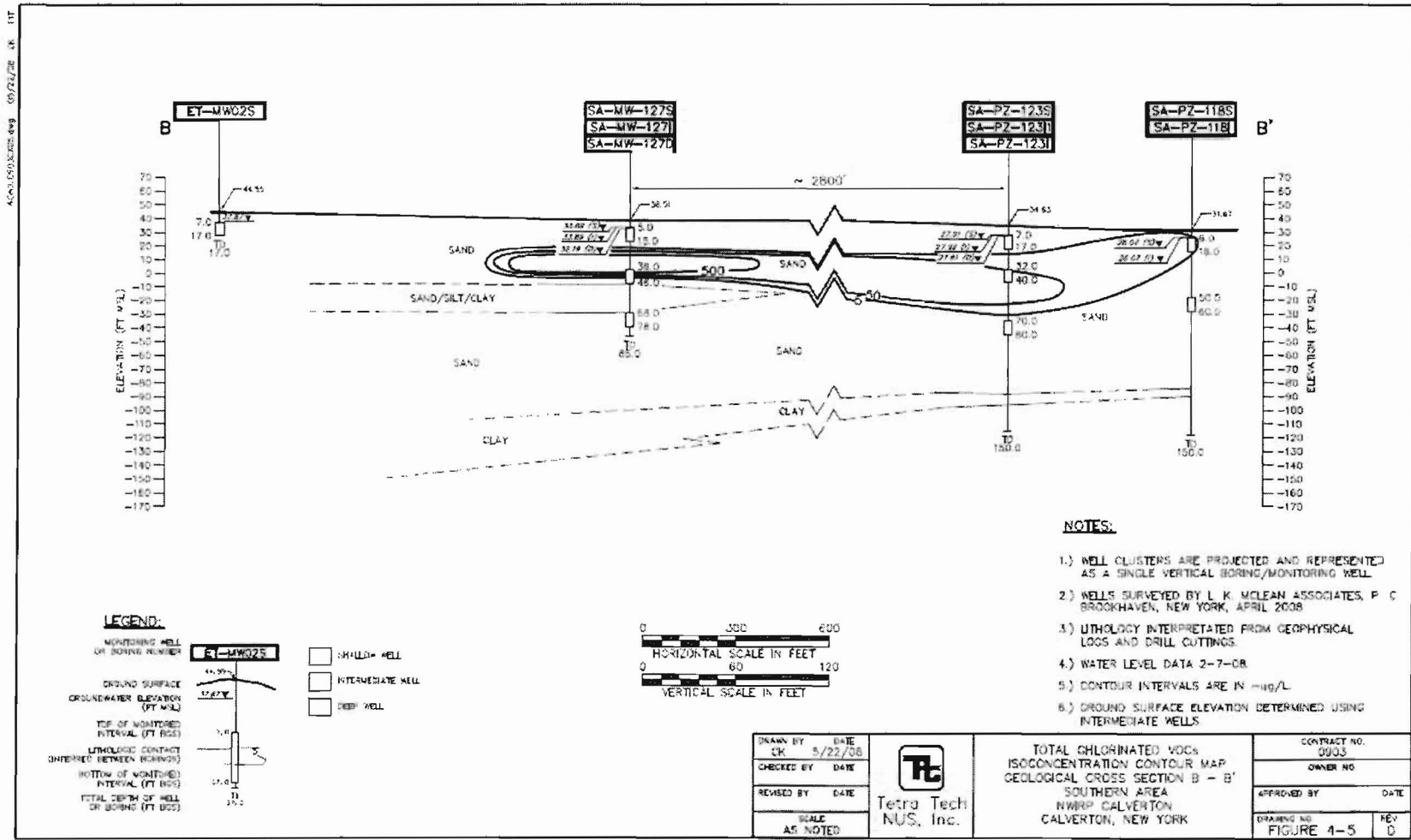


SOUTHERN AREA GROUNDWATER CONTOURS (EAST/WEST)

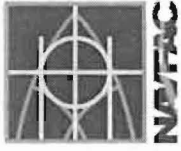


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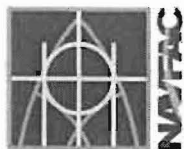
SOUTHERN AREA GROUNDWATER CONTOURS (NORTHWEST TO SOUTHEAST)



