EarthTech
A tyco International Ltd. Company

10 Patewood Drive
Bldg. VI, Suite 500
Greenville, SC 29615

P 864.234.3000
F 864.234.3069
www.earthtech.com

July 3, 2007

Ms. Linda Ross, CPG
New York State Department of Environmental Conservation, Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

RE: Second Quarter 2007 Groundwater Monitoring Report
April 2007 Sampling Event
Former Scott Aviation Facility
Lancaster, New York
NYSDEC Site Code No. 9-15-149

Dear Ms. Ross:

Earth Tech, Inc. is pleased to provide the Second Quarter 2007 Quarterly Groundwater Monitoring Report for the former Scott Aviation Facility located in Lancaster, New York (Figure 1). Quarterly groundwater monitoring activities have been performed in accordance with the New York State Department of Environmental Conservation (NYSDEC), Administrative Order on Consent (AOC), Index No. B9-0377095-05, for the former Scott Aviation property (formerly Figgie International), NYSDEC Site Code No. 9-15-149. This report has been developed in accordance with the *New York State Department of Environmental Conservation, Division of Environmental Remediation, Draft DER-10 Technical Guidance for Site Investigation and Remediation,* dated December 2002.

Groundwater samples were collected from select monitoring wells in fulfillment of the site AOC groundwater monitoring requirements. A new monitoring schedule was implemented based on Table 10 presented in the *Remedial Action Engineering Report (July 20, 2005 through July 20, 2006),* dated November 2006, and the wells sampled during this groundwater event reflected this new schedule. Additionally, vapor samples were collected as part of the April 2007 sampling event from the remediation system's air discharge sampling ports to ensure that the treated system effluent was in compliance with NYSDEC discharge guidance criteria. Included in this report are a description of the project background, groundwater and air monitoring activities, operation and maintenance (O&M) activities for the Dual Phase Extraction (DPE) system, and a summary of groundwater quality and treated vapor effluent results.

Project Background

Scott Aviation, Inc. was sold to Zodiac Acquisitions Corporation, and the facility is now occupied by AVOX Systems Inc. Responsibility for the groundwater remediation system located at 25 Walter Winter Drive, west of AVOX Plant No. 2, was retained by Scott Technologies, Inc., the former parent company of Scott Aviation, Inc. Scott Technologies has retained the services of Earth Tech for the ongoing operation and maintenance (O&M) of the DPE remediation system and groundwater monitoring activities.

Earth Tech conducted a site investigation during February 2003 in fulfillment of the document "Site Investigation Work Plan," dated December 31, 2002, approved by NYSDEC on January 15, 2003. A comprehensive Site Investigation Completion Report (SICR) was submitted to NYSDEC on June 30, 2003; the report was approved by NYSDEC in August 2003. At the request of NYSDEC, Earth Tech prepared a

Remedial Design Work Plan (RDWP) to complete the additional remedial work recommended in the SICR. The RDWP was submitted on November 21, 2003, and was approved by NYSDEC on January 5, 2004.

Per the approved RDWP, a DPE remediation system was installed during the period of February 2004 through May 2004, and the DPE system was initially started on May 14, 2004. The DPE system was combined with a preexisting groundwater collection trench (GWCT) system. The objectives for this combined remediation system (collectively known as the DPE system) include: 1) maintaining hydraulic capture of groundwater containing dissolved volatile organic compounds (VOCs) along the western property boundary; 2) inducing a depression in the water table surface and reversing the groundwater flow direction along the western property boundary; and 3) reducing VOC concentrations in perched groundwater and soil. Figure 2 depicts the location of groundwater monitoring wells, the DPE recovery wells and system piping, the enclosed DPE system trailer, and the preexisting GWCT and treatment building. Figure 3 shows the process and instrumentation diagram for the combined remediation system.

At the conclusion of the initial one-year O&M period (June 2004 to July 2005), a Remedial Action Engineering Report (RAER) was prepared to summarize the system design, system start-up, O&M activities, quarterly monitoring data, as well as provide recommendations for continued system operation, system optimization, sampling frequency, and O&M. The 2005 RAER was submitted to the NYSDEC on November 11, 2005. In a letter dated December 13, 2005, the NYSDEC accepted the 2005 RAER and requested the addition of monitoring wells MW-4, MW-8R, and MW-16S to the quarterly sampling schedule.

The second year of remediation system operation was summarized in the RAER (July 20, 2005 through July 20, 2006) and was submitted to the NYSDEC in November 2006. The format of this report was similar to the initial RAER prepared for the site. In this report, ten monitoring wells were identified to be sampled during the next year of quarterly groundwater monitoring (October 2006, January 2007, April 2007, and July 2007). The next comprehensive monitoring event is scheduled for October 2007; the third RAER will be generated upon completion.

Quarterly Groundwater Monitoring Activities – April 2007

Earth Tech personnel collected quarterly groundwater samples on April 16-17, 2007, in accordance with the procedures outlined in the NYSDEC-approved RDWP. Monitoring wells sampled in April 2007 included MW-2, MW-3, MW-4, MW-6, MW-8R, MW-10, MW-11, MW-12, MW-13S, and MW-16S (Figure 2). Field forms generated during this sampling event are provided in Appendix A. Groundwater samples were analyzed for VOCs by United States Environmental Protection Agency (EPA) SW-846 Method 8260B by Severn Trent Laboratories, Inc. (STL) located in Amherst, New York.

Prior to the collection of groundwater samples, a complete round of groundwater levels were measured in all site wells, piezometers, and groundwater collection trench manhole. Table 1 provides a summary of groundwater elevations measured on April 16, 2007. A summary of groundwater levels and corresponding elevations and hydrographs for each monitoring well and nested piezometer pair are provided in Appendix B. Monitoring wells MW-2, MW-3, MW-6, MW-8R, MW-9, MW-10, MW-11, and MW-12 are screened across both the shallow and deep groundwater zones. The nested piezometer pairs (MW-13S/D, MW-14S/D, MW-15S/D, and MW-16S/D) are discretely screened with one piezometer screened in the shallow overburden groundwater zone (S designation) and one piezometer screened in the deep overburden groundwater zone (D

designation). Figure 4 provides the groundwater surface contours and corresponding flow direction using monitoring well and deep piezometer water level data.

Groundwater elevations measured on April 16, 2007 ranged from 665.69 at MW-14D to 686.14 feet above mean sea level (AMSL) at MW-15S. Based on the April 2007 water level measurements, the groundwater surface beneath the site continues to exhibit a radial pattern of hydraulic depression, and groundwater flows inward towards the operating DPE recovery wells and the GWCT. As Figure 4 illustrates, there is a depression in the water table surface that centers in the vicinity of extraction well DPE-2. The DPE system continues to induce groundwater flow reversal along the western property boundary. This reversal in groundwater flow provides sustained hydraulic capture of VOCs present in the overburden groundwater that may otherwise migrate off-site.

Groundwater Quality Results – April 2007

Table 2 summarizes the detected VOCs in groundwater samples collected in April 2007. Trend plots illustrating concentrations of trichloroethane (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), vinyl chloride (VC), 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), and chloroethane are provided in Appendix C. The table below summarizes VOCs detected above their detection limits, their respective concentration ranges, the number of detections, and the number of those detections that exceeded the Site-specific Remedial Action Objectives (RAOs) or the New York Code of Rules and Regulations (NYCRR), Title 6, Part 702.15(a)(2) and 703.5. Note that in some cases the detection limits for certain VOCs were set above their respective RAO's due to dilution factors and foaming of the samples (refer to Appendix D for laboratory technical guidance document concerning "foaming."

Groundwater Quality Results
April 2007

VOCs Detected in Groundwater	Concentration Range (µg/L)	Number of Detections	Remedial Action Objective/NYCRR Exceedances
Chloroethane	22 – 1,800	4	4
Benzene	2.2 - 33	2	2
1,1-Dichloroethane	3.4 – 1,500	4	3
1,1-Dichloroethene	27 - 52	2	2
cis-1,2-Dichloroethene	9.8 – 36,000	5	5
Methylene chloride	2.1 - 110	6	3
Trichloroethene	0.89 – 94,000	5	4
Vinyl chloride	4.1 – 3,300	5	4

Eight VOCs were detected in groundwater above their associated detection limit during the monitoring period. All eight VOCs detected exceeded either the Site-specific RAOs for groundwater or the NYCRR criteria. The most prevalent compounds detected in groundwater included TCE, methylene chloride, cis-1,2-DCE, and VC. The occurrence of these compounds is primarily in the vicinity of the former on-site source

area, and VOC concentrations decrease significantly in the vicinity of the perimeter monitoring wells. Methylene chloride is a common laboratory contaminant.

The presence and distribution of TCE daughter products (cis-1,2-DCE, VC, and chloroethane) and 1,1,1-TCA (1,1-DCA and chloroethane) provides supportive evidence that the attenuation of TCE and 1,1,1-TCA and its daughter products via reductive dechlorination continues to occur naturally at the site. The occurrence of these daughter products appears to be directly related to the distribution of TCE in the subsurface. A limited number of other VOCs detected in overburden groundwater (1,1-TCA, 1,1-DCE, and benzene) were detected sporadically at random locations with no observed spatial distribution trends.

VOC concentrations in groundwater continue to degrade as a result of naturally occurring reductive dechlorination processes. Additionally, VOCs in soil vapor and groundwater are also decreasing as a result of extraction and treatment through the DPE system. A comparison of groundwater quality results for TCE for the monitoring wells and piezometers sampled during the monitoring period is provided below.

Summary of TCE Concentrations in Groundwater
October 2004 through April 2007

Well ID	TCE Concentration (µg/L)											Percent TCE Reduction from Jan 2007
	Oct 2004	Jan 2005	April 2005	July 2005	Oct 2005	Jan 2006	April 2006	July 2006	Oct 2006	Jan 2007	April 2007	
MW-2	NS	NS	<10	NS	NS	< 25	< 25	< 25	< 5	< 5	< 20	Not Detected
MW-3	NS	NS	<10	NS	NS	< 25	< 25	< 25	< 5	< 5	< 20	Not Detected
MW-4	8,100	20,000	NS	NS	NS	6,500	3,200	2,400	2,600	2,800	4,900	Increase
MW-6	< 10	< 10	< 10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	Not Detected
MW-8R	35,000	23,000	15,000	9,200	13,000	42,000	14,000	16,000	13,000	1,600	19,000	Increase
MW-10	NS	NS	<10	NS	NS	< 5	<5	< 5	< 5	< 5	< 5	Not Detected
MW-11	NS	NS	<10	NS	NS	2.2	<20	< 20	6.8	2.6	0.89	66
MW-12	13	< 10	< 10	< 5	< 5	<25	< 25	< 25	NS	< 5	< 20	Not Detected
MW-13S	2,100	10,000	760	760	410	NS	NS	17,000	1,300	1,500	4,400	Increase
MW-16S	200,000	420,00	400,000	480,000	440,000	470,000	260,000	310,000	77,000	44,000	94,000	Increase

Notes:

1) Shading indicates a comprehensive (i.e., all site monitoring wells sampled) groundwater sampling event.

2) NS – Not sampled.

During this quarterly groundwater monitoring period, TCE was not detected above its RAO in site perimeter monitoring wells MW-2, MW-3, MW-6, MW-10, MW-11, and MW-12.

A slight decrease in the concentration of TCE detected in MW-11, which is located outside of the existing site groundwater plume, was observed when compared to the results from the previous sampling event

conducted in January 2007. An increase in TCE from the previous sampling event conducted in January 2007 was observed at MW-4, MW-8R, MW-13S, and MW-16S; however, the results were within the range of historical detections for these wells. Concentrations of TCE in these four wells likely increased from the previous quarter due to decreased water levels observed during the April 2007 sampling event. A review of the groundwater elevations for these wells, as provided in Appendix B, indicates a significant increase in the water elevations measured in January 2007. As a result, dilution in the concentration of TCE in these four wells was likely to have occurred in January 2007. Based on the results of the April 2007 groundwater sampling event, it appears that the combined DPE and GWCT treatment system continues to prevent the migration of high concentrations of TCE off-site.

An electronic copy of the analytical laboratory data is provided as Appendix E on a compact disc (CD). A complete hard copy of the analytical data report is on file in Earth Tech's Greenville, South Carolina and Amherst, New York offices, and it can be made available upon request.

Quarterly DPE System Vapor Effluent Air Monitoring Activities – April 2007

Earth Tech personnel collected vapor effluent samples from the DPE system air discharge stacks on April 16, 2007. The first sample was obtained from the vapor effluent discharge for the DPE system, which is treated in series by two 500-pound granulated activated carbon vessels. The second sample was obtained from the air stripper (AS) discharge. Figure 3 shows the locations of the sample ports. Summa canisters were used to collect air samples from permanent sample ports located on the two system air stacks. Air samples were analyzed for VOCs by Method TO-14A by STL Laboratories, Inc. located in Burlington, Vermont.

DPE System Effluent Air Monitoring Results – April 2007

The system vapor effluent results are summarized in Table 3, and an electronic copy of the analytical laboratory data package is provided on the enclosed CD in Appendix E (complete hard copy available in Earth Tech's Greenville, South Carolina and Amherst, New York offices). Three VOCs were detected in the GAC effluent and twelve VOCs were detected in the AS effluent. The total VOC discharge in the GAC effluent was 31 micrograms per cubic meter ($\mu g/m^3$) and 100 $\mu g/m^3$ in the AS effluent. The calculated VOC discharge-loading rate for the entire DPE system was 0.0001 pounds per hour (lb/hr), which is significantly below the NYSDEC discharge guidance value of 0.5 lb/hr.

Based on historical GAC effluent results for the DPE system, the calculated VOC discharge loading rate of 0.0001 lb/hr was extremely low. Upon further investigation, it was determined that a pipe leading to the GAC units had cracked due to inclement weather. This had caused ambient air to be drawn into the system prior to the GAC units. The GAC effluent sample was collected before this crack in the piping was noticed. It is likely that the low VOC discharge result was caused by dilution with ambient air. The cracked pipe has subsequently been repaired.

Dual Phase Extraction System Operation and Maintenance

Earth Tech monitored system performance, conducted routine O&M, and responded to system alarms and periodic breakdown of the DPE System. O&M activities performed during February 2007, March 2007, and April 2007 included the following:

- Performed preventative maintenance activities such as replacing air filters and bag filters and monitoring the oil level in the liquid ring pump (LRP);
- On February 8, 2007, the DPE system, groundwater collection trench pump, and air stripper were observed down. A detailed inspection of the systems concluded that the air stripper blower motor had failed (note if the air stripper goes down, the DPE system and GWCT pump stop automatically);
- On March 5, 2007, the AS blower motor was replaced and the groundwater collection trench and DPE system were restarted. After the system was restated, an inspection of the DPE components revealed that the knockout tank pump housing was cracked due to prior freeze event. The DPE system was turned off until the pump housing was replaced (the groundwater collection trench / AS remained on);
- On March 20, 2007, the knockout tank pump was replaced (originally, only the housing was scheduled for replacement, but due to the long wait time for the part to be shipped and the need to get the DPE system up and running as soon as possible, a new pump was ordered). Also during this service event, the DPE and AS totalizers were cleaned and two DPE drop tube assembles were repaired. The DPE system was then successfully restarted;
- After the March 20, 2007 DPE system repair, the system had turned off twice due to LRP low vacuum alarm (March 22, 2007 and March 23, 2007). The system was restarted on both occasions. On March 23, 2007, the system was successfully restarted after the DPE totalizer was re-cleaned and knockout tank pump influent valve and bag filter inlet/outlet valves were adjusted;
- On March 28, 2007, the DPE system was observed to be not running. Earth Tech restarted the DPE system, and it ran continuously throughout the remainder of this reporting period; and
- On April 16, 2007, Earth Tech performed the Second Quarter 2007 Erie County/Buffalo Pollution Discharge Elimination System (EC/BPDES) sampling event.

With the exception of the breakdown periods noted above, the DPE system ran continuously during the monitoring period. Based on a system operational period from January 26, 2007 through April 16, 2007, the total DPE system runtime was only approximately 40 percent. This runtime percentage was derived from the LRP run timer divided by the monitoring time period. During this operational period, the DPE system collected 41,442 gallons of groundwater at an average flow rate of 0.36 gallons per minute (gpm). The GWCT collected 192,698 gallons of groundwater at an average flow rate of 1.68 gpm. Therefore, the total volume of groundwater treated and discharged to the sanitary sewer by the AS was 234,140 gallons at a combined average flow rate of 2.04 gpm.

Summary

The DPE system continues to extract groundwater and soil vapors from recovery wells DPE-2, DPE-3, DPE-4, DPE-7, and DPE-8. Recovery wells DPE-1, DPE-5, and DPE-6 remain out of operation due to the high amounts of lime historically recovered by these wells that led to continuous fouling of DPE recovery system piping and components. The high quantity of lime recovered by these three wells was the direct result of historical site soil remediation activities that mixed excavated soil with lime prior to backfilling in the vicinity of these extraction wells. Preliminary investigation will begin into potential ways of bringing these three wells back on-line in the future.

During the April 2007 groundwater sampling event, TCE was not detected above its RAO in site perimeter monitoring wells MW-2, MW-3, MW-6, MW-10, MW-11, and MW-12. TCE concentration decreased slightly in monitoring well MW-11. The concentration of TCE increased in monitoring wells MW-4, MW-8R, MW-13S, and MW-16S; however, the concentrations were within the historical range of detections for these wells. The increase in TCE observed in these four wells is at least partially attributed to decreasing water levels noted in these wells in April 2007. A comparison to the water levels measured at these same wells during the previous quarterly groundwater sampling event conducted in January 2007 shows significantly higher water levels in January. These higher water levels likely caused more diluted concentrations of TCE to be measured at these wells during the January 2007 groundwater sampling event.

Based on the results of the April 2007 sampling event, the combined DPE and GWCT system continues to maintain hydraulic capture of the overburden groundwater. In addition, the system continues to make progress towards the reduction of the concentration of VOCs present in site soil and groundwater. Vapor emissions produced by the combined system during the quarter continue to remain below the NYSDEC discharge guidance value of 0.5 lb/hr.

If you have any questions regarding this submission, please do not hesitate to contact me at (864) 234-3053 or by email at timothy.renn@earthtech.com.