SOUTHERN AREA GROUNDWATER



DRAFT
Approximate SCDHS Profile Well Locations
2008



SOUTHERN AREA QUESTIONS/DISCUSSION

- **Questions/Discussion**

ATTACHMENT 4

ECOR SOLUTIONS - PRESENTATION



Site 7: Former Fuel Depot

Air Sparge/Soil Vapor Extraction System

Naval Weapons Industrial Reserve Plant

Calverton, NY

Restoration Advisory Board Meeting

July 31, 2008

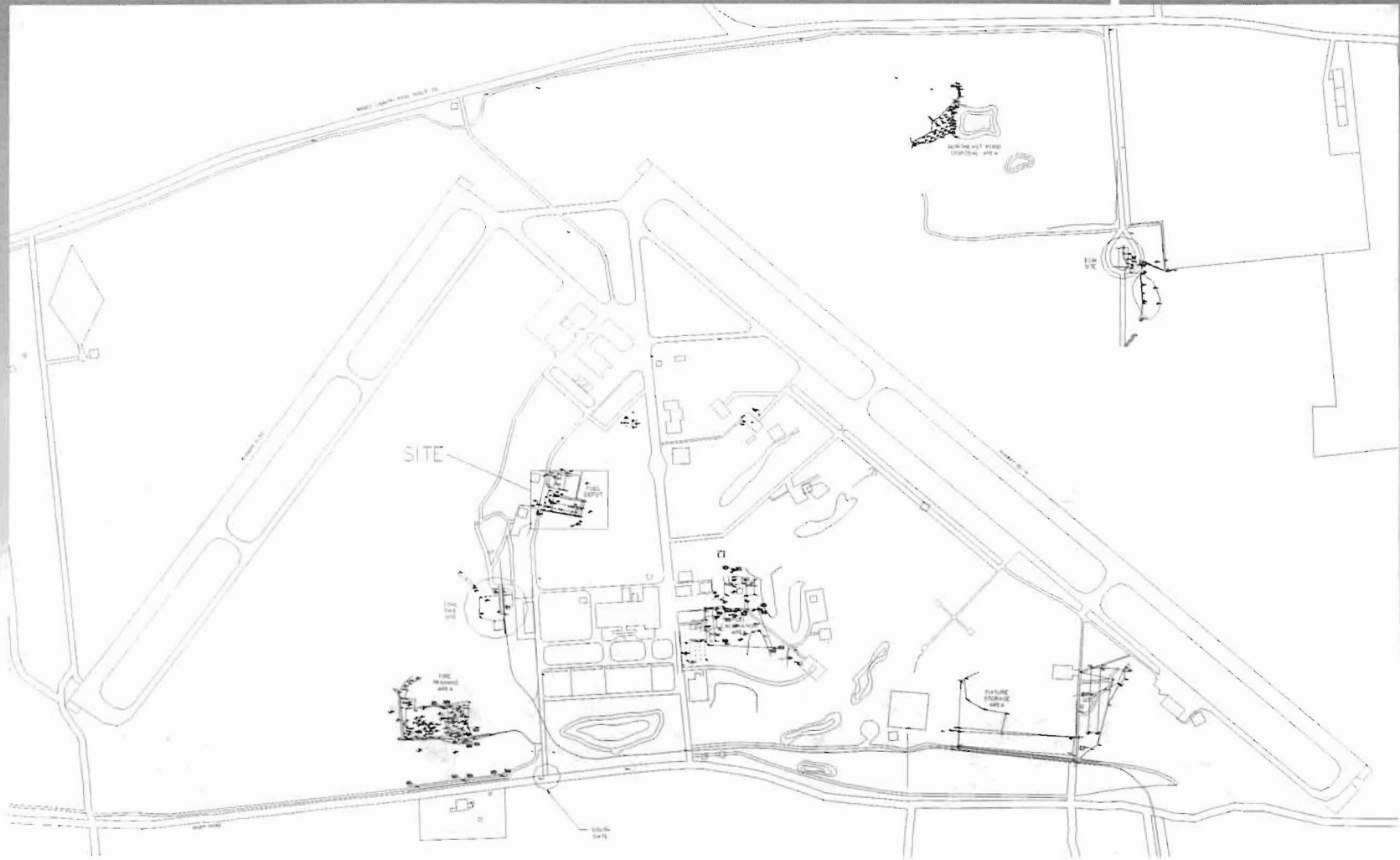
Delivering environmental construction, operations and remediation solutions to industry and government



Project Overview

- Contaminants of Concern:
BTEX, Napthalene, and Freon in groundwater
- Air Sparge/Soil Vapor Extraction System
constructed 2004
- Goal:
 - Mass removal of groundwater contaminants
 - Operate & Maintain in-situ treatment system
until remediation goals are attained

Site 7: Former Fuel Depot



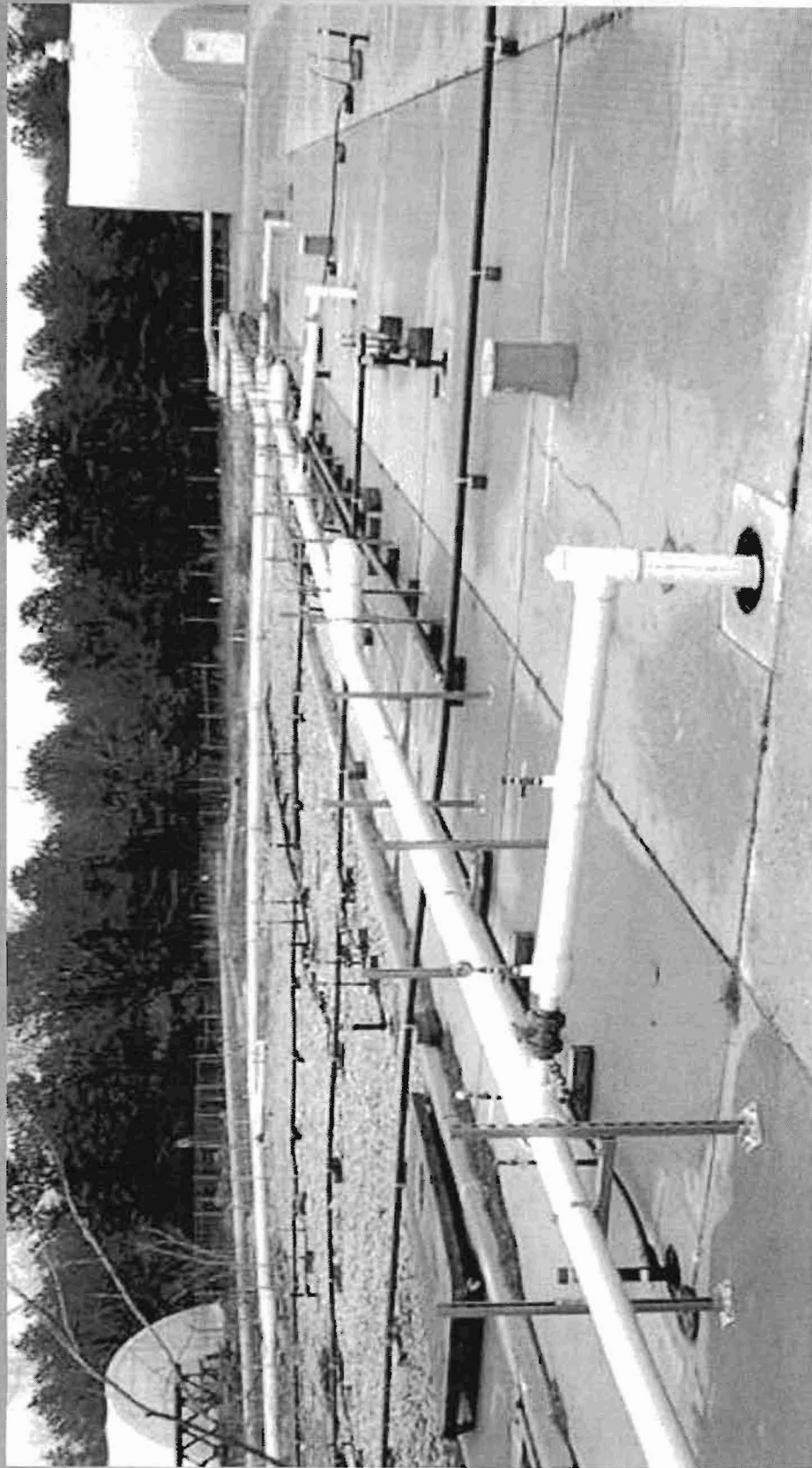
Source: TtEC, Inc.