Sincerely,

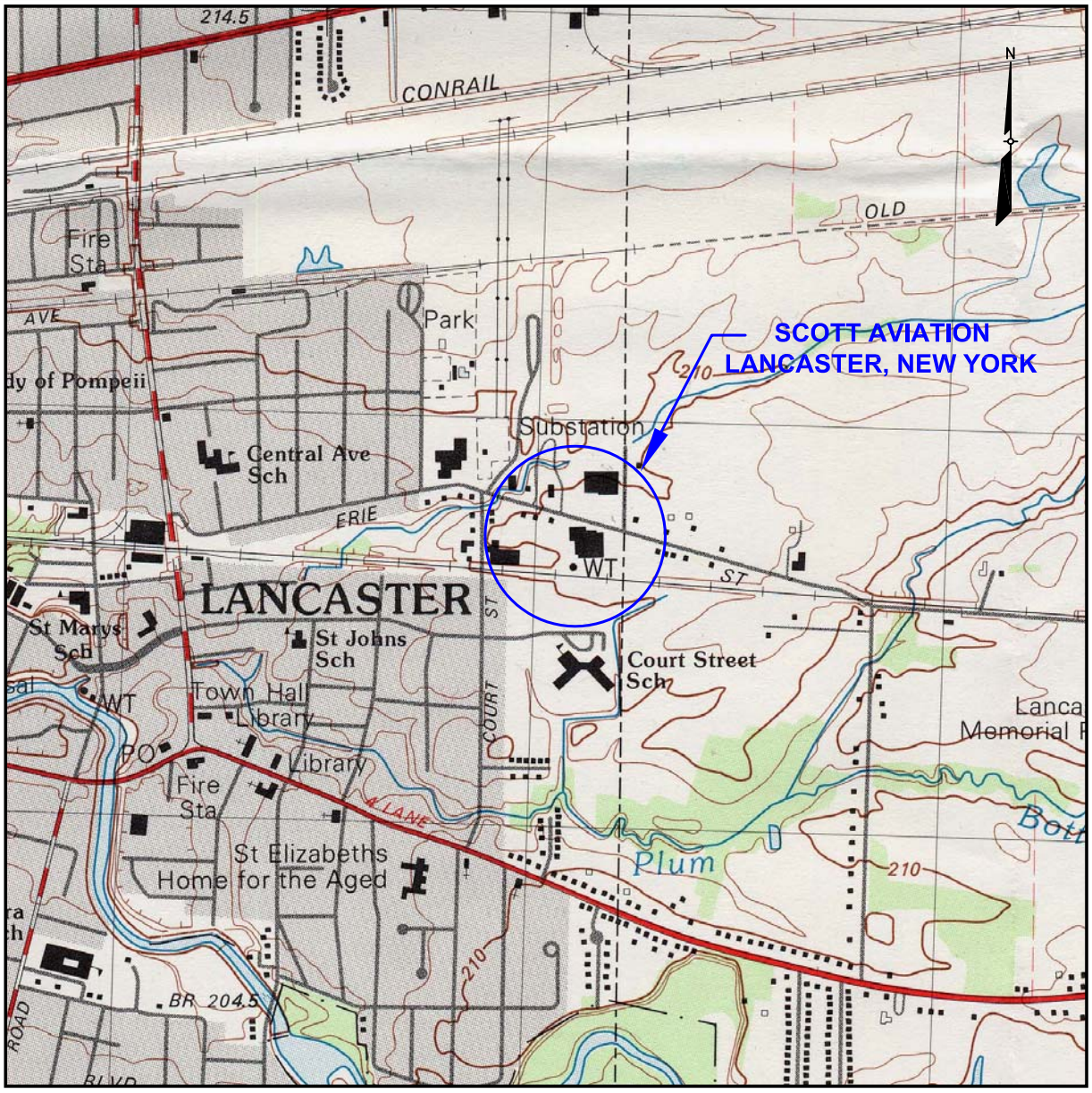
Earth Tech, Inc.

Timothy S. Renn, P.E.
Project Manager

\Enclosures

cc: Matt Forcucci, NYSDOH – Western Regional Office
Bill Saskowski, Avox Systems, Inc.
John Perkins, Tyco Safety Products
Dino Zack, Earth Tech
Project File 71149
Facility File

FIGURES



SOURCE:
1982 GEOLOGIC SURVEY 7.5 X 15 MINUTE TOPOGRAPHIC QUADRANGLE
LANCASTER, NEW YORK

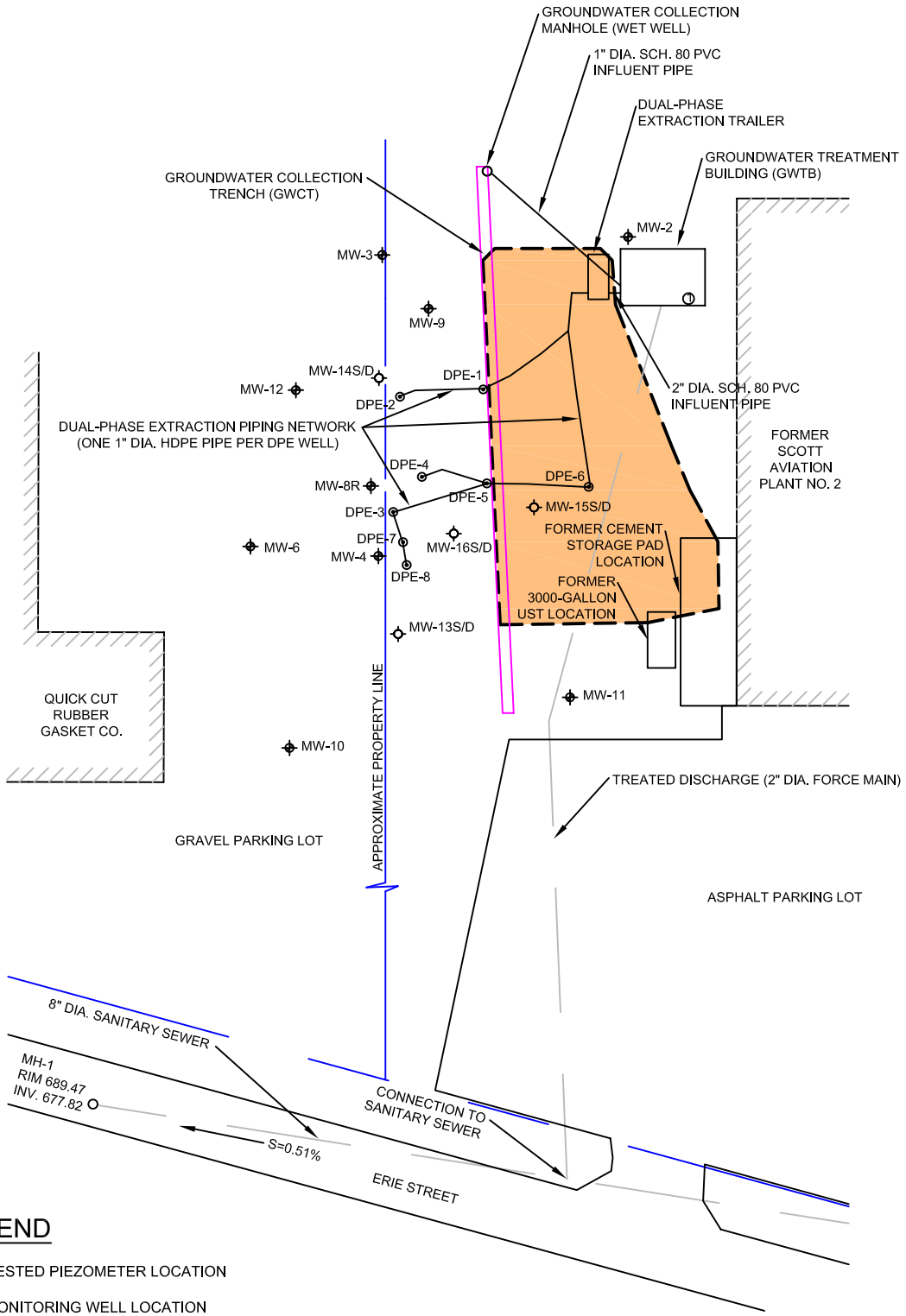
0 1000 2000
SCALE IN FEET

EarthTech
A tyco International Ltd. Company

FIGURE 1
SITE LOCATION MAP

FORMER SCOTT AVIATION FACILITY
LANCASTER, NEW YORK

L:\work\71149\CADD\71149_000 Site Loc Map.dwg, 11/28/2005 1:32:28 PM, robert.stubblefield



LEGEND

- MW-13S/D — NESTED PIEZOMETER LOCATION
- MW-6 — MONITORING WELL LOCATION
- DPE-8 — DUAL-PHASE EXTRACTION WELL LOCATION
- APPROXIMATE LIMIT OF FORMER EXCAVATION
- APPROXIMATE PROPERTY BOUNDARY
- GROUNDWATER COLLECTION TRENCH (GWCT)
- SANITARY SEWER

0 30 60

SCALE IN FEET

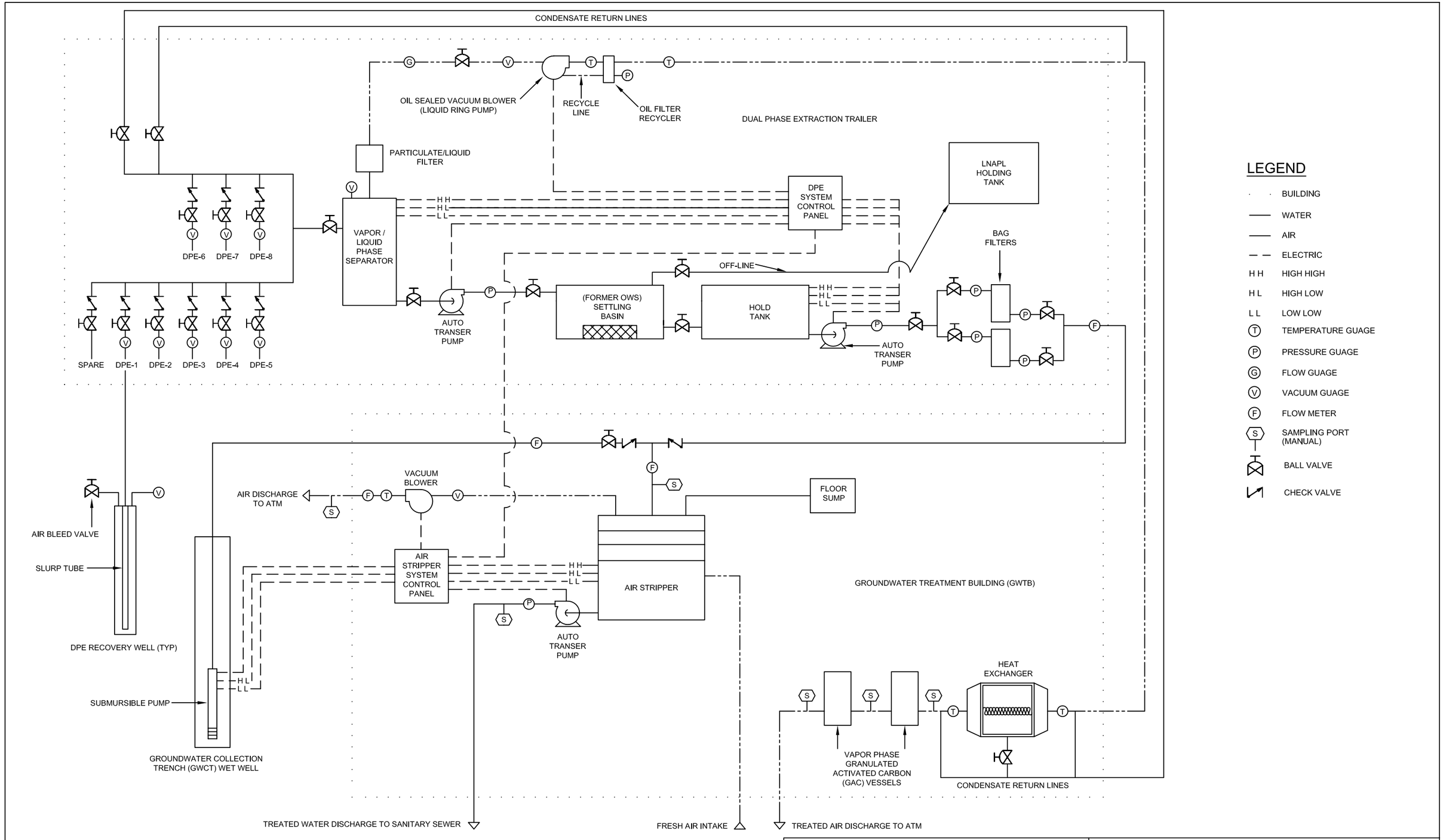
EarthTech

A tyco International Ltd. Company

FIGURE 2
SITE FEATURES MAP

FORMER SCOTT AVIATION FACILITY
LANCASTER, NEW YORK

L:\work\71149\CADD\71149_001 Site Plan July 2005.dwg, 11/28/2005 1:33:47 PM, robert.stubblefield



LEGEND

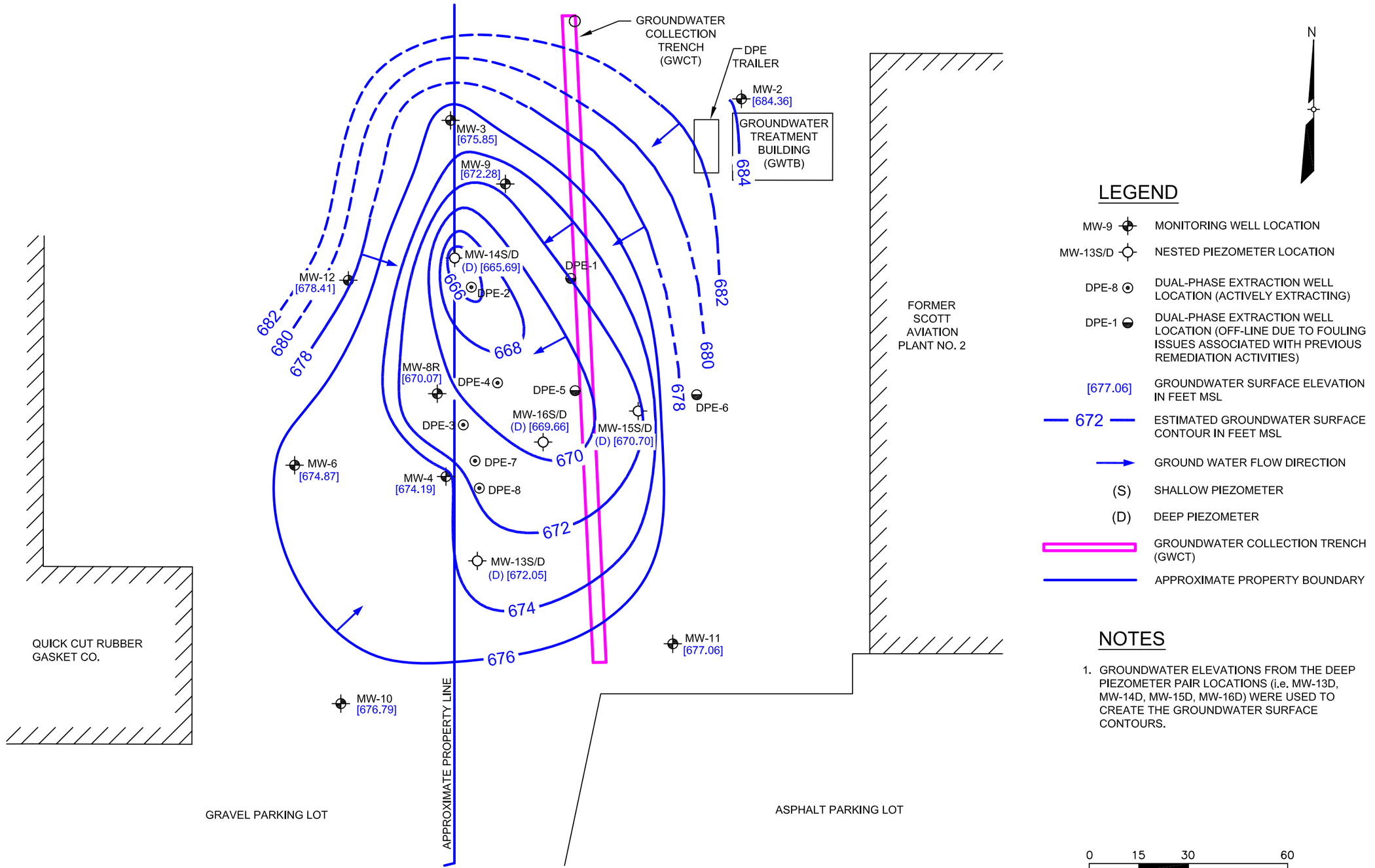
- BUILDING
- WATER
- AIR
- ELECTRIC
- H H — HIGH HIGH
- H L — HIGH LOW
- L L — LOW LOW
- (T) — TEMPERATURE GUAGE
- (P) — PRESSURE GUAGE
- (G) — FLOW GUAGE
- (V) — VACUUM GUAGE
- (F) — FLOW METER
- (S) — SAMPLING PORT (MANUAL)
- BALL VALVE
- CHECK VALVE

EarthTech
A tyco International Ltd. Company

FIGURE 3
PROCESS AND INSTRUMENTATION DIAGRAM

FORMER SCOTT AVIATION FACILITY
LANCASTER, NEW YORK

L:\work\71149\CADD\71149_008 P&ID.dwg, 11/30/2005 1:22:09 PM, robert.stubblefield



NOTES

1. GROUNDWATER ELEVATIONS FROM THE DEEP PIEZOMETER PAIR LOCATIONS (i.e. MW-13D, MW-14D, MW-15D, MW-16D) WERE USED TO CREATE THE GROUNDWATER SURFACE CONTOURS.