Area Map

Delivering environmental construction, operations and remediation solutions to industry and government



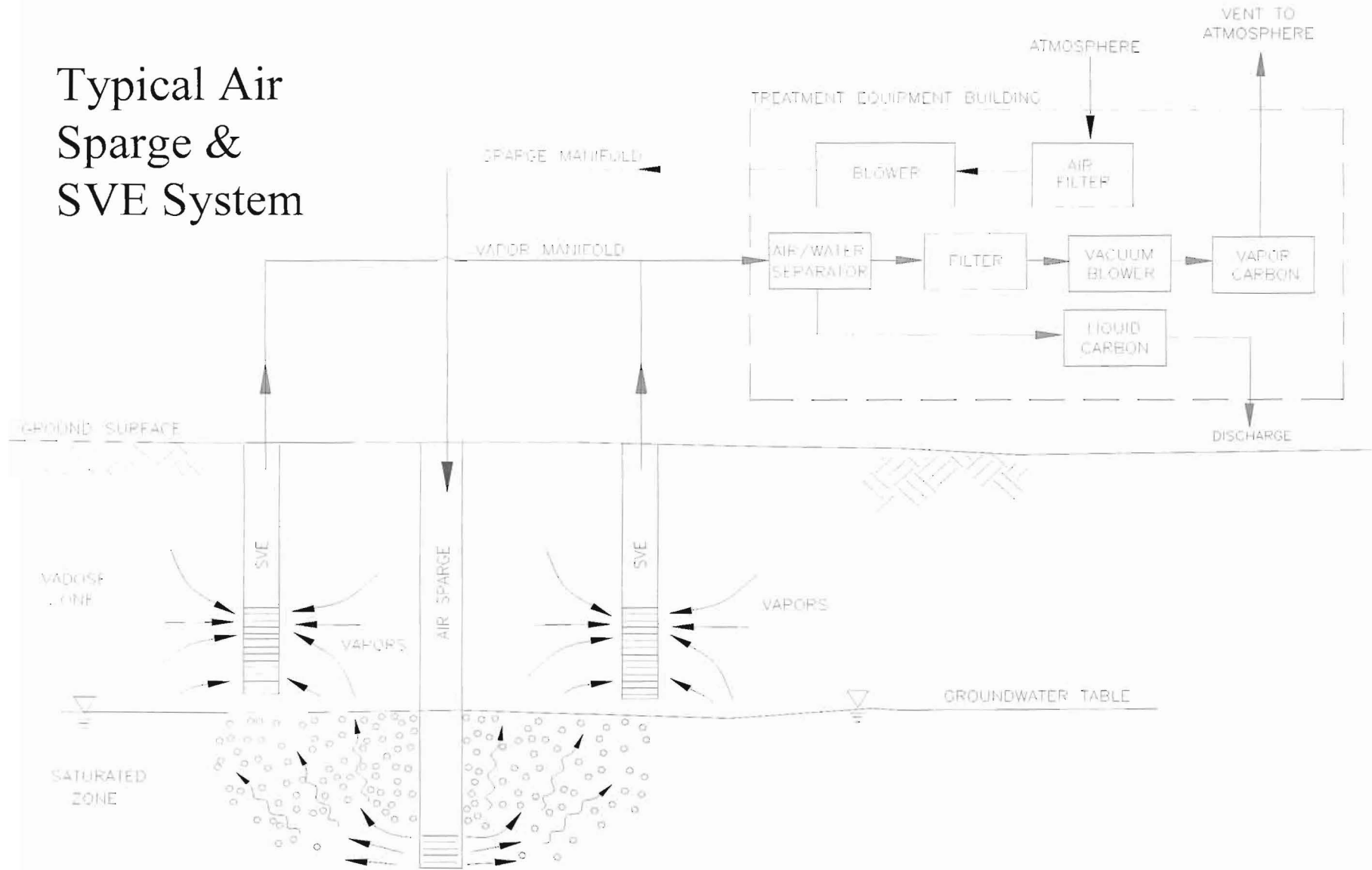
The Site



Delivering environmental construction, operations and remediation solutions to industry and government



Typical Air Sparge & SVE System



Source: TtEC, Inc.

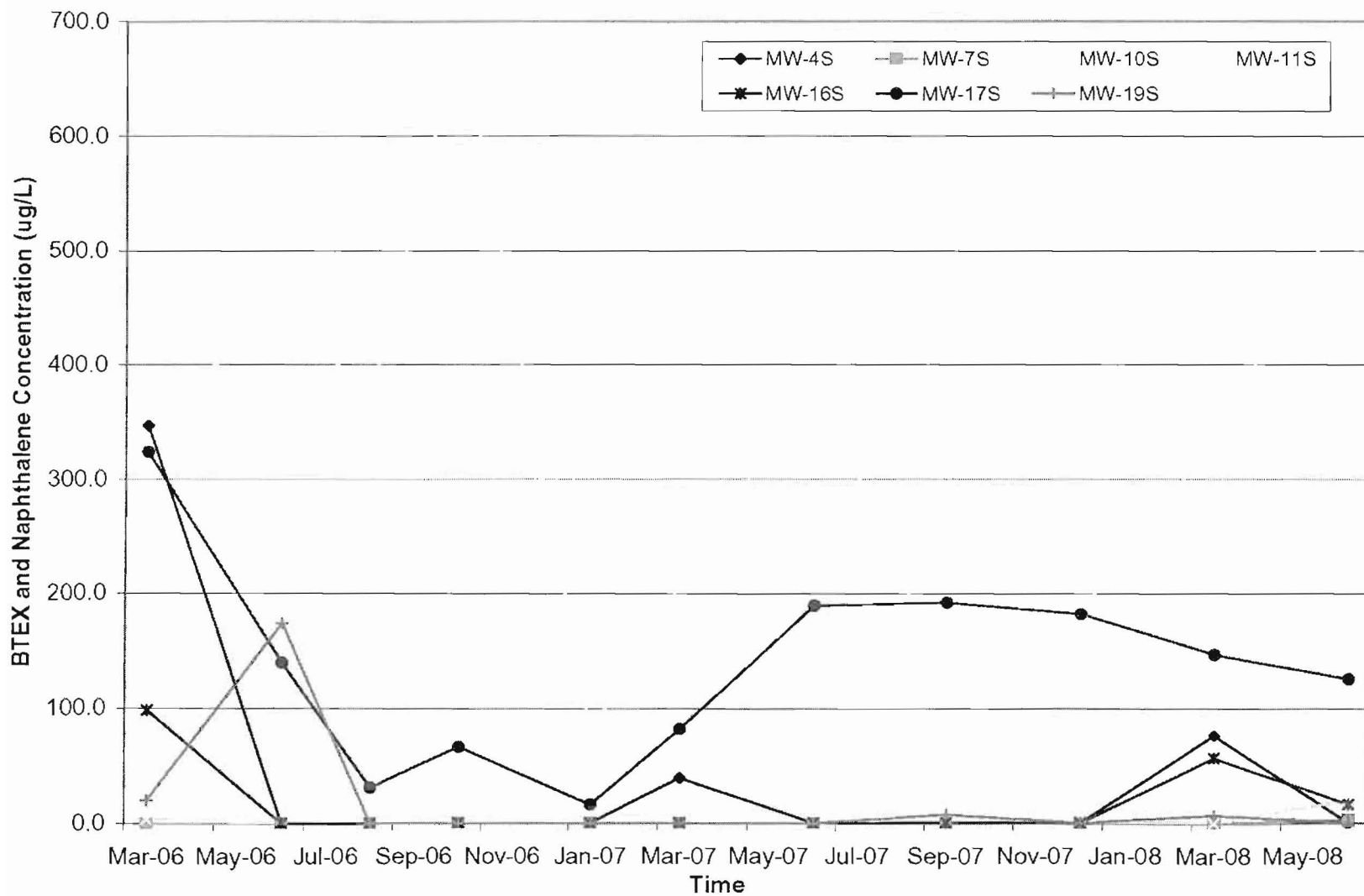
Delivering environmental construction, operations and remediation solutions to industry and government