0 15 30 60

SCALE IN FEET

EarthTech
A tyco International Ltd. Company

FIGURE 4
GROUNDWATER SURFACE CONTOUR MAP
APRIL 16, 2007

FORMER SCOTT AVIATION FACILITY
LANCASTER, NEW YORK

\\USGRNS01\data\work\71149\CADD\71149_023 GW Surf Cont June_2007_(DEEP).dwg, 6/4/2007 8:38:24 AM, mandy.splawn

TABLES

Table 1
Quarterly Groundwater Monitoring Water Level Data – April 16, 2007
Former Scott Aviation Facility
Lancaster, New York

Monitoring Point Identification	Top of Casing Elevation	Depth to Water (feet from TOC)	Ground Water Elevation (feet MSL)
Monitoring Wells			
MW-2	690.35	5.99	684.36
MW-3	687.72	11.87	675.85
MW-4	686.64	12.45	674.19
MW-6	686.68	11.81	674.87
MW-8R	685.67	15.60	670.07
MW-9	685.43	13.15	672.28
MW-10	687.72	10.93	676.79
MW-11	688.61	11.55	677.06
MW-12	685.79	7.38	678.41
Nested Piezometers			
MW-13S	686.57	12.01	674.56
MW-13D	686.71	14.66	672.05
MW-14S	685.31	3.45	681.86
MW-14D	685.43	19.74	665.69
MW-15S	686.64	0.50	686.14
MW-15D	687.31	16.61	670.70
MW-16S	685.84	13.07	672.77
MW-16D	686.01	16.35	669.66

Notes:
TOC - Top of Casing
MSL - Mean Sea Level

Table 2
Groundwater Sample Results for Volatile Organic Compounds
April 2007
Former Scott Aviation Facility
Lancaster, New York

Sample ID		MW-2			MW-3			MW-4			MW-6			MW-8R		
Date Collected	RAO	4/16/2007			4/16/2007			4/17/2007			4/16/2007			4/17/2007		
Volatile Organic Compounds by Method SW8260B (µg/L)																
cis-1,2-Dichloroethene	5	<	20	U	<	20	U		**6200**		<	5.0	U		**11000**	
Benzene	1		**2.2**	J	<	20	U	<	500	U	<	5.0	U	<	1000	U
Chloroethane	5		**45**		<	20	U	<	500	U	<	5.0	U	<	1000	U
Vinyl chloride	5	<	20	U	<	20	U		**360**	J	<	5.0	U		**670**	J
Methylene chloride	5		2.1	J		2.2	J		**64**	J	<	5.0	U		**110**	J
1,1-Dichloroethane	5	<	20	U		**5.3**	J	<	500	U	<	5.0	U		**240**	J
1,1-Dichloroethene	5	<	20	U	<	20	U		**52**	J	<	5.0	U	<	1000	U
Trichloroethene	5	<	20	U	<	20	U		**4900**		<	5.0	U		**19000**	

Sample ID		MW-10			MW-10 Duplicate			MW-11			MW-12			MW-13S			MW-16S		
Date Collected	RAO	416/2007			4/16/2007			4/16/2007			4/16/2007			4/17/2007			4/17/2007		
Volatile Organic Compounds by Method SW8260B (µg/L)																			
cis-1,2-Dichloroethene	5	<	5.0	U	<	5.0	U		**9.8**		<	20	U		**2200**			**36000**	
Benzene	1	<	5.0	U	<	5.0	U	<	5.0	U	<	20	U		**33**	BJ	<	5000	U
Chloroethane	5	<	5.0	U	<	5.0	U		**22**			**29**		<	250	U		**1800**	J
Vinyl chloride	5	<	5.0	U	<	5.0	U		4.1	J	<	20	U		**90**	J		**3300**	J
Methylene chloride	5	<	5.0	U	<	5.0	U	<	5.0	U		2.3	J		**33**	J	<	5000	U
1,1-Dichloroethane	5	<	5.0	U	<	5.0	U		3.4	J	<	20	U	<	250	U		**1500**	J
1,1-Dichloroethene	5	<	5.0	U	<	5.0	U	<	5.0	U	<	20	U		**27**	J	<	5000	U
Trichloroethene	5	<	5.0	U	<	5.0	U		0.89	J	<	20	U		**4400**			**94000**	

Bold indicates the concentration exceeds the RAO.

Qualifiers:
J - Indicates an estimated value.
D - Indicates all compounds identified in an analysis at the secondary dilution factor.
U - Indicates compound below associated detection level.

Table 3
Air Monitoring Results - April 2007
Former Scott Aviation Facility
Lancaster, New York

	Sample ID:	GAC Effluent	AS Effluent
	Sample Date:	4/16/2007	4/16/2007
VOCs by Method TO-14A (µg/m^3)			
1,1-Dichloroethane		0.81 U	6.9
1,2,4-Trimethylbenzene		0.98 U	0.98
1,3,5-Trimethylbenzene		0.98 U	1.1
Benzene		0.64 U	1.90
Chloroethane		1.3 U	20.0
cis-1,2-Dichloroethene		2.2	39.0
Ethylbenzene		0.87 U	1.0
Toluene		12.0	9.4
Trichloroethene		7.5	10.0
Vinyl Chloride		0.51 U	5.1
Xylene (m,p)		2.2 U	3.3
Xylene (o)		0.87 U	1.2
Total Detected VOCs (µg/m^3)		31	100
Air Flow Rate (scfm)		89	284
VOC discharge loading (lb/hr)		0.00001	0.0001
Total VOC discharge loading (lb/hr)[7]		**0.0001**	

Notes:

1. µg/m^3 = micrograms per cubic meter
2. acfm = actual cubic feet per minute
3. scfm = standard cubic feet per minute
4. lb/hr = pounds per hour
5. GAC Effluent represents the treated vapor discharge for the Liquid Ring Pump.
6. AS Effluent represents the untreated vapor discharge for the Air Stripper.
7. Low VOC discharge loading result for the Quarter likely the result of crack in the pipe leading into the GAC units causing dilution of effluent sample with ambient air.

Qualifiers:
U - Not detected at or above reporting limit.

APPENDIX A

FIELD FORMS

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/16/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-2
X Upgradient ____ Downgradient
Weather Conditions: wet snow
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 17.00 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 5.95 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 11.05 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 1.80 gal
3 Casing Volumes = 5.4 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3.5 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 690.35 1/100 ft
Height of Riser (above land surface): 2.55 1/100 ft
Land Surface Elevation: 687.80 1/100 ft
Screened Interval (below land surface): 7-17 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	
Time (Military)	10:25	10:30	10:35	10:40	10:45	10:50	10:55	
Depth to Groundwater Below Top of Casing (ft)	6.78	7.3	8	8.2	8.4	8.5	8.6	
Drawdown (ft)	-0.83	-0.52	-0.7	-0.2	-0.2	-0.1	-0.1	
pH (S.U.)	6.7	6.65	6.7	6.86	6.68	6.68	6.68	
Sp. Cond. (mS/cm)	1.467	1.483	1.472	1.469	1.47	1.449	1.448	
Turbidity (NTUs)	17.2	18.7	22	21	25	22	23	
Dissolved Oxygen (mg/L)	15.55	9.16	7.31	5.87	4.61	3.33	3.19	
Water Temperature (°C)	6.93	6.69	7.26	7.43	7.39	7.62	7.67	
ORP (mV)	-42.7	-44.7	-42	-41.5	-42.9	-43.1	-45.2	

Physical appearance at start — Color: clear; some "floaties" — Odor: no — Sheen/Free Product: no

Physical appearance at sampling — Color: clear; some "floaties" — Odor: no — Sheen/Free Product: no

COMMENTS/OBSERVATIONS: 10:20hrs. Samples collected at 11:00hrs; tubing set at 12' bgs; set to lowest flow rate. Flow-thru cell leaking air.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/16/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-3
Upgradient: ____ X Downgradient
Weather Conditions: wet snow
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 28.00 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 11.87 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 16.13 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.63 gal
3 Casing Volumes = 7.9 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 687.72 1/100 ft
Height of Riser (above land surface): -0.08 1/100 ft
Land Surface Elevation: 687.80 1/100 ft
Screened Interval (below land surface): 7.5 - 27.5 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	200	100	100	100	100	100		
Time (Military)	12:40	12:45	12:50	12:55	13:00	13:05		
Depth to Groundwater Below Top of Casing (ft)	12.7	12.98	13.15	13.35	13.5	13.61		
Drawdown (ft)	-0.83	-0.28	-0.17	-0.2	-0.15	-0.11		
pH (S.U.)	7.02	6.96	6.92	6.91	6.91	6.91		
Sp. Cond. (mS/cm)	1.028	1.025	1.021	1.02	1.019	1.016		
Turbidity (NTUs)	4.3	5.5	4.5	5.1	3.2	2.2		
Dissolved Oxygen (mg/L)	29.5	3.5	2.08	1.8	1.64	1.57		
Water Temperature (°C)	8.44	8.48	8.14	8.09	8.02	8.12		
ORP (mV)	48.8	57.2	63.9	61	58.8	58.3		

Physical appearance at start: Color clear, colorless; Odor no
Sheen/Free Product: no

Physical appearance at sampling: Color clear, colorless; Odor no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 12:35hrs. Samples collected at 13:10hrs.; tubing set at mid-point of screen. Flow-thru cell leaking air.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/17/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-4
Upgradient ____ X Downgradient
Weather Conditions: light rain
Air Temperature: 32 ° F
Total Depth (TWD) Below Top of Casing = 26.00 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 12.55 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 13.45 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.19 gal
3 Casing Volumes = 6.6 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Teflon Tubing
Total Volume of Water Removed: ~3.5 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 686.64 1/100 ft
Height of Riser (above land surface): -0.06 1/100 ft
Land Surface Elevation: 686.70 1/100 ft
Screened Interval (below land surface): 15.5 - 25.5 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	
Time (Military)	11:30	11:35	11:40	11:45	11:50	11:55	12:00	
Depth to Groundwater Below Top of Casing (ft)	13.04	13.35	13.66	13.85	13.96	14	14	
Drawdown (ft)	-0.49	-0.31	-0.31	-0.19	-0.11	-0.04	0	
pH (S.U.)	7.06	6.99	6.99	6.99	7	7	7	
Sp. Cond. (mS/cm)	0.853	0.875	0.881	0.882	0.878	0.871	0.867	
Turbidity (NTUs)	86.6	65	53.3	46.1	37.2	31	28.8	
Dissolved Oxygen (mg/L)	10.15	1.43	1.25	1.39	2.68	2.41	2.27	
Water Temperature (°C)	10.12	10.11	10.3	10.3	10.22	10.06	10.02	
ORP (mV)	32.7	12.6	11.3	10.9	9.9	8.4	6.9	

Physical appearance at start — Color: clear - lt brown tint; Odor: yes
Sheen/Free Product: sl. sheen; no visible product

Physical appearance at sampling — Color: clear; Odor: yes
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 11:25. Pump set at lowest rate. Samples collected at 12:05hrs; tubing set at mid-point of screen. Flow-thru cell leaking air.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/16/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-6
Upgradient ____ X Downgradient
Weather Conditions: wet rain
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 25.00 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 11.7 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 13.30 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.17 gal
3 Casing Volumes = 6.5 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3.5 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 686.68 1/100 ft
Height of Riser (above land surface): -0.02 1/100 ft
Land Surface Elevation: 686.70 1/100 ft
Screened Interval (below land surface): 14.5 - 24.5 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	
Time (Military)	14:40	14:45	14:50	14:55	15:00	15:05	15:10	
Depth to Groundwater Below Top of Casing (ft)	12.28	12.55	12.8	13.2	13.5	13.75	13.85	
Drawdown (ft)	-0.58	-0.27	-0.25	-0.4	-0.3	-0.25	-0.1	
pH (S.U.)	7.75	7.59	7.58	7.58	7.57	7.57	7.57	
Sp. Cond. (mS/cm)	0.483	0.765	0.765	0.765	0.764	0.764	0.764	
Turbidity (NTUs)	32	13.2	11	9.7	20.3	19.7	19	
Dissolved Oxygen (mg/L)	13.06	1.61	1.54	1.4	1.32	1.29	1.29	
Water Temperature (°C)	9.63	9.66	9.7	9.79	10	10.18	10.2	
ORP (mV)	-5.3	2.7	1.2	-5.4	-9.8	-11.9	-16.9	

Physical appearance at start: Color clear; Odor no
Sheen/Free Product: no

Physical appearance at sampling: Color clear; Odor no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 14:35hrs. Samples collected at 15:15hrs; tubing set at mid-point of screen.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/17/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-8R
Upgradient | X | Downgradient
Weather Conditions: light snow
Air Temperature: 32 ° F
Total Depth (TWD) Below Top of Casing = 27.50 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 15.65 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 11.85 1/100 ft
1 Casing Volume (OCV) = LWC x 0.653 = 7.74 gal
3 Casing Volumes = 23.2 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Teflon Tubing
Total Volume of Water Removed: ~3.5 liter

Casing Diameter: 4 inches
Casing Material: PVC
Measuring Point Elevation: 685.67 1/100 ft
Height of Riser (above land surface): -0.66 1/100 ft
Land Surface Elevation: 686.33 1/100 ft
Screened Interval (below land surface): 14 - 24 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	
Time (Military)	10:05	10:10	10:15	10:20	10:25	10:30	10:35	
Depth to Groundwater Below Top of Casing (ft)	16.18	16.28	16.5	16.61	16.64	16.75	16.8	
Drawdown (ft)	-0.53	-0.1	-0.22	-0.11	-0.03	-0.11	-0.05	
pH (S.U.)	7.2	7.12	7.1	7.05	7.11	7.11	7.1	
Sp. Cond. (mS/cm)	1.198	0.987	0.986	0.986	0.983	0.95	0.92	
Turbidity (NTUs)	98	68	58.8	55.8	50.1	55.7	46	
Dissolved Oxygen (mg/L)	5.56	5.71	5.83	5.83	5.85	6.08	6.23	
Water Temperature (°C)	10.2	10.33	10.31	10.23	10.11	10.03	9.92	
ORP (mV)	78.9	84	89.9	111.3	107.7	106.2	106.8	

Physical appearance at start — Color: slightly turbid, lt gray; Odor: slight odor
Sheen/Free Product: slight sheen

Physical appearance at sampling — Color: clear-lt gray; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 10:00hrs. Samples collected at 10:40hrs.; tubing set at mid-point of screen.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/16/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-10
Upgradient: ____ X Downgradient
Weather Conditions: wet snow
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 24.00 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 11.1 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 12.90 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.10 gal
3 Casing Volumes = 6.31 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~2.5 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 687.72 1/100 ft
Height of Riser (above land surface): -0.08 1/100 ft
Land Surface Elevation: 687.80 1/100 ft
Screened Interval (below land surface): 3.5 - 23.5 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	Duplicate

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100			
Time (Military)	16:05	16:10	16:15	16:20	16:25			
Depth to Groundwater Below Top of Casing (ft)	11.4	11.56	11.62	11.7	11.75			
Drawdown (ft)	-0.3	-0.16	-0.06	-0.08	-0.05			
pH (S.U.)	6.82	6.77	6.77	6.76	6.77			
Sp. Cond. (mS/cm)	1.832	1.891	1.912	1.919	1.923			
Turbidity (NTUs)	44.8	37.7	37.6	26.1	20.8			
Dissolved Oxygen (mg/L)	1.75	1.12	1.29	1.32	1.47			
Water Temperature (°C)	9.27	9.16	9.15	9.12	9.03			
ORP (mV)	53.8	53	52.9	52.6	52.3			

Physical appearance at start — Color: clear with floaties (Fe bacteria); Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 16:00. Samples collected at 16:30hrs.; tubing set at mid-point of screen. Duplicate sample collected at "08:00hrs"

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/16/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-11
X Upgradient ____ Downgradient
Weather Conditions: wet snow
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 28.50 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 15.45 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 13.05 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 2.13 gal
3 Casing Volumes = 6.38 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3.5 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 688.61 1/100 ft
Height of Riser (above land surface): -0.26 1/100 ft
Land Surface Elevation: 688.87 1/100 ft
Screened Interval (below land surface): 8.5 - 28.5 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	
Time (Military)	11:10	11:15	11:20	11:25	11:30	11:35	11:40	
Depth to Groundwater Below Top of Casing (ft)	16.38	16.5	16.74	16.8	16.9	16.94	16.99	
Drawdown (ft)	-0.93	-0.12	-0.24	-0.06	-0.1	-0.04	-0.05	
pH (S.U.)	6.58	6.81	6.91	7	7	6.99	6.97	
Sp. Cond. (mS/cm)	1.321	1.453	1.459	1.462	1.499	1.549	1.551	
Turbidity (NTUs)	8.74	1.83	1.5	0.9	0.76	0.66	0.5	
Dissolved Oxygen (mg/L)	13.3	3.92	2.6	1.67	1.98	2.4	2.54	
Water Temperature (°C)	8.47	8.36	8.53	8.84	8.8	8.7	8.29	
ORP (mV)	-38.7	-34.4	-35.2	-36.6	-34	-32.6	-30.7	

Physical appearance at start — Color: clear; Odor: no
Sheen/Free Product: no

Physical appearance at sampling — Color: clear; Odor: no
Sheen/Free Product: no

COMMENTS/OBSERVATIONS: Start purging at 11:05. Samples collected at 11:40hrs.; tubing set at mid-point of screen.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/16/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-12
Upgradient: ____ X Downgradient
Weather Conditions: wet snow
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 27.50 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 7.35 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 20.15 1/100 ft
1 Casing Volume (OCV) = LWC x 0.163 = 3.28 gal
3 Casing Volumes = 9.85 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3 liter

Casing Diameter: 2 inches
Casing Material: PVC
Measuring Point Elevation: 685.79 1/100 ft
Height of Riser (above land surface): -0.39 1/100 ft
Land Surface Elevation: 686.18 1/100 ft
Screened Interval (below land surface): 7 - 27 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100		
Time (Military)	13:40	13:45	13:50	13:55	14:00	14:05		
Depth to Groundwater Below Top of Casing (ft)	7.89	8.2	8.4	8.7	8.8	8.98		
Drawdown (ft)	-0.54	-0.31	-0.2	-0.3	-0.1	-0.18		
pH (S.U.)	6.82	6.73	6.73	6.73	6.74	6.74		
Sp. Cond. (mS/cm)	1.294	1.309	1.311	1.317	1.319	1.322		
Turbidity (NTUs)	4.36	4.5	5.8	4.88	4.98	5.9		
Dissolved Oxygen (mg/L)	2.85	2.17	1.88	1.2	1.1	1.08		
Water Temperature (°C)	7.42	7.43	7.5	7.58	7.58	7.56		
ORP (mV)	-75.3	-80	-80.1	-80.3	-79.8	-79		

Physical appearance at start: Color clear; Odor no; Sheen/Free Product no
Physical appearance at sampling: Color clear; Odor no; Sheen/Free Product no

COMMENTS/OBSERVATIONS: Start purging at 13:35hrs. Samples collected at 14:10hrs; tubing set at mid-point of screen.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/17/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-13S
Upgradient: ____ X Downgradient
Weather Conditions: cloudy
Air Temperature: 30 ° F
Total Depth (TWD) Below Top of Casing = 16.50 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 12.12 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 4.38 1/100 ft
1 Casing Volume (OCV) = LWC x 0.04 = 0.18 gal
3 Casing Volumes = 0.53 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3 liter

Casing Diameter: 1 inches
Casing Material: PVC
Measuring Point Elevation: 686.57 1/100 ft
Height of Riser (above land surface): -0.29 1/100 ft
Land Surface Elevation: 686.86 1/100 ft
Screened Interval (below land surface): 8.5-16.5 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100		
Time (Military)	13:25	13:30	13:35	13:40	13:45	13:50		
Depth to Groundwater Below Top of Casing (ft)	na	na	na	na	na	na		
Drawdown (ft)	na	na	na	na	na	na		
pH (S.U.)	7.1	7.03	7.03	7.04	7.05	7.05		
Sp. Cond. (mS/cm)	0.916	0.927	0.934	0.94	0.948	0.949		
Turbidity (NTUs)	19.5	12	5.5	3.2	1.1	1.4		
Dissolved Oxygen (mg/L)	2.34	1.62	1.82	1.85	2.22	2.2		
Water Temperature (°C)	9.15	9.05	9.03	8.99	8.99	8.98		
ORP (mV)	2.1	-21.8	-20	-20.7	-22.9	-23		

Physical appearance at start: Color clear; Odor no; Sheen/Free Product no
Physical appearance at sampling: Color clear; Odor no; Sheen/Free Product no

COMMENTS/OBSERVATIONS: Start purging at 13:20hrs. Samples collected at 13:55 hrs.; tubing set at mid-point of screen.

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

GROUNDWATER SAMPLING LOG

Date (mo/day/yr): 4/17/2007
Field Personnel: DLZ
Site Name: **Former Scott Aviation Site - Lancaster, NY**
Earth Tech Job #: **71149**
Well ID #: MW-16S
Upgradient: ____ X Downgradient
Weather Conditions: light rain
Air Temperature: 32 ° F
Total Depth (TWD) Below Top of Casing = 18.00 1/100 ft
Depth to Groundwater (DGW) Below Top of Casing = 13.07 1/100 ft
Length of Water Column (LWC) = TWD - DGW = 4.93 1/100 ft
1 Casing Volume (OCV) = LWC x 0.04 = 0.20 gal
3 Casing Volumes = 0.59 gal
Method of Well Evacuation: Peristaltic Pump
Method of Sample Collection: Peristaltic Pump/Poly Tubing
Total Volume of Water Removed: ~3.5 liter

Casing Diameter: 1 inches
Casing Material: PVC
Measuring Point Elevation: 685.84 1/100 ft
Height of Riser (above land surface): -0.51 1/100 ft
Land Surface Elevation: 686.35 1/100 ft
Screened Interval (below land surface): 12 - 18 1/100 ft

Container	Analysis (Method)	# Bottles	Preservative	Dup - MS/MSD
VOA 40 mL glass	TCL VOCs (8260B)	2	HCL, 4°C	

FIELD ANALYSES

Flow Rate (ml/min)	100	100	100	100	100	100	100	
Time (Military)	9:00	9:05	9:10	9:15	9:20	9:25	9:30	
Depth to Groundwater Below Top of Casing (ft)	na	na	na	na	na	na	na	
Drawdown (ft)	na	na	na	na	na	na	na	
pH (S.U.)	6.86	6.82	6.8	6.8	6.81	6.8	6.8	
Sp. Cond. (mS/cm)	1.209	1.19	1.165	1.154	1.157	1.156	1.156	
Turbidity (NTUs)	52	47	31.5	32.6	27.5	21.7	19	
Dissolved Oxygen (mg/L)	2.74	1.89	1.49	1.17	1.14	0.99	1.11	
Water Temperature (°C)	9.2	8.98	8.76	8.02	7.64	7.48	7.1	
ORP (mV)	-60.1	-58.6	-55.6	-55.6	-53.9	-51.2	-50.9	

Physical appearance at start — Color: clear-lt brown; Odor: yes
Sheen/Free Product: sheen

Physical appearance at sampling — Color: clear; Odor: yes
Sheen/Free Product: sheen; brown/black NAPL on tubing

COMMENTS/OBSERVATIONS: Started purging at 08:55hrs. Did not monitor water level due to small diameter of casing. Samples collected at 09:35 hrs.; tubing set at mid-point of screen.

casing

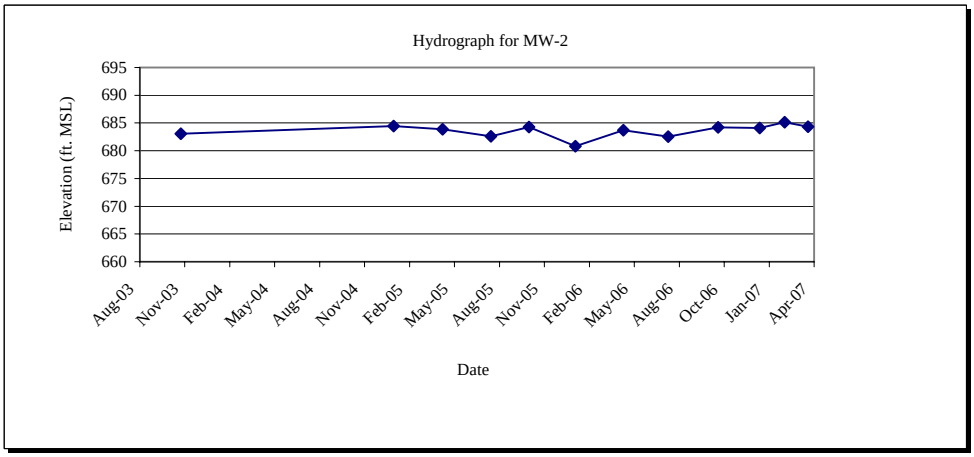
APPENDIX B

SUMMARY OF GROUNDWATER ELEVATIONS

MONITORING WELL MW-2
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	7.29	683.06
4/8/2004	NM	NA
10/12/2004	NM	NA
1/6/2005	5.92	684.43
4/14/2005	6.50	683.85
7/20/2005	7.77	682.58
10/4/2005	6.08	684.27
1/5/2006	9.56	680.79
4/11/2006	6.65	683.70
7/10/2006	7.79	682.56
10/18/2006	6.11	684.24
1/9/2007	6.27	684.08
2/28/2007	5.20	685.15
4/16/2007	5.99	684.36

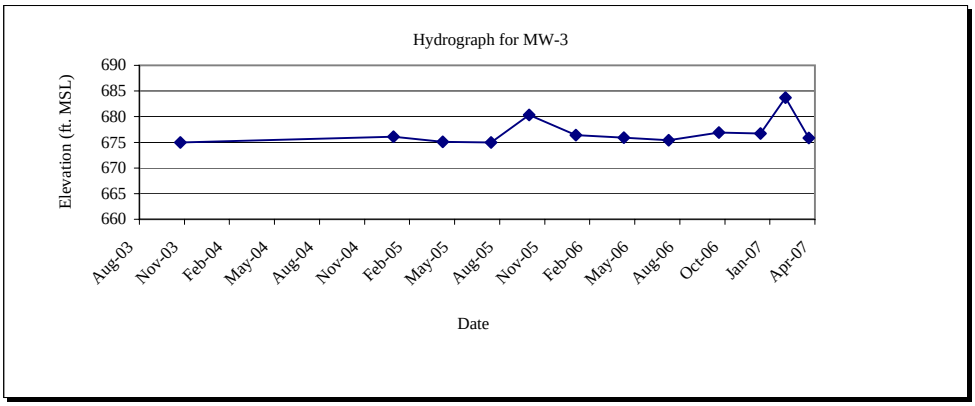
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 690.35
DPE and GWCT down on 2/28/07



MONITORING WELL MW-3
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	12.76	674.96
4/8/2004	NM	NA
10/12/2004	NM	NA
1/6/2005	11.65	676.07
4/14/2005	12.64	675.08
7/20/2005	12.73	674.99
10/4/2005	7.38	680.34
1/5/2006	11.31	676.41
4/11/2006	11.84	675.88
7/10/2006	12.31	675.41
10/18/2006	10.82	676.9
1/9/2007	10.99	676.73
2/28/2007	3.99	683.73
4/16/2007	11.87	675.85

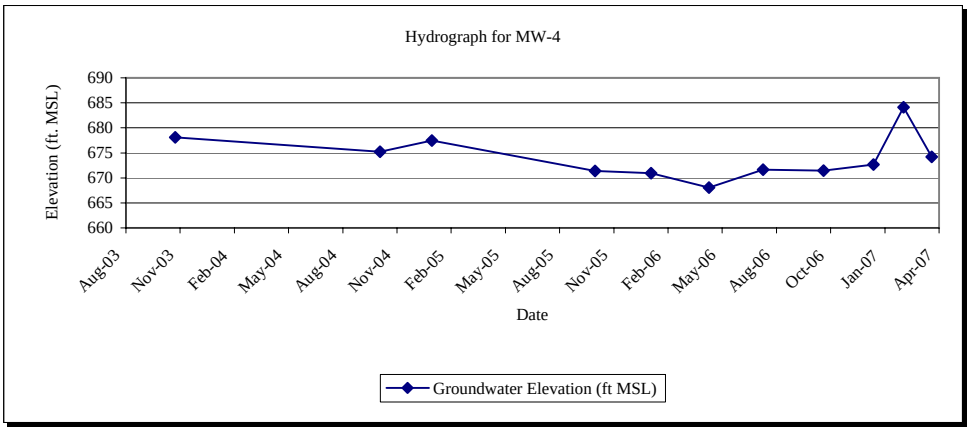
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 687.72
DPE and GWCT down on 2/28/07



MONITORING WELL MW-4
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	8.54	678.10
4/8/2004	NM	NA
10/12/2004	11.40	675.24
1/6/2005	9.20	677.44
4/14/2005	NM	NA
7/20/2005	NM	NA
10/4/2005	15.24	671.40
1/5/2006	15.71	670.93
4/11/2006	18.56	668.08
7/10/2006	15.02	671.62
10/18/2006	15.21	671.43
1/9/2007	14.00	672.64
2/28/2007	2.54	684.10
4/16/2007	12.45	674.19

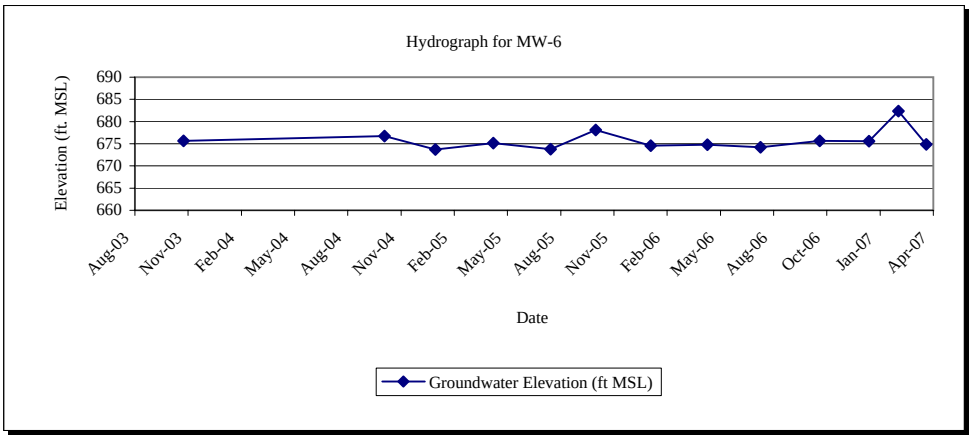
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 686.64
DPE and GWCT down on 2/28/07



MONITORING WELL MW-6
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	11.06	675.62
4/8/2004	NM	NA
10/12/2004	9.95	676.73
1/6/2005	13.00	673.68
4/14/2005	11.57	675.11
7/20/2005	12.88	673.80
10/4/2005	8.55	678.13
1/5/2006	12.11	674.57
4/11/2006	11.91	674.77
7/10/2006	12.5	674.18
10/18/2006	11.02	675.66
1/9/2007	11.1	675.58
2/28/2007	4.35	682.33
4/16/2007	11.81	674.87

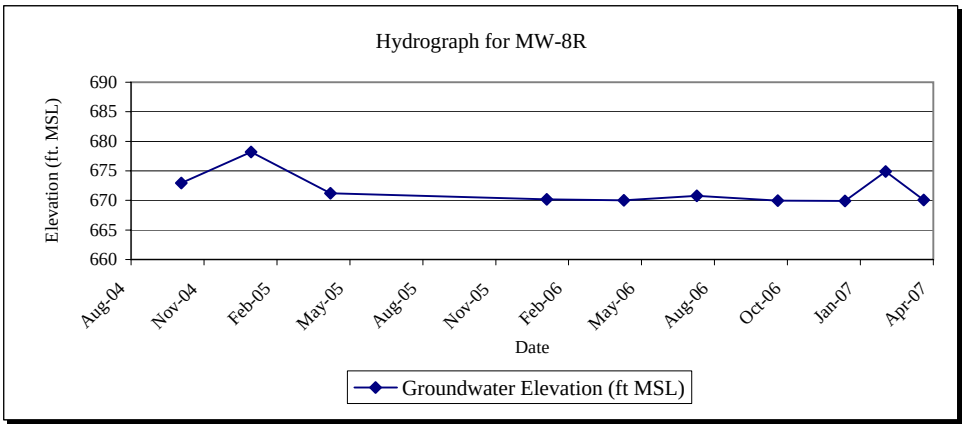
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 686.68
DPE and GWCT down on 2/28/07



MONITORING WELL MW-8R
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	NM	NA
10/12/2004	12.75	672.92
1/6/2005	7.45	678.22
4/14/2005	14.45	671.22
7/20/2005	NM	NA
10/4/2005	NM	NA
1/6/2006	15.51	670.16
4/11/2006	15.65	670.02
7/10/2006	14.9	670.77
10/18/2006	15.72	669.95
1/9/2007	15.76	669.91
2/28/2007	10.78	674.89
4/16/2007	15.60	670.07

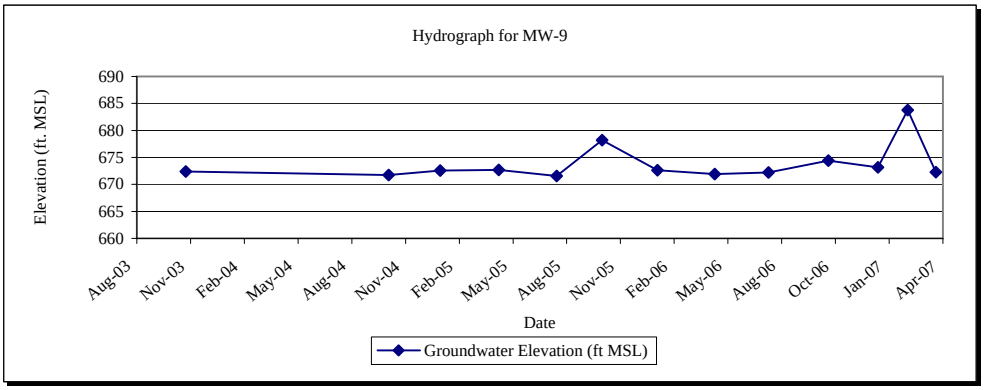
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 685.67
DPE and GWCT down on 2/28/07



MONITORING WELL MW-9
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	13.03	672.4
4/8/2004	NM	NA
10/12/2004	13.68	671.75
1/6/2005	12.89	672.54
4/14/2005	12.74	672.69
7/20/2005	13.88	671.55
10/4/2005	7.22	678.21
1/5/2006	12.79	672.64
4/11/2006	13.50	671.93
7/10/2006	13.24	672.19
10/18/2006	11.00	674.43
1/9/2007	12.24	673.19
2/28/2007	1.66	683.77
4/16/2007	13.15	672.28

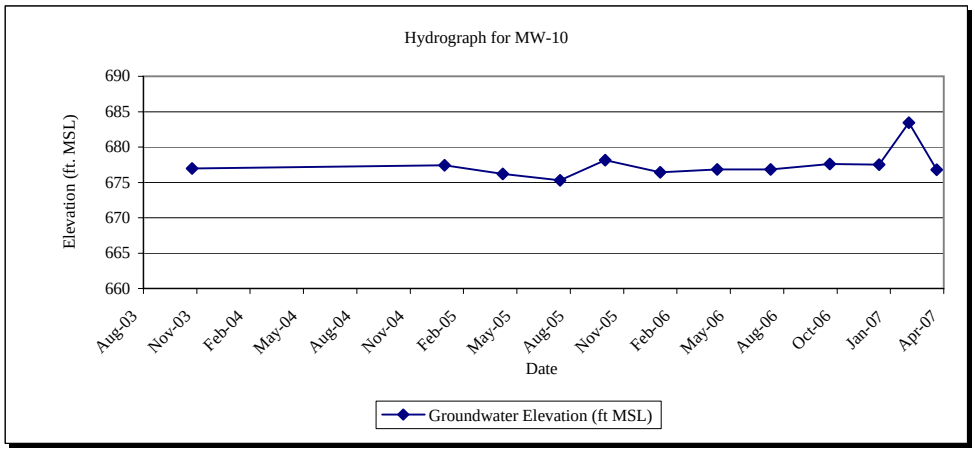
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 685.43
DPE and GWCT down on 2/28/07



MONITORING WELL MW-10
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
11/7/2003	10.75	676.97
4/8/2004	NM	NA
10/12/2004	NM	NA
1/6/2005	10.28	677.44
4/14/2005	11.50	676.22
7/20/2005	12.43	675.29
10/4/2005	9.58	678.14
1/5/2006	11.28	676.44
4/11/2006	10.91	676.81
7/10/2006	10.90	676.82
10/18/2006	10.13	677.59
1/9/2007	10.21	677.51
2/28/2007	4.30	683.42
4/16/2007	10.93	676.79