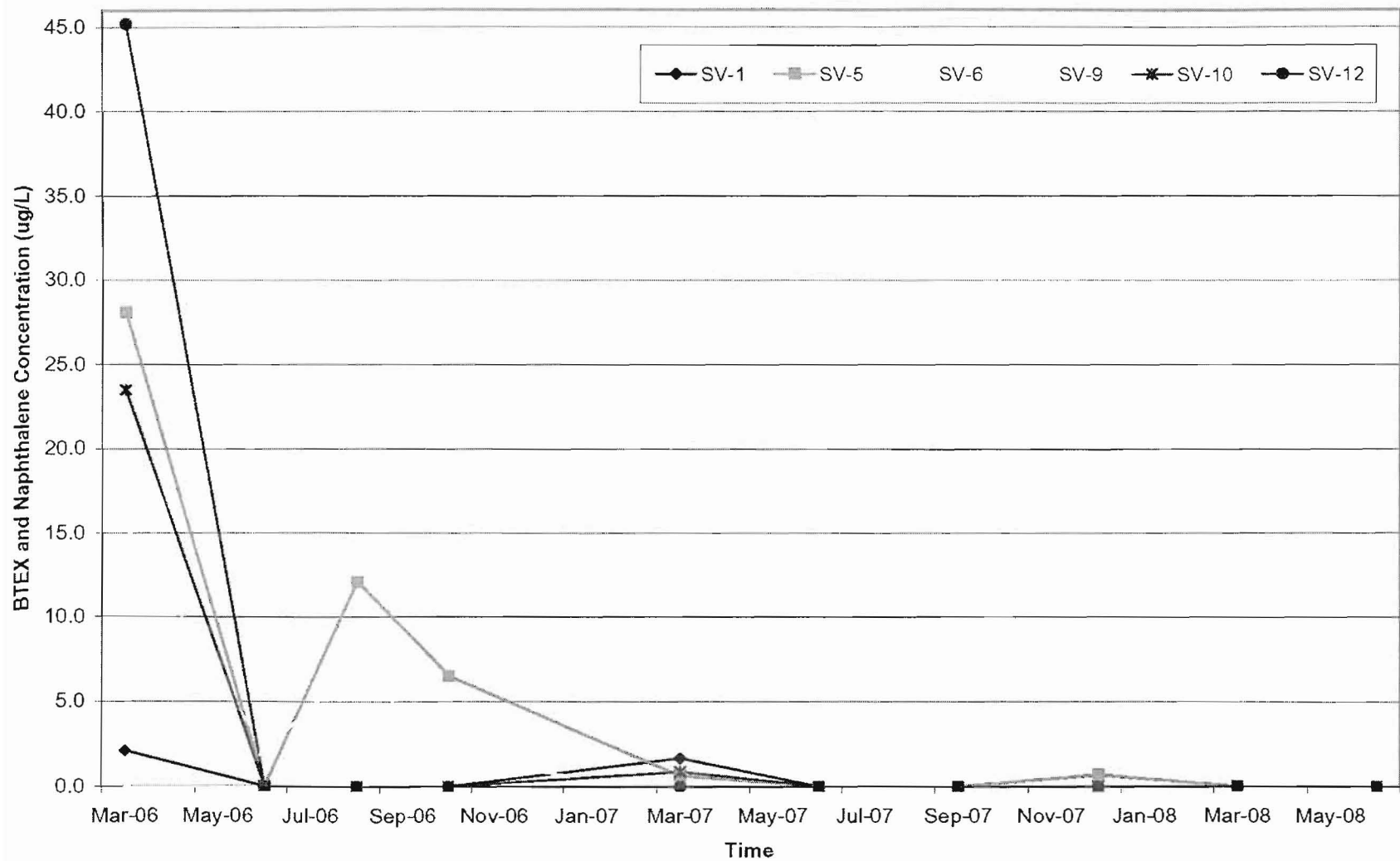
Operational Activities

- System restarted on April 3, 2008 following winter shutdown
- Latest groundwater samples collected June 23-24, 2008
- Groundwater sampling events also planned for September and December
- Performed weekly O&M visits to:
 - Monitor vapor phase carbon adsorbers
 - Obtain instrument measurements
 - Perform general site inspections

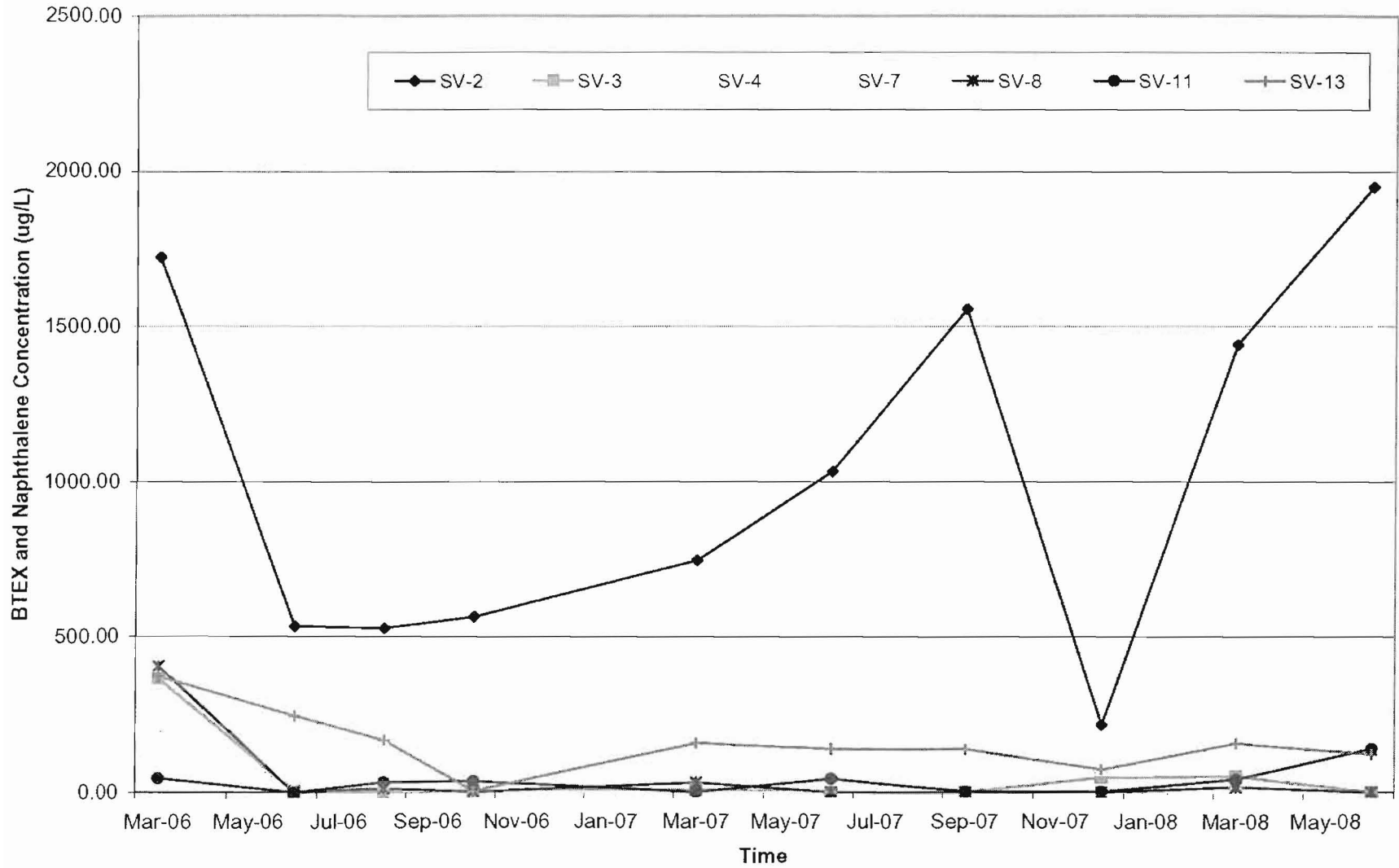
**Groundwater Contaminant Concentrations at Monitoring Well Locations
NWIRP Calverton, NY
June 2008**