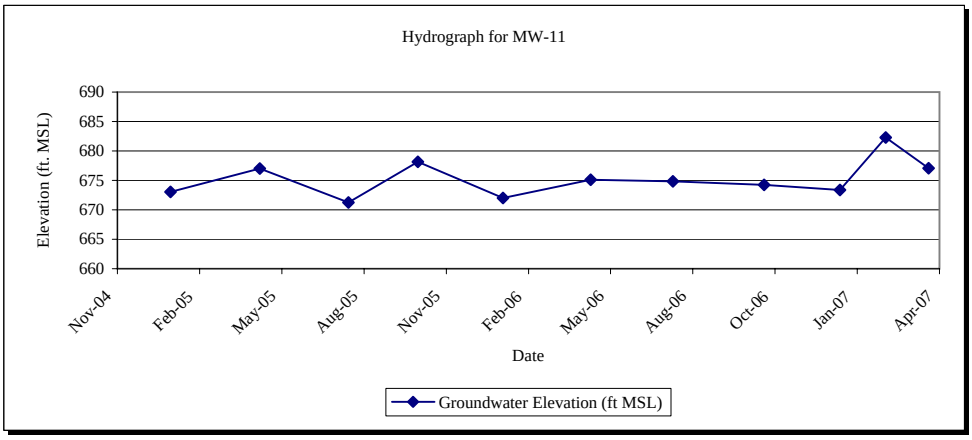
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 687.72
DPE and GWCT down on 2/28/07



MONITORING WELL MW-11
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	NM	NA
10/12/2004	NM	NA
1/6/2005	15.59	673.02
4/14/2005	11.59	677.02
7/20/2005	17.34	671.27
10/4/2005	10.45	678.16
1/5/2006	16.58	672.03
4/11/2006	13.52	675.09
7/10/2006	13.75	674.86
10/18/2006	14.35	674.26
1/9/2007	15.26	673.35
2/28/2007	6.34	682.27
4/16/2007	11.55	677.06

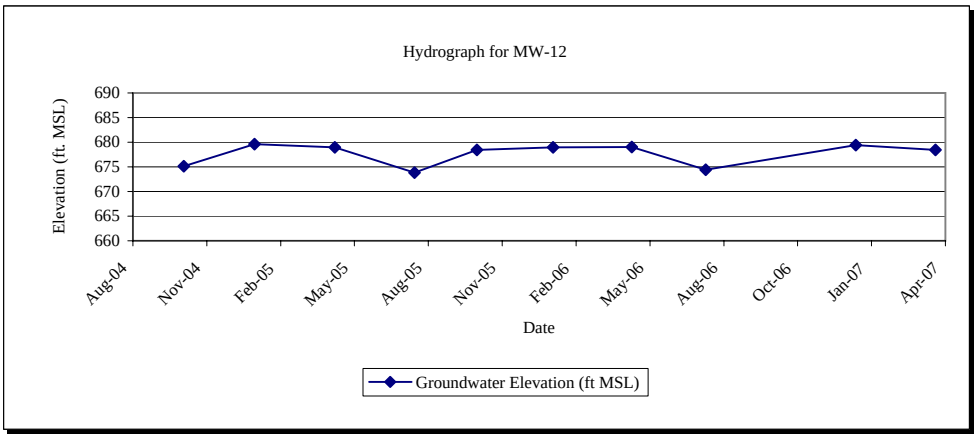
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 688.61
DPE and GWCT down on 2/28/07



MONITORING WELL MW-12
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	NM	NA
10/12/2004	10.64	675.15
1/6/2005	6.18	679.61
4/14/2005	6.80	678.99
7/20/2005	11.95	673.84
10/4/2005	7.36	678.43
1/5/2006	6.8	678.99
4/11/2006	6.76	679.03
7/10/2006	11.35	674.44
10/18/2006	NM*	
1/9/2007	6.35	679.44
2/28/2007	NM*	
4/16/2007	7.38	678.41

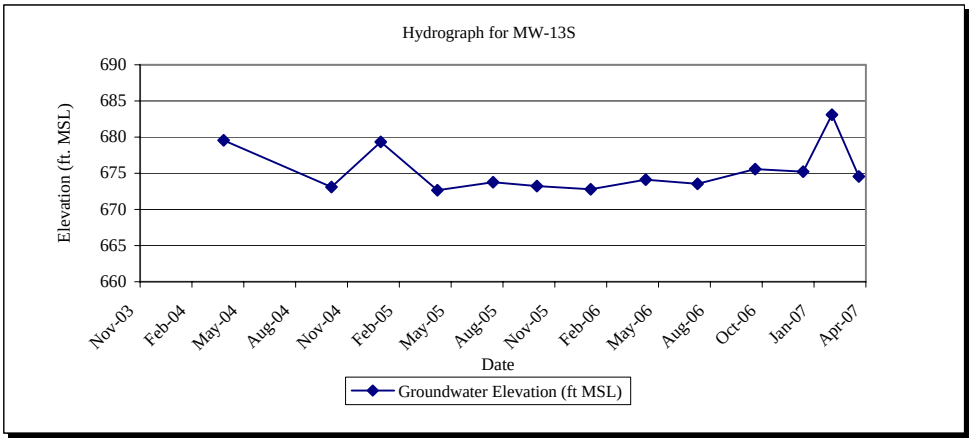
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 685.79
NM* - Well could not be located due to snow cover
DPE and GWCT down on 2/28/07



MONITORING WELL MW-13S
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	7.01	679.56
10/12/2004	13.47	673.10
1/6/2005	7.24	679.33
4/14/2005	13.91	672.66
7/20/2005	12.81	673.76
10/4/2005	13.35	673.22
1/5/2006	13.79	672.78
4/11/2006	12.45	674.12
7/10/2006	13.02	673.55
10/18/2006	10.99	675.58
1/9/2007	11.35	675.22
2/28/2007	3.49	683.08
4/16/2007	12.01	674.56

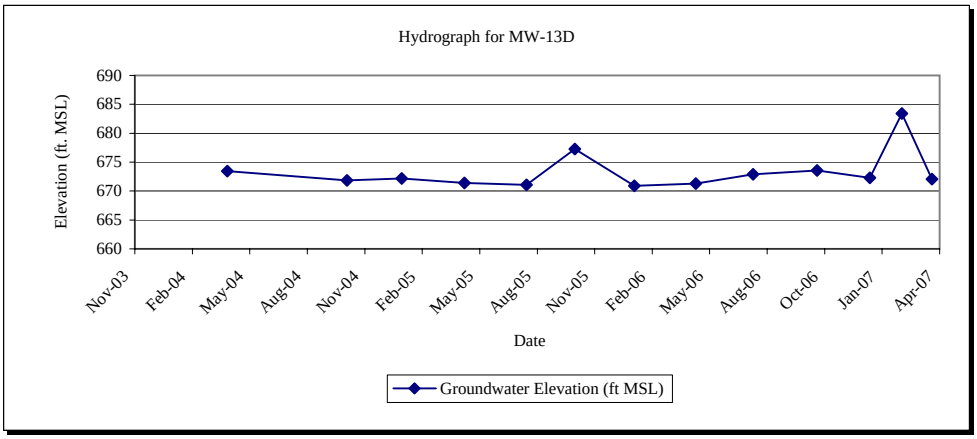
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 686.57
DPE and GWCT down on 2/28/07



MONITORING WELL MW-13D
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	13.28	673.43
10/12/2004	14.87	671.84
1/6/2005	14.55	672.16
4/14/2005	15.32	671.39
7/20/2005	15.65	671.06
10/4/2005	9.44	677.27
1/5/2006	15.83	670.88
4/11/2006	15.41	671.30
7/10/2006	13.79	672.92
10/18/2006	13.17	673.54
1/9/2007	14.41	672.30
2/28/2007	3.28	683.43
4/16/2007	14.66	672.05

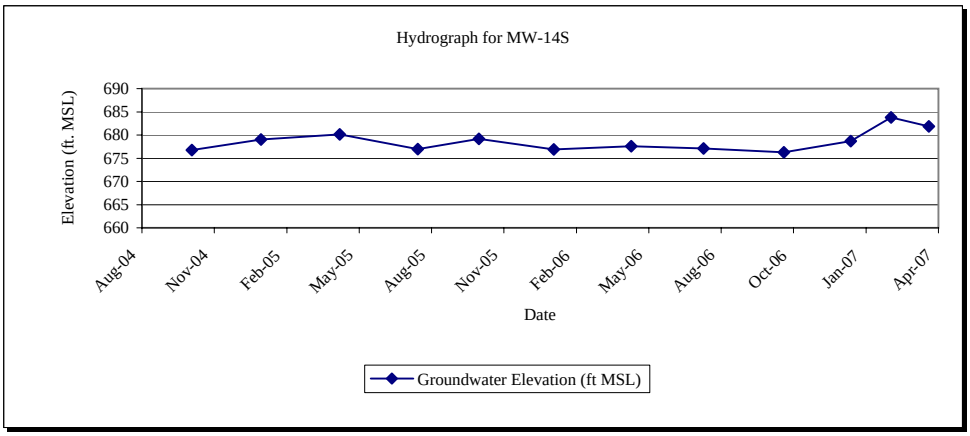
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 686.71
DPE and GWCT down on 2/28/07



MONITORING WELL MW-14S
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	5.14	680.17
10/12/2004	8.57	676.74
1/6/2005	6.27	679.04
4/14/2005	5.16	680.15
7/20/2005	8.32	676.99
10/4/2005	6.14	679.17
1/5/2006	8.41	676.9
4/11/2006	7.75	677.56
7/10/2006	8.18	677.13
10/18/2006	9.00	676.31
1/9/2007	6.61	678.7
2/28/2007	1.50	683.81
4/16/2007	3.45	681.86

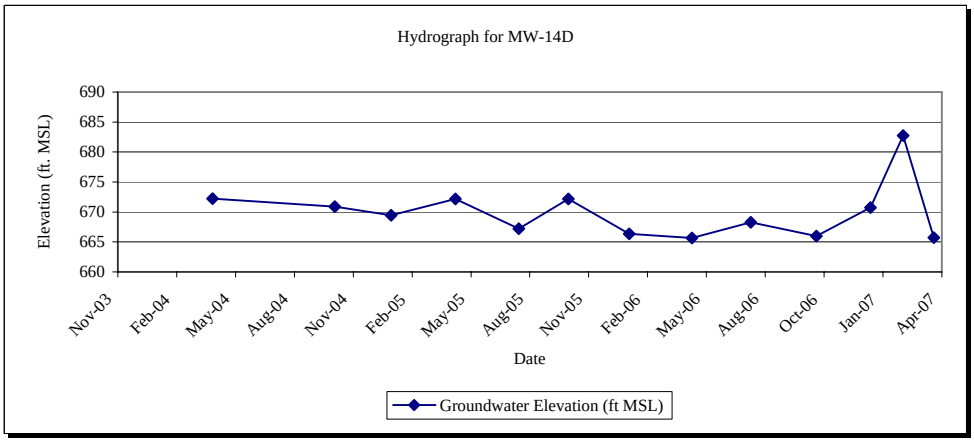
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 685.31
DPE and GWCT down on 2/28/07



MONITORING WELL MW-14D
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	13.21	672.22
10/12/2004	14.55	670.88
1/6/2005	15.97	669.46
4/14/2005	13.25	672.18
7/20/2005	18.20	667.23
10/4/2005	13.26	672.17
1/5/2006	19.08	666.35
4/11/2006	19.79	665.64
7/10/2006	17.16	668.27
10/18/2006	19.44	665.99
1/9/2007	14.71	670.72
2/28/2007	2.67	682.76
4/16/2007	19.74	665.69

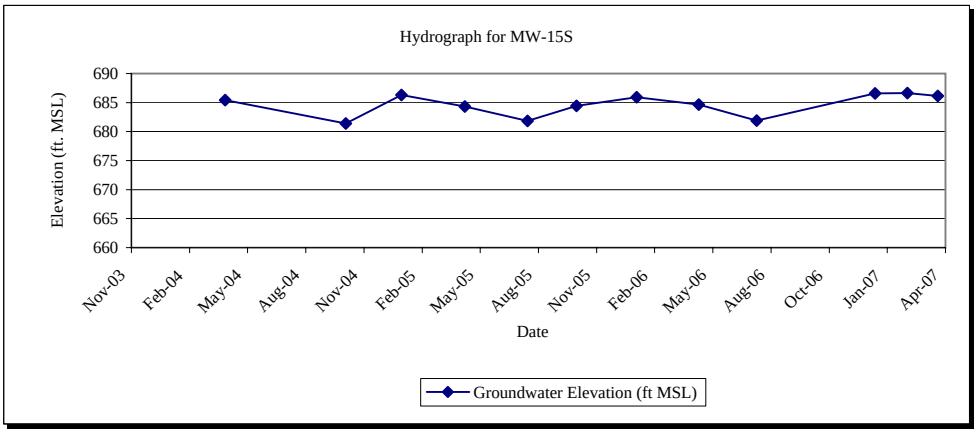
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 685.43
DPE and GWCT down on 2/28/07



MONITORING WELL MW-15S
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	1.20	685.44
10/12/2004	5.26	681.38
1/6/2005	0.35	686.29
4/14/2005	2.31	684.33
7/20/2005	4.78	681.86
10/4/2005	2.22	684.42
1/5/2006	0.70	685.94
4/11/2006	2.00	684.64
7/10/2006	4.75	681.89
1/9/2007	0.05	686.59
2/28/2007	0.00	686.64
4/16/2007	0.50	686.14

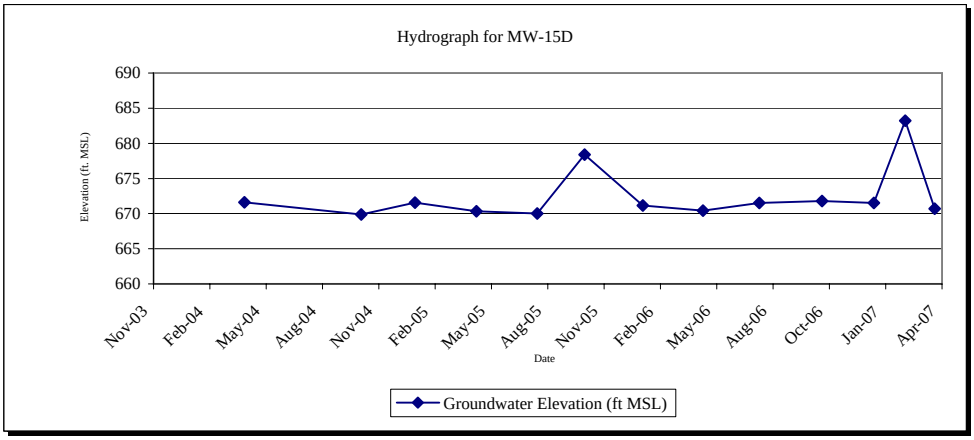
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 686.64
DPE and GWCT down on 2/28/07



MONITORING WELL MW-15D
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	15.70	671.61
10/12/2004	17.42	669.89
1/6/2005	15.74	671.57
4/14/2005	16.99	670.32
7/20/2005	17.31	670.00
10/4/2005	8.94	678.37
1/5/2006	16.16	671.15
4/11/2006	16.90	670.41
7/10/2006	15.78	671.53
10/18/2006	15.50	671.81
1/9/2007	15.80	671.51
2/28/2007	4.10	683.21
4/16/2007	16.61	670.70

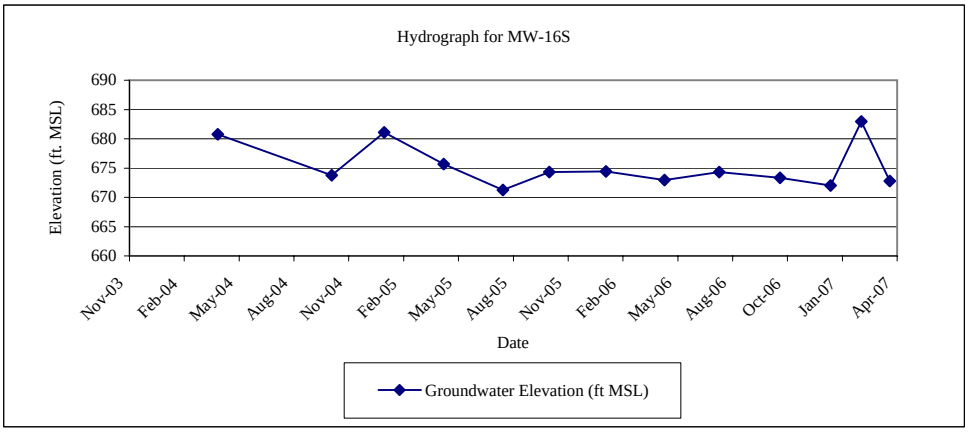
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 687.31
DPE and GWCT down on 2/28/07



MONITORING WELL MW-16S
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	5.09	680.75
10/12/2004	12.09	673.75
1/6/2005	4.75	681.09
4/14/2005	10.15	675.69
7/20/2005	14.56	671.28
10/4/2005	11.50	674.34
1/5/2006	11.41	674.43
4/11/2006	12.90	672.94
7/10/2006	11.54	674.30
10/18/2006	12.50	673.34
1/9/2007	13.82	672.02
2/28/2007	2.90	682.94
4/16/2007	13.07	672.77

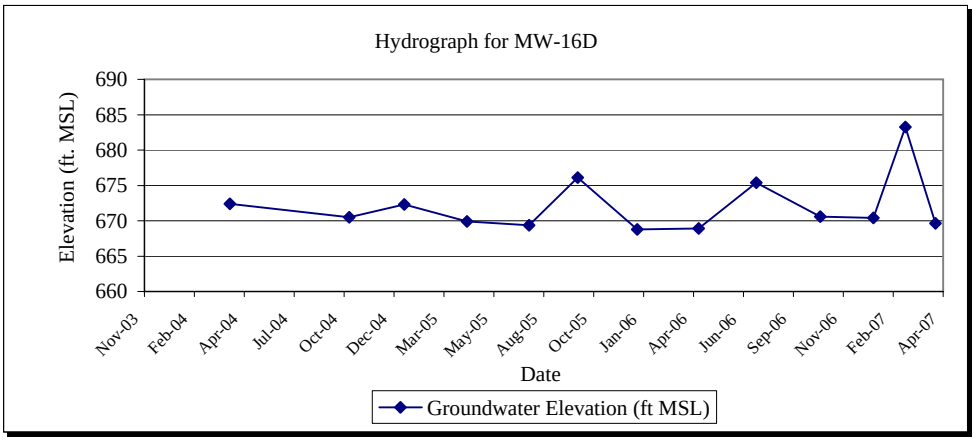
NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 685.84
DPE and GWCT down on 2/28/07



MONITORING WELL MW-16D
SUMMARY OF GROUNDWATER ELEVATIONS
Former Scott Aviation Site
Lancaster, New York

Date	Depth to Water from TOC (ft)	Groundwater Elevation (ft MSL)
4/8/2004	13.62	672.39
10/12/2004	15.51	670.50
1/6/2005	13.70	672.31
4/14/2005	16.09	669.92
7/20/2005	16.65	669.36
10/4/2005	9.89	676.12
1/5/2006	17.21	668.80
4/11/2006	17.1	668.91
7/10/2006	10.61	675.4
10/18/2006	15.41	670.6
1/9/2007	15.6	670.41
2/28/2007	2.74	683.27
4/16/2007	16.35	669.66

NOTES:
ft MSL - feet mean sea level
NA - Not Available
NM - Not Measured
TOC - top of PVC casing
TOC Elevation - 686.01
DPE and GWCT down on 2/28/07

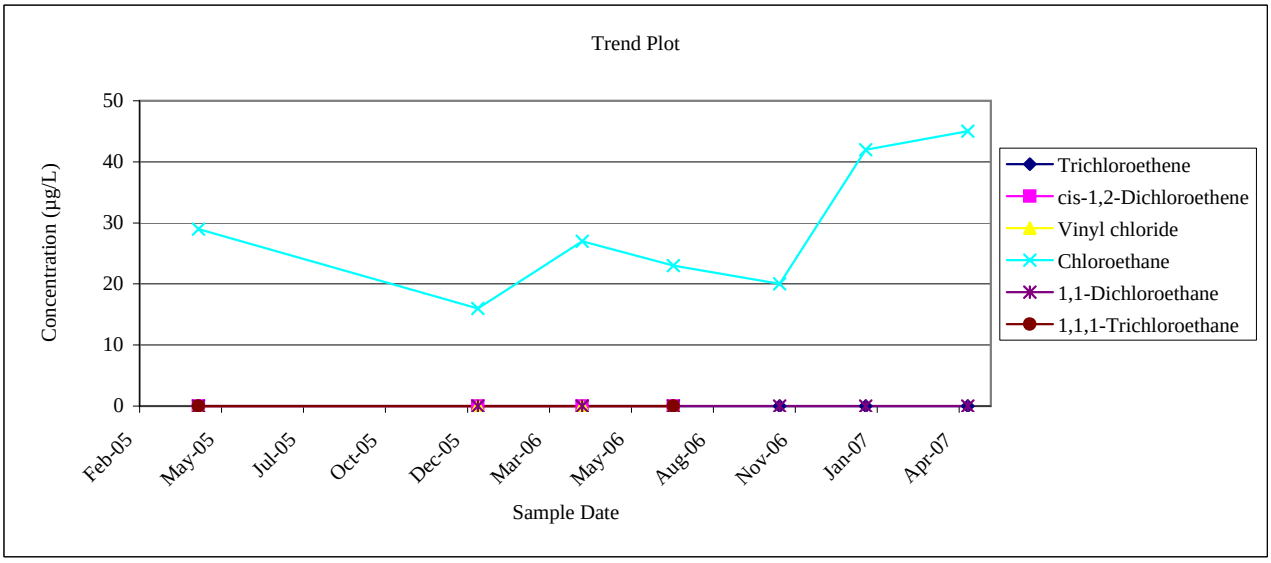


APPENDIX C

SUMMARY OF VOCs IN GROUNDWATER

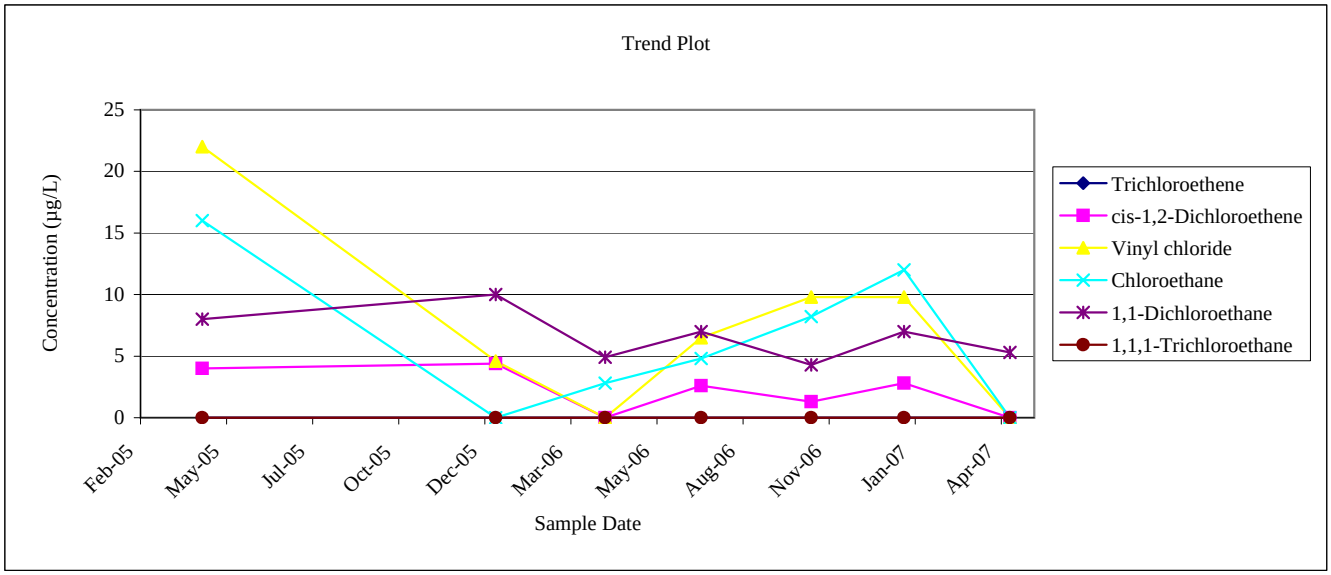
MONITORING WELL MW-2
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/14/2005	< 10	< 10	< 10	29	< 10	<10
1/5/2006	< 25	< 25	< 25	16	< 25	< 25
4/14/2006	< 25	< 25	< 25	27	< 25	< 25
7/10/2006	< 25	< 25	< 25	23	< 25	< 25
10/19/2006	< 5	< 5	< 5	20	< 5	< 5
1/9/2007	< 5	< 5	< 5	42	< 5	< 5
4/16/2007	< 20	< 20	< 20	45	< 20	< 20



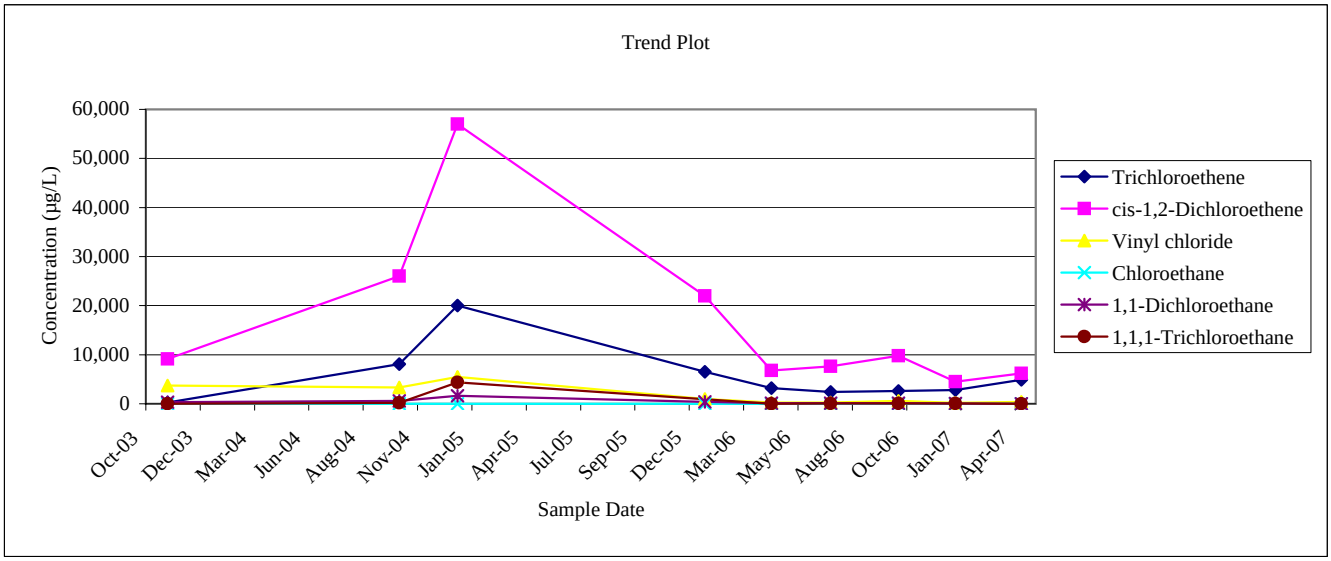
MONITORING WELL MW-3
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/14/2005	< 10	4	22	16	8	<10
1/5/2006	< 25	4.4	4.6	< 25	10	< 25
4/14/2006	< 25	< 25	< 25	2.8	4.9	< 25
7/10/2006	< 25	2.6	6.5	4.8	7	< 25
10/18/2006	< 5	1.3	9.8	8.2	4.3	< 5
1/10/2007	< 5	2.8	9.8	12	7	< 5
4/16/2007	< 20	< 20	< 20	< 20	5.3	< 20



MONITORING WELL MW-4
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

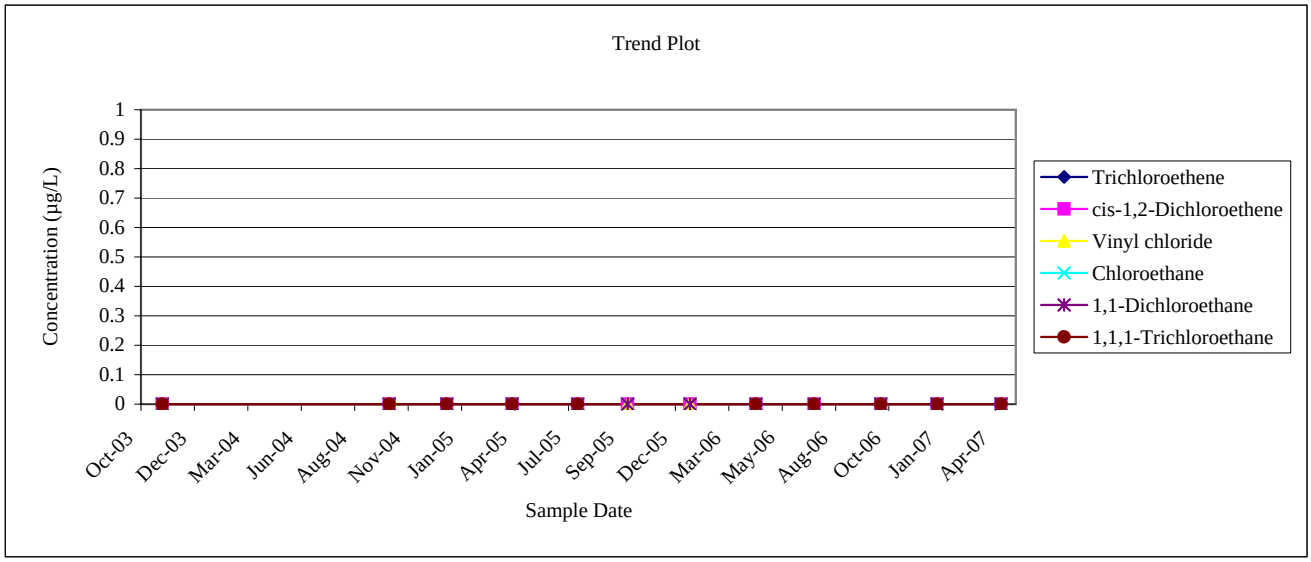
Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
11/7/2003	270	9,100	3,700	<10	320	28
10/13/2004	8,100	26,000	3,300	< 1,000	560	220
1/7/2005	20,000	57,000	5,500	< 2,000	1,600	4,400
1/6/2006	6,500	22,000	1,000	< 2,000	370	520
4/14/2006	3,200	6,800	280	< 500	120	< 500
7/10/2006	2,400	7,600	250	< 500	120	68
10/18/2006	2,600	9,800	600	< 5	130	52
1/10/2007	2,800	4,500	220	< 400	56	66
4/17/2007	4,900	6,200	360	< 500	< 500	< 500



Note: LNAPL was present in MW-4 during the October 2004 and January 2005 groundwater sampling events.

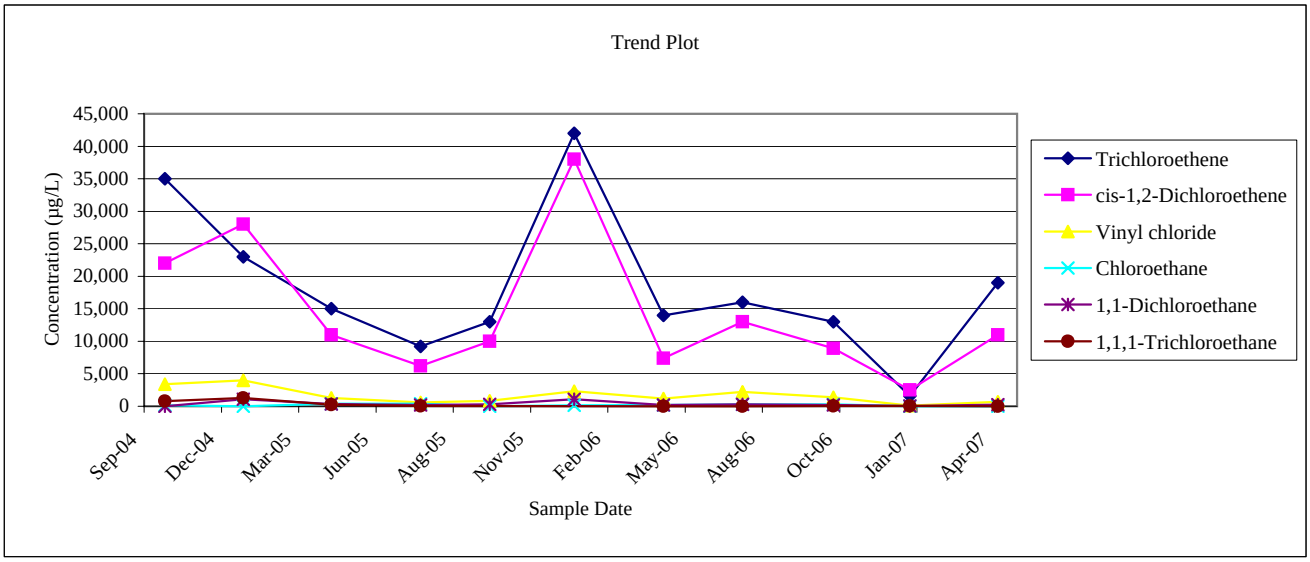
MONITORING WELL MW-6
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
11/7/2003	< 10	< 10	< 10	< 10	< 10	< 6
10/12/2004	< 10	< 10	< 10	< 10	< 10	< 10
1/6/2005	< 10	< 10	< 10	< 10	< 10	< 10
4/14/2005	< 10	< 10	< 10	< 10	< 10	< 10
7/21/2005	< 5	< 5	< 5	< 5	< 5	< 5
10/4/2005	< 5	< 5	< 5	< 5	< 5	< 5
1/5/2006	< 5	< 5	< 5	< 5	< 5	< 5
4/14/2006	< 5	< 5	< 5	< 5	< 5	< 5
7/10/2006	< 5	< 5	< 5	< 5	< 5	< 5
10/18/2006	< 5	< 5	< 5	< 5	< 5	< 5
1/10/2007	< 5	< 5	< 5	< 5	< 5	< 5
4/16/2007	< 5	< 5	< 5	< 5	< 5	< 5



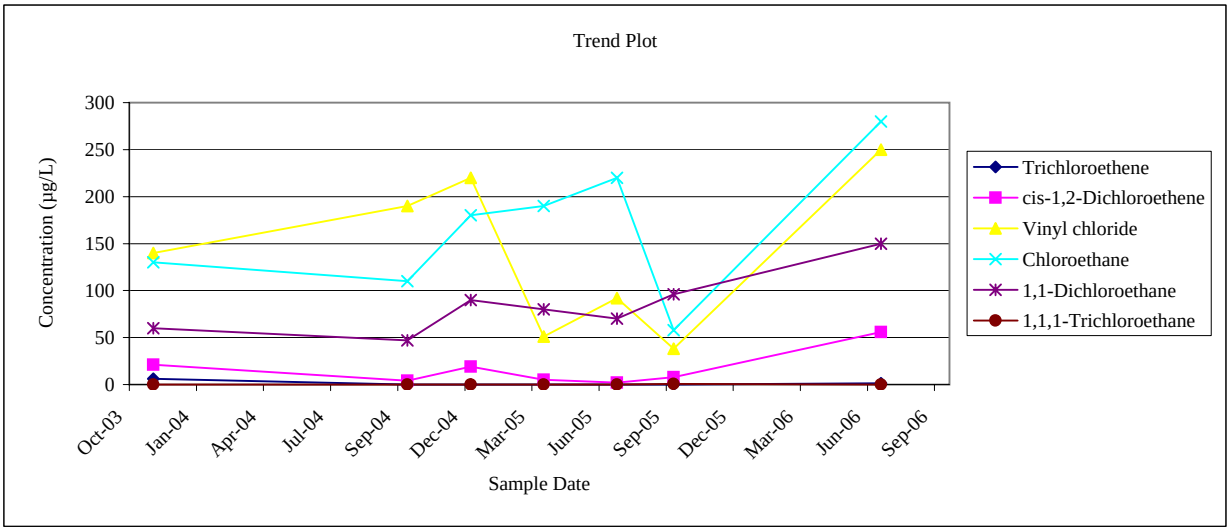
MONITORING WELL MW-8R
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
10/13/2004	35,000	22,000	3,400	160	< 5,000	810
1/7/2005	23,000	28,000	4,000	< 2,000	1,100	1,300
4/14/2005	15,000	11,000	1,300	380	360	240
7/21/2005	9,200	6,200	600	390	200	52
10/5/2005	13,000	10,000	830	< 1,000	300	<1,000
1/6/2006	42,000	38,000	2,300	150	1100	820
4/14/2006	14,000	7,400	1,200	220	200	< 1,000
7/10/2006	16,000	13,000	2,200	300	320	< 1,000
10/18/2006	13,000	8,900	1,400	300	200	32
1/10/2007	1,600	2,500	120	24	52	26
4/17/2007	19,000	11,000	670	< 1,000	240	< 1,000