Groundwater Contaminant Concentrations at Select SVE Wells
NWIRP Calverton, NY
June 2008



Groundwater Analytical Results at Select SVE Well Locations
NWIRP Calverton, NY
June 2008



Mass Removal

Mass Removal is calculated from:

- the concentration of contaminants in vapor samples collected monthly at a location immediately prior to carbon adsorption.
- The flowrate of the vapor through the adsorbers
- And the operational time of the system for the month.

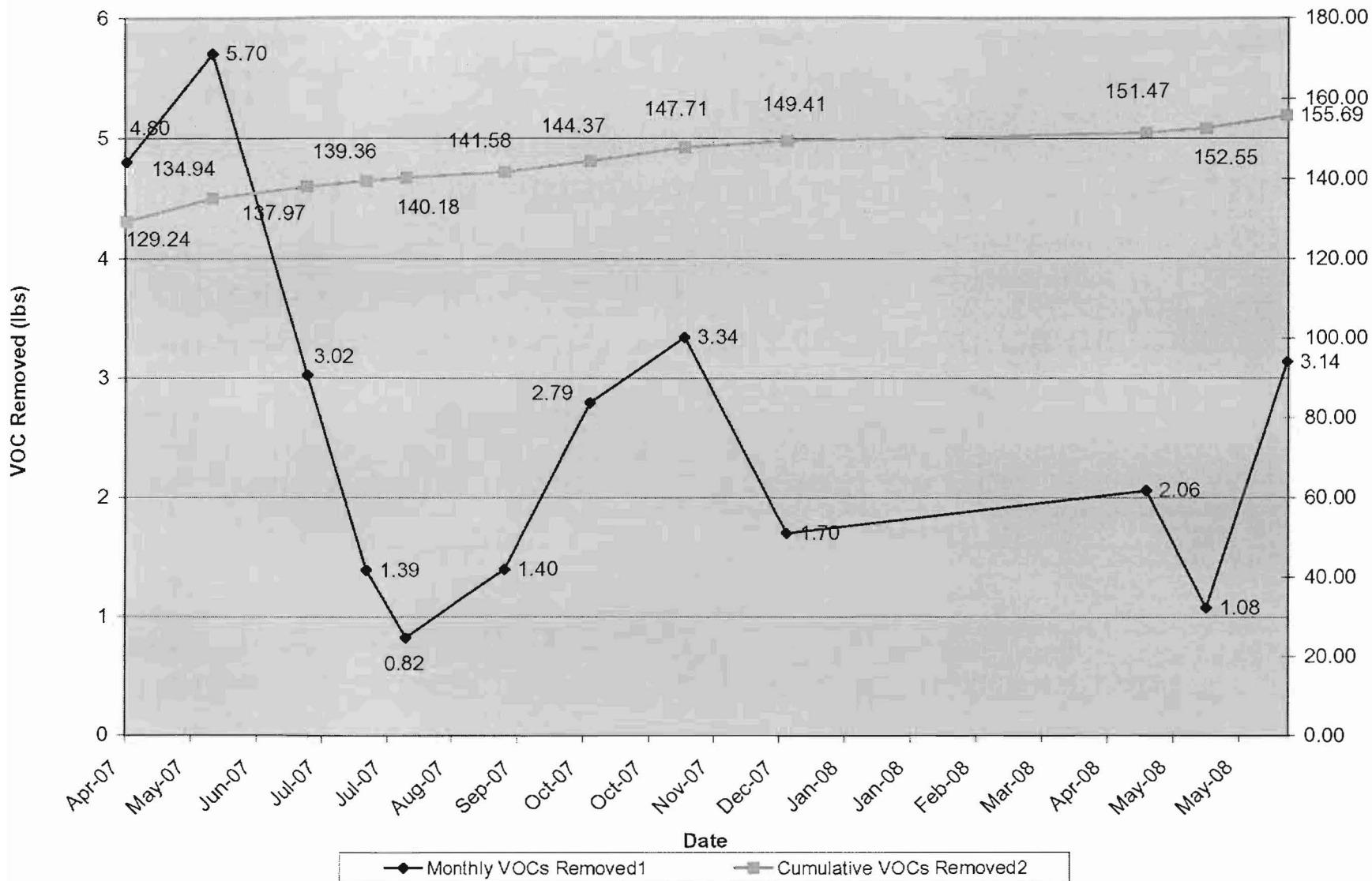
$$\left(\frac{\text{mass}}{\text{volume}}\right) \times \left(\frac{\text{volume}}{\text{time}}\right) \times \text{time} = \text{mass}$$