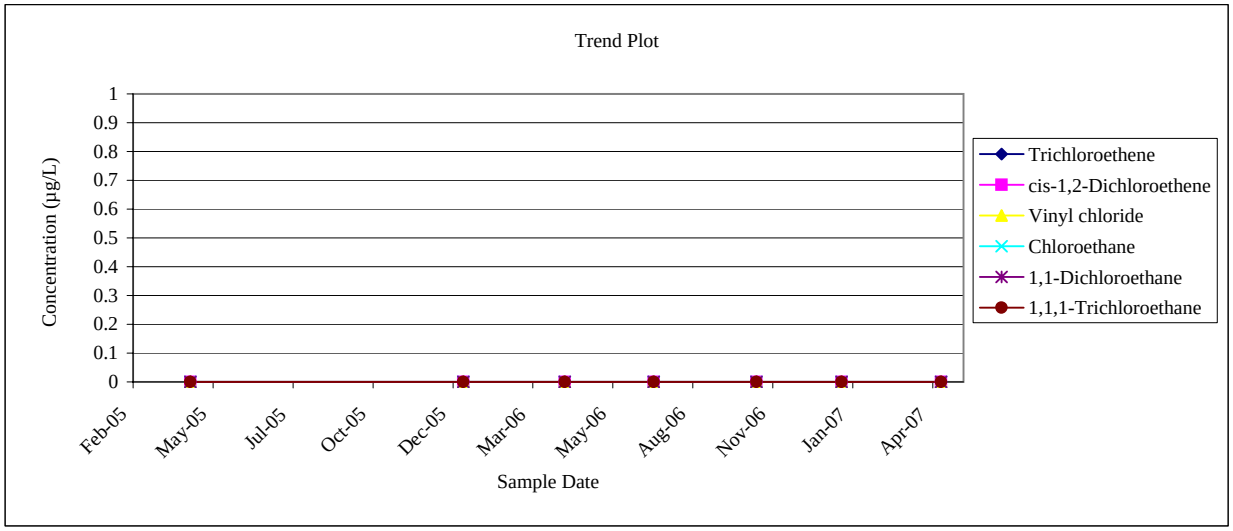
MONITORING WELL MW-9
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
11/7/2003	6	21	140	130	60	< 10
10/13/2004	< 10	4	190	110	47	< 10
1/6/2005	< 10	19	220	180	90	< 10
4/14/2005	< 10	5	51	190	80	< 10
7/21/2005	< 5	2	92	220	70	< 5
10/5/2005	< 5	8	38	58	96	0.68
7/10/2006	1.3	56	250	280	150	< 5



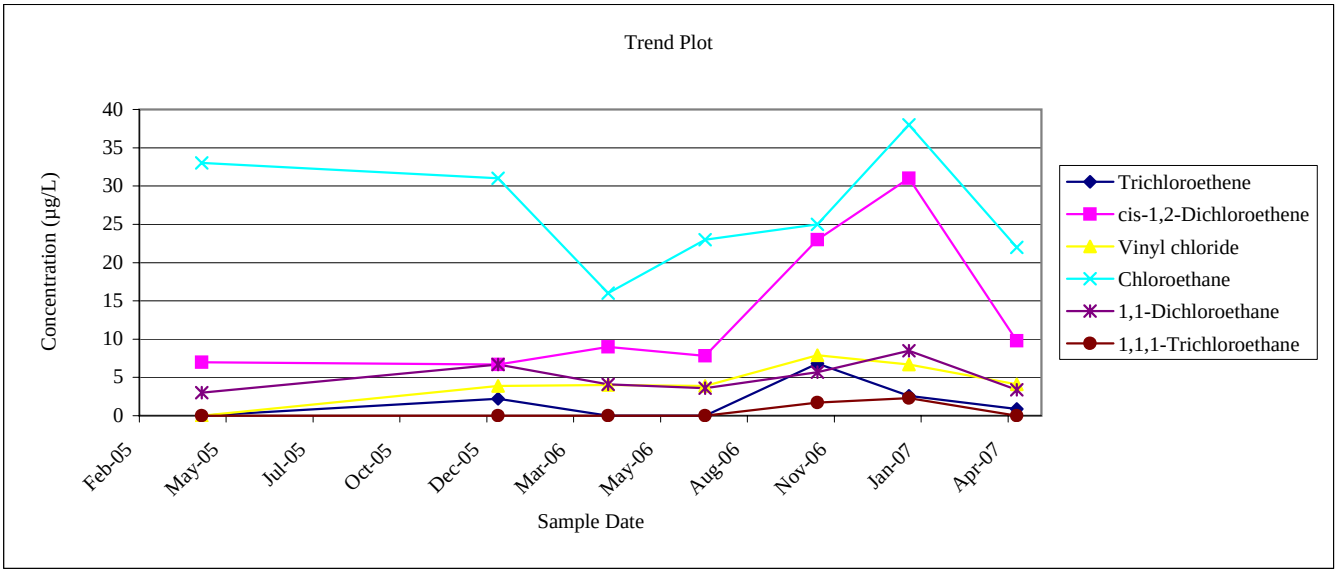
MONITORING WELL MW-10
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/14/2005	< 10	< 10	< 10	< 10	< 10	<10
1/5/2006	< 5	< 5	< 5	< 5	< 5	< 5
4/14/2006	< 5	< 5	< 5	< 5	< 5	< 5
7/10/2006	< 5	< 5	< 5	< 5	< 5	< 5
10/18/2006	< 5	< 5	< 5	< 5	< 5	< 5
1/9/2007	< 5	< 5	< 5	< 5	< 5	< 5
4/16/2007	< 5	< 5	< 5	< 5	< 5	< 5



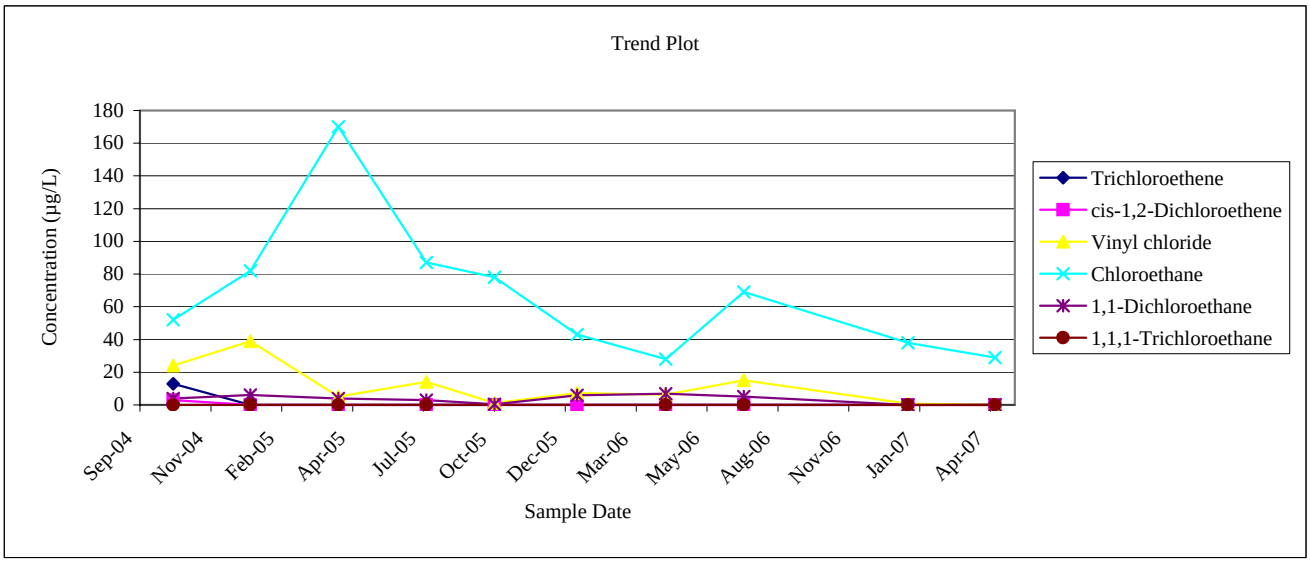
MONITORING WELL MW-11
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/14/2005	< 10	7	< 10	33	3	< 10
1/5/2006	2.2	6.7	3.9	31	6.7	<20
4/14/2006	< 20	9	4	16	4.1	< 20
7/10/2006	< 20	7.8	3.9	23	3.6	< 20
10/19/2006	6.8	23	7.9	25	5.7	1.7
1/9/2007	2.6	31	6.7	38	8.5	2.3
4/16/2007	0.89	9.8	4.1	22	3.4	< 5



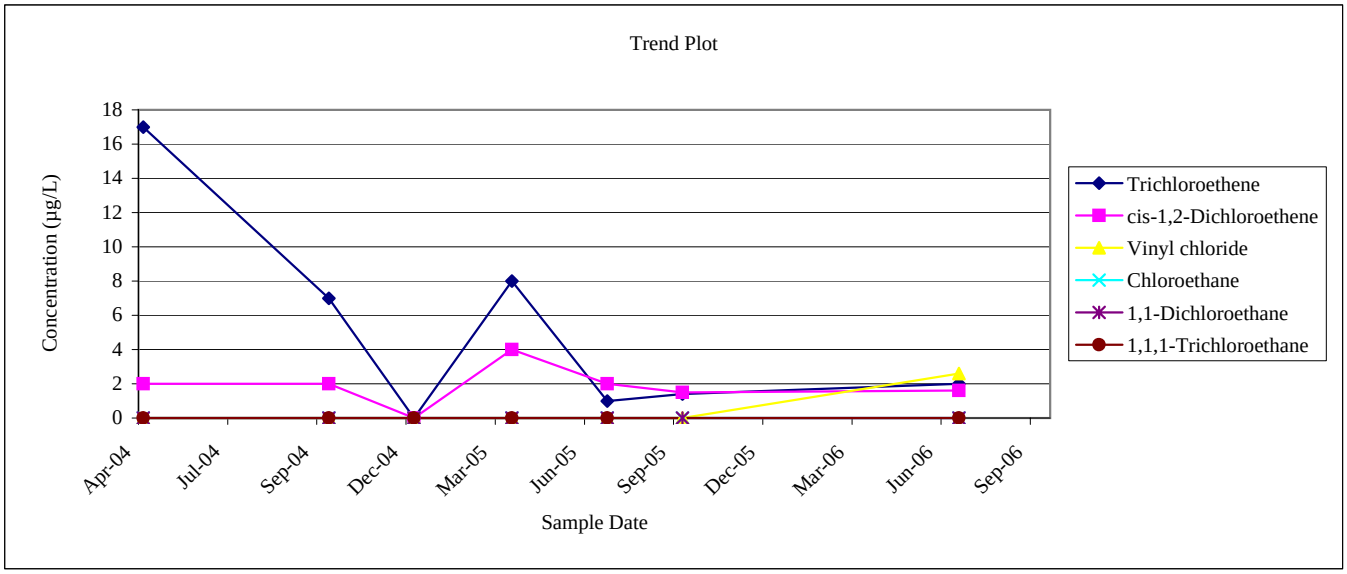
MONITORING WELL MW-12
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
10/12/2004	13	3	24	52	4	<10
1/6/2005	< 10	< 10	39	82	6	<10
4/14/2005	< 10	< 10	5	170	4	<10
7/21/2005	< 5	< 5	14	87	3	<5
10/5/2005	< 5	< 5	1.2	78	0.43	<5
1/5/2006	< 25	< 25	7.2	43	5.8	<25
4/14/2006	< 25	< 25	6.3	28	6.9	< 25
7/10/2006	< 25	< 25	15	69	5	< 25
1/9/2007	< 5	< 5	0.83	38	< 5	< 5
4/16/2007	< 20	< 20	< 20	29	< 20	< 20



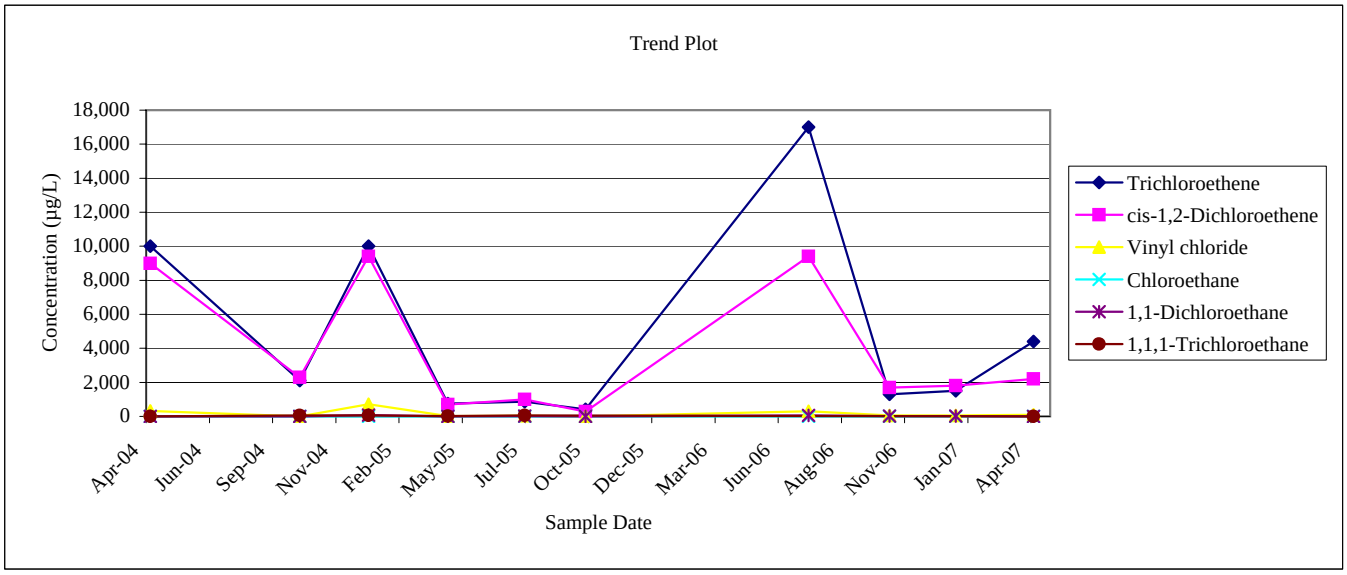
PIEZOMETER MW-13D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	17	2	< 10	< 10	< 10	< 10
10/12/2004	7	2	< 10	< 10	< 10	< 10
1/6/2005	< 10	< 10	< 10	< 10	< 10	< 10
4/15/2005	8	4	< 10	< 10	< 10	< 10
7/20/2005	1	2	< 5	< 5	< 5	< 5
10/4/2005	1.4	1.5	< 5	< 5	< 5	<5
7/10/2006	2	1.6	2.6	< 5	< 5	< 5



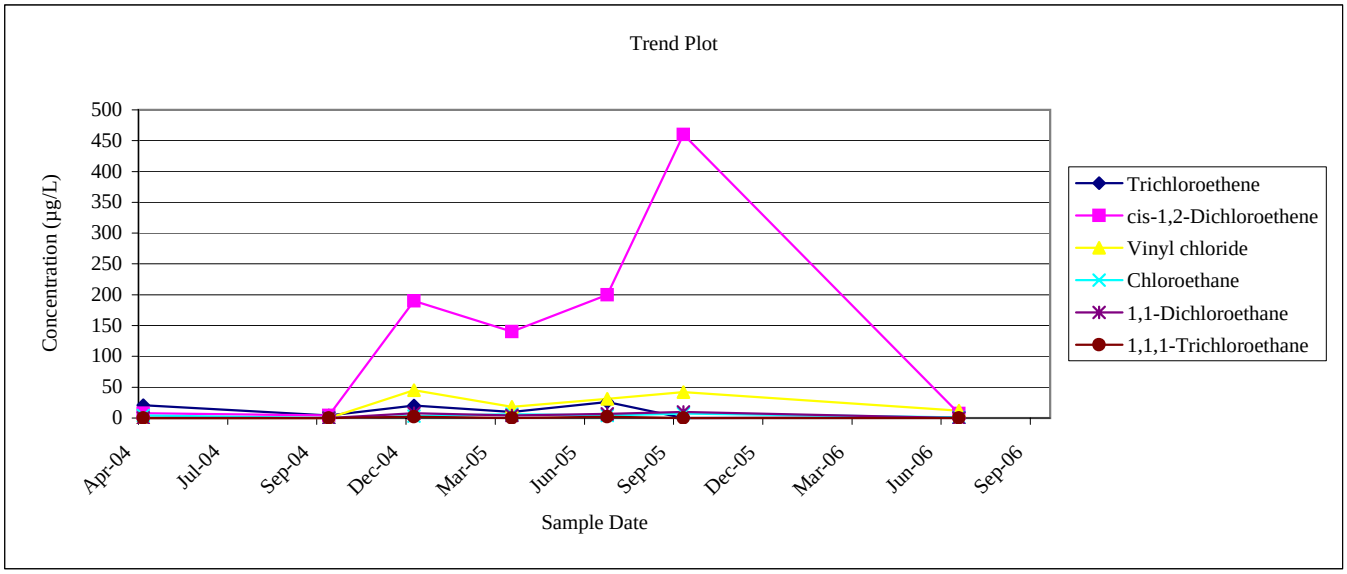
PIEZOMETER MW-13S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	10,000	9,000	320	< 100	< 100	< 100
10/12/2004	2,100	2,300	< 200	< 200	< 200	56
1/6/2005	10,000	9,400	720	< 200	75	62
4/15/2005	760	700	28	< 50	9	20
7/20/2005	870	990	37	< 40	16	49
10/4/2005	410	280	9.1	< 40	< 40	3.4
7/10/2006	17,000	9,400	300	9	65	88
10/19/2006	1,300	1,700	50	<100	19	36
1/10/2007	1,500	1,800	58	<100	24	41
4/17/2007	4,400	2,200	90	< 250	< 250	< 250