Concentration Flowrate

Mass Removal Statistics

- The mass removal for April was 2.06 lbs
- The mass removal for May was 2.08 lbs
- The mass removal for June was 3.14 lbs
- Cumulative mass removal since 2008 system start up is 6.3 lbs
- Cumulative mass removal from system start-up is 155.7 lbs

**NWIRP Calverton AS/SVE system
Mass Removal by Soil Vapor Extraction
2007-2008**



Future Activities

- Continue collecting monthly effluent air samples to monitor vapor concentrations
- Collect groundwater samples using GeoProbe[®] system in the areas south and east of SV-2 and SV-4
- Get a better understanding of site contamination and determine if new AS/SVE wells could reduce increasing concentrations in SV-2 and SV-4
- Investigate if contamination may be moving east resulting in increased concentrations in MW-10S

Questions?

Delivering environmental construction, operations and remediation solutions to industry and government

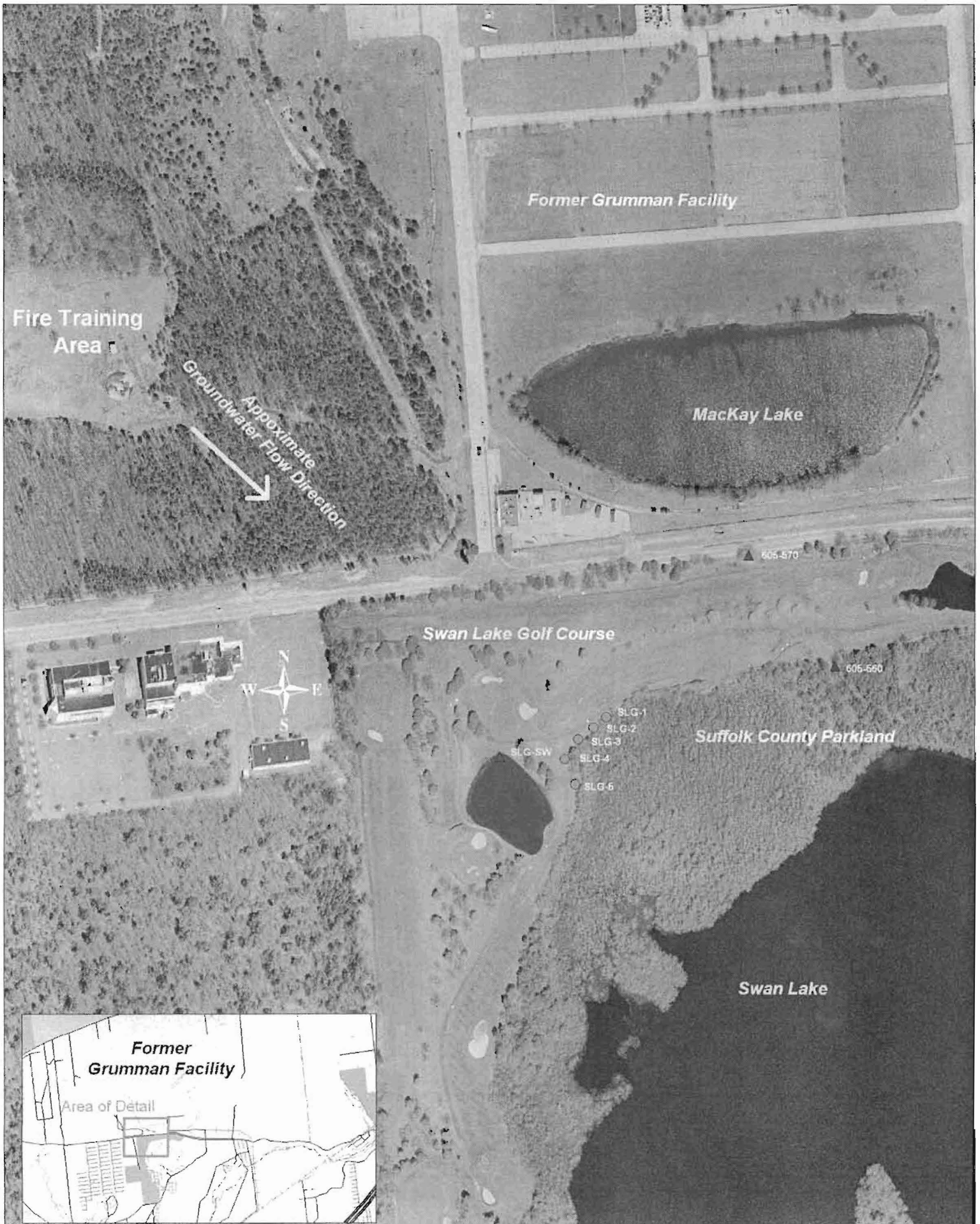


ATTACHMENT 5

SCDHS - PRESENTATION

SCDHS Profile Wells & Surface Water Sample Locations
January - April 2008

In the Vicinity of Site 2-Fire Training Area-Naval Weapons Industrial Reserve Plant (formerly Grumman), Calverton



Suffolk County Department of Health Services
Division of Environmental Quality
Swan Lake Golf Course Detected VOC Sample Results

DRAFT

Monitoring Well ID & Sampling Interval (feet below grade)	Location	Sample Type	Sample Date	Carbon disulfide	Chloroform	Trichloroethene	Chloroethane	Vinyl chloride	1,1 Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichlorobenzene (o)	1,4-Dichlorobenzene (p)	tert-Butylbenzene	sec-Butylbenzene	Tetrachloroethene
				ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
SL/G-1 (15-20)	Swan Lake Golf Course	Groundwater	1/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-1 (25-30)	Swan Lake Golf Course	Groundwater	1/31/2008	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-1 (35-40)	Swan Lake Golf Course	Groundwater	1/31/2008	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (20-25)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (30-35)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (40-45)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (50-55)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-2 (60-65)	Swan Lake Golf Course	Groundwater	3/31/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-3 (10-15)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-3 (20-25)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-3 (30-35)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	0.6	0.5	7.1	1.2	3	1	0.7	2.4	<0.5
SL/G-3 (40-45)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (10-15)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (20-25)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (30-35)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7
SL/G-4 (40-45)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (50-55)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-4 (60-65)	Swan Lake Golf Course	Groundwater	4/7/2008	<0.5	0.6	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (10-15)	Swan Lake Golf Course	Groundwater	4/8/2008	1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (20-25)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (30-35)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	0.7	24	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (40-45)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	<0.5	2.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (50-55)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SL/G-5 (60-65)	Swan Lake Golf Course	Groundwater	4/8/2008	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SLG-SW	Swan Lake Golf Course	Surface Water	3/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
605-570	Swan Lake Golf Course	Surface Water	4/9/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
605-560	Swan Lake Golf Course	Surface Water	4/9/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Drinking water Maximum Contaminant Level of 5 ug/l exceeded

ug/l = micrograms per liter or parts per billion (ppb)

DRAFT
Approximate SCDHS Profile Well Locations
2008



Suffolk County Department of Health Services
Profile Well Data
Grumman Blvd, Calverton
2008

Well Information			Detected VOC's																	
Well ID	Screen Interval (ft below grade)	Sample Date	1,1-Dichloroethene	1,2,4-Trichlorobenzene	Chloroethane	1,2,3-Trichlorobenzene	1,1-Dichloroethane	1,1,1-Trichloroethane	Trichloroethene	Vinyl chloride	1,2-Dichloroethane	Benzene	Isopropylbenzene	tert-Butylbenzene	sec-Butylbenzene	Carbon disulfide	1,2-Dichlorobenzene (o)	1,3-Dichlorobenzene (m)	1,4-Dichlorobenzene (p)	
GB-13	15-20	6/23/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-30	6/12/2008	<0.5	<0.5	<0.5	<0.5	2.4	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
	35-40	6/12/2008	16	1.4	11	<0.5	214	57	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7
GB-14	45-50	6/12/2008	19	0.7	5.9	<0.5	188	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
	15-20	6/24/2008	<0.5	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-30	6/23/2008	0.6	<0.5	<0.5	<0.5	3.3	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	<0.5	<0.5	<0.5	<0.5
GB-15	35-40	6/23/2008	36	3.4	25	1	470	115	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	1	<0.5	0.8	<0.5	1.3	<0.5
	15-20	6/24/2008	0.6	<0.5	<0.5	<0.5	4.7	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-30	6/24/2008	0.6	<0.5	<0.5	<0.5	4.4	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
GB-16	35-40	6/24/2008	46	4.1	33	1.2	644	184	0.5	2.9	0.7	1.2	<0.5	0.5	1.5	<0.5	1.4	0.5	2.2	<0.5
	45-50	6/16/2008	3.1	<0.5	1.3	<0.5	53	3.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	15-20	6/30/2008	<0.5	<0.5	<0.5	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GB-17	25-30	6/30/2008	<0.5	<0.5	<0.5	<0.5	2.8	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
	35-40	6/30/2008	30	3	16	0.8	355	94	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	0.8	<0.5	0.8	<0.5	1.3	<0.5
	45-50	6/24/2008	20	1	12	<0.5	330	72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
GB-18	5-10	6/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	15-20	6/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-30	6/24/2008	0.8	<0.5	<0.5	<0.5	9.2	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
GB-19	35-40	6/24/2008	29	2.5	12	0.7	405	99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.9	<0.5
	45-50	6/24/2008	1.3	<0.5	<0.5	<0.5	22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	15-20	6/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GB-20	25-30	6/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	35-40	6/25/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	45-50	6/25/2008	<0.5	0.5	0.6	<0.5	39	<0.5	<0.5	<0.5	7.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GB-21	15-20	7/1/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-30	7/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	35-40	7/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GB-22	45-50	7/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	15-20	6/26/2008	<0.5	<0.5	<0.5	<0.5	1.3	<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
	25-30	6/26/2008	<0.5	<0.5	<0.5	<0.5	1.3	<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
GB-23	35-40	6/26/2008	<0.5	<0.5	<0.5	<0.5	1.3	1.0	<0.5	<0.5	6.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	45-50	6/26/2008	4.3	<0.5	5.7	<0.5	69	21	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5
	15-20	7/1/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GB-24	25-30	7/1/2008	<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
	35-40	7/1/2008	<0.5	<0.5	<0.5	<0.5	1.2	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
	45-50	6/30/2008	<0.5	<0.5	<0.5	<0.5	2.6	<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
GB-24	5-10	7/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	15-20	7/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	25-30	7/2/2008	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
GB-24	35-40	7/2/2008	1.8	<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	<0.5	<0.5	<0.5
	45-50	7/1/2008	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

Note: Units = ug/l
P = Samples Pending
NA = No Sample