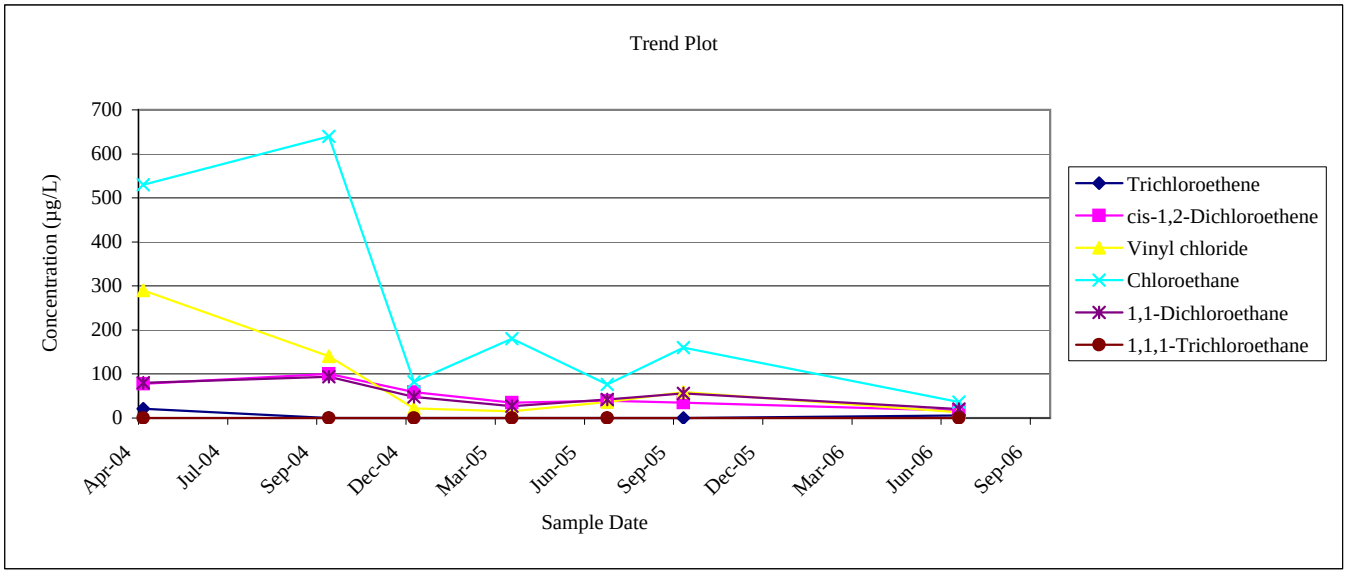
PIEZOMETER MW-14D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	21	8	< 10	4	< 10	< 10
10/12/2004	4	4	< 10	< 10	< 10	< 10
1/6/2005	20	190	45	3	8	2
4/15/2005	10	140	18	6	4	< 10
7/20/2005	26	200	31	4	7	2
10/5/2005	< 10	460	42	7.2	9.9	<10
7/10/2006	0.96	7.2	12	0.82	< 5	< 5



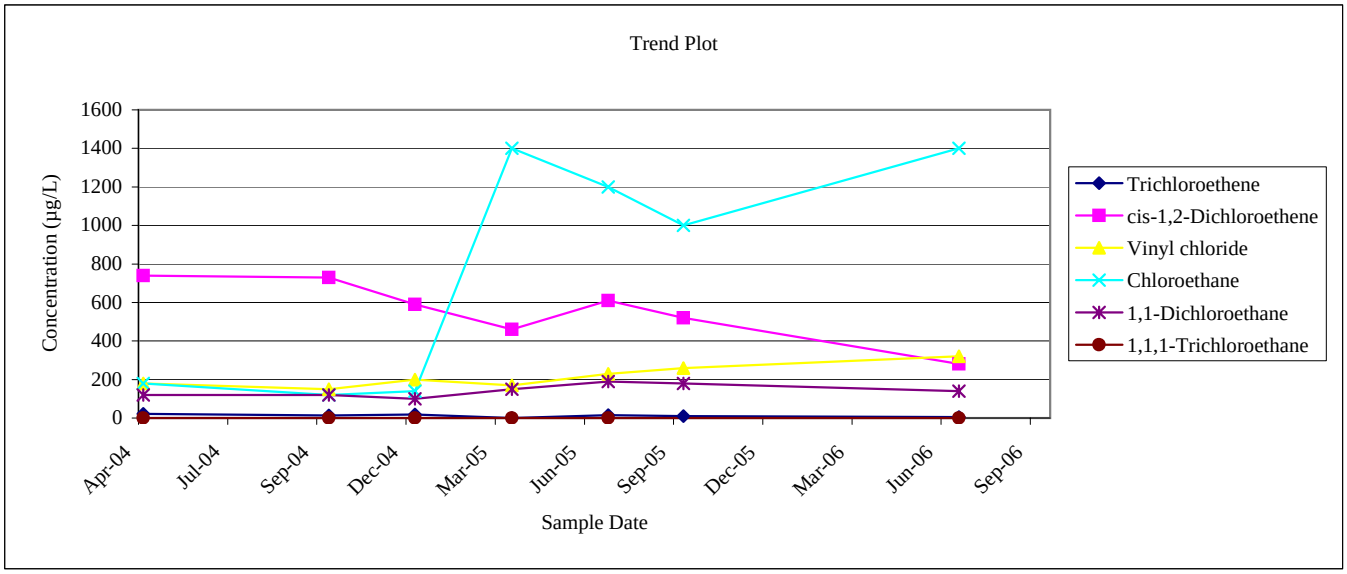
PIEZOMETER MW-14S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	21	78	290	530	80	< 20
10/12/2004	< 10	100	140	640	94	< 10
1/6/2005	< 10	59	22	82	48	< 10
4/15/2005	< 10	35	15	180	27	< 10
7/20/2005	< 5	39	36	76	42	< 5
10/5/2005	< 5	35	59	160	56	<5
7/10/2006	5.7	17	13	36	20	< 25



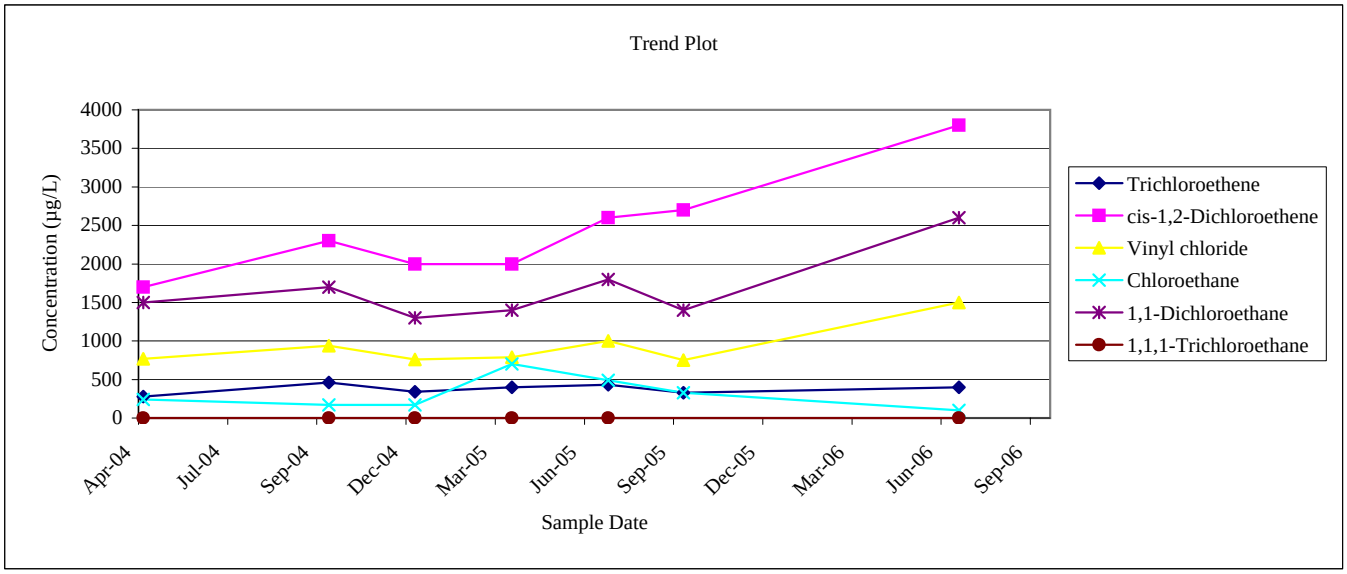
PIEZOMETER MW-15D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	21	740	180	180	120	< 10
10/12/2004	14	730	150	120	120	< 50
1/7/2005	18	590	200	140	100	< 50
4/15/2005	< 50	460	170	1,400	150	< 50
7/21/2005	15	610	230	1,200	190	< 25
10/5/2005	10	520	260	1,000	180	<50
7/10/2006	4.9	280	320	1,400	140	< 5



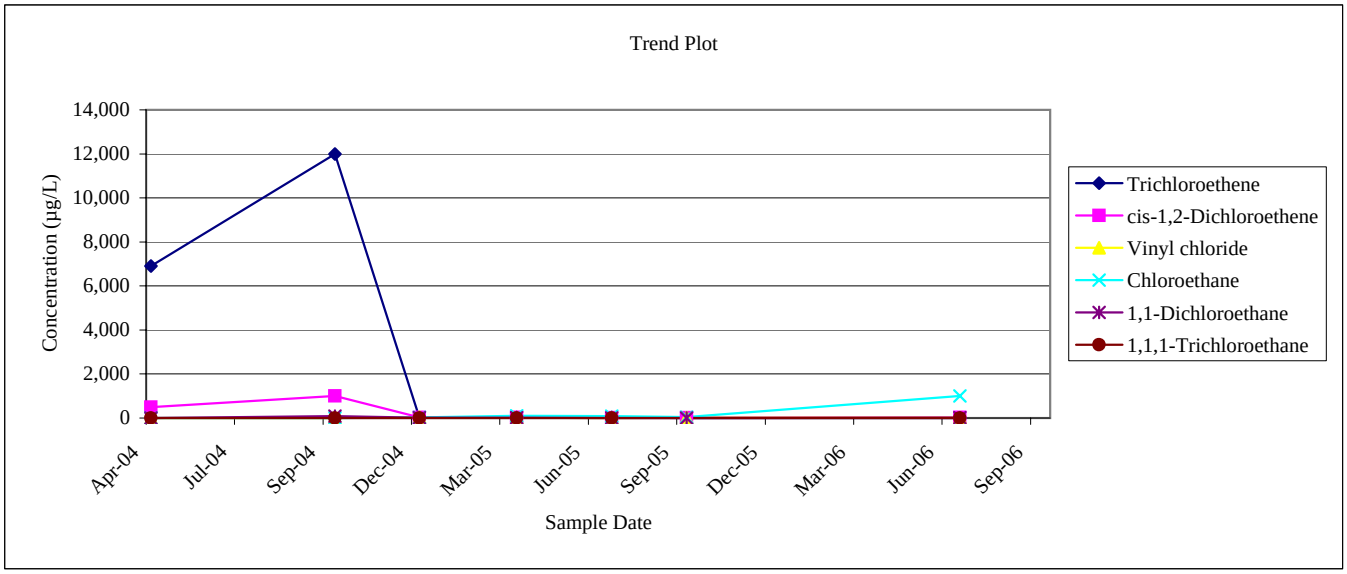
PIEZOMETER MW-15S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	280	1,700	770	240	1,500	< 250
10/12/2004	460	2,300	940	170	1,700	< 250
1/7/2005	340	2,000	760	170	1,300	< 250
4/15/2005	400	2,000	790	700	1,400	< 200
7/21/2005	430	2,600	1,000	490	1,800	< 120
10/5/2005	330	2,700	750	330	1,400	<100
7/10/2006	400	3,800	1,500	100	2,600	< 25



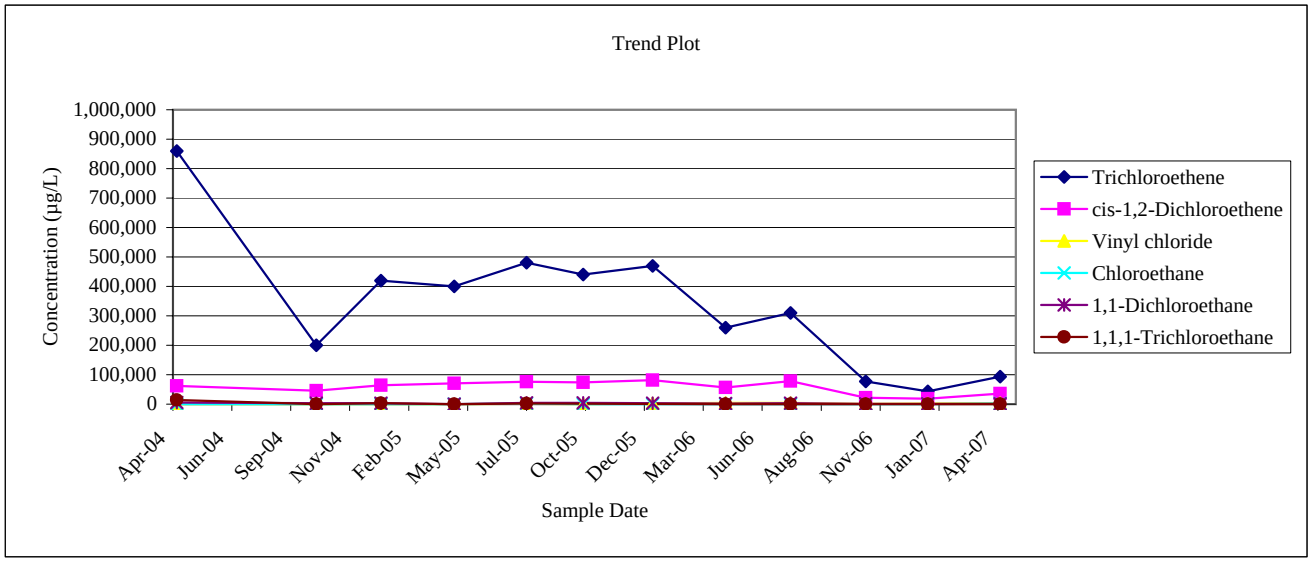
PIEZOMETER MW-16D
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	6,900	490	< 500	< 500	< 500	< 500
10/12/2004	12,000	1,000	< 500	< 500	91	< 500
1/6/2005	9	27	39	22	15	< 10
4/15/2005	32	36	17	100	10	< 10
7/21/2005	25	12	4	84	2	< 10
10/5/2005	1.3	16	10	41	5	<5
7/10/2006	6.1	27	21	1,000	9.7	< 5



PIEZOMETER MW-16S
SUMMARY OF VOCs IN GROUNDWATER
Former Scott Aviation Site
Lancaster, New York

Sample Date	Analytical Results (µg/L)					
	Trichloroethene	cis-1,2-Dichloroethene	Vinyl chloride	Chloroethane	1,1-Dichloroethane	1,1,1-Trichloroethane
4/8/2004	860,000	62,000	< 2,0000	< 20,000	5,000	14,000
10/12/2004	200,000	46,000	< 10,000	< 10,000	2,900	< 10,000
1/7/2005	420,000	64,000	< 10,000	< 10,000	3,800	3,300
4/15/2005	400,000	71,000	< 25,000	< 25,000	< 25,000	< 25,000
7/21/2005	480,000	76,000	1,500	2,200	4,400	2,700
10/5/2005	440,000	74,000	< 25,000	< 25,000	4,100	<25,000
1/6/2006	470,000	82,000	2,600	< 20,000	3,300	5,200
4/14/2006	260,000	56,000	3,900	< 20,000	2,600	< 20,000
7/10/2006	310,000	78,000	4,000	< 20,000	3,500	< 20,000
10/19/2006	77,000	22,000	1,300	< 5,000	940	< 5,000
1/10/2007	44,000	18,000	1,900	< 2,500	840	< 2,500
4/17/2007	94,000	36,000	3,300	1,800	1,500	< 5,000



APPENDIX D

STL BUFFALO TECHNICAL GUIDANCE DOCUMENT

SEVERN TRENT STL

STL Buffalo Technical Guidance Document

Title: **Evaluation of Foaming Samples Requiring Volatile Analysis**
Document # TG003
Revision: 0
Date: 03/19/2007
Author: John Schove, jschove@stl-inc.com
Verl Preston, vpreston@stl-inc.com

Introduction:

Environmental samples which demonstrate the characteristic of foaming during the analysis for volatile organics are a common matrix challenge encountered by the laboratory. When analyzing these difficult samples, it is STL's goal to produce data that are method compliant, provide the lowest possible report limits and preserve the integrity of the instrument for long-term production of additional quality data.

Discussion:

Purge and trap technology is employed to extract volatile organic compounds (VOC's) from a solid or liquid sample matrix by passing a purge gas (High Purity Helium) through the bottom of a fritted sparge vessel before it makes contact with the sample. The frit disburses the gas into finely divided bubbles thereby allowing a larger surface area of the sample to be contacted. This process allows the inert gas stream to strip the analytes from the sample matrix and transfer them to an absorbent trap. These analytes are then collected and concentrated on this absorbent trap for analysis. The VOC's are then desorbed off the trap, with a sweep gas, and transferred to the Gas Chromatograph (GC) and then eventually to the detection system (Mass Spectrometer, Photo Ionization Detector, Flame Ionization Detector or Electrolytic Conductivity Detector).

Some samples may exhibit foaming during the purging process. In the event that foaming samples were allowed to come in contact with the sample pathway, damage to the instrument can be extensive. Sample foaming can often result not only in a ruined adsorbent trap but also in irreversible contamination of the internal gas sample pathway. Foaming also causes interference with the quantitation of target compounds in several ways; i.e. raising the chromatographic baseline causing decreased sensitivity, decreasing instrument response in CCVs and ICVs resulting in the failure of SPCC minimum response requirements, and shifting analyte retention times, causing internal standards to fall outside of allowable retention time shifts of 30 seconds*. In cases of severe contamination, the sensitivity and linearity of the instrument may be compromised such that maintenance and/or replacement of damaged parts will not return the instrument to its original condition. This will impact the ability to maintain acceptable Method Detection Limits and Initial Calibrations as demonstrated by the exceedances of allowable %RSD criteria and failure of batch QA/QC samples such as the LCS and MS/MSD requirements.

* Section 7.4.6 of sw846 3ed method 8260b

Introduction of foam into the sample pathway may therefore adversely affect the quality of data not only in the short-term but also for the life of the instrument.

There are many factors, which may contribute to the foaming characteristics of a sample. The presence of soaps or surfactants is a common cause of foaming and may be present in many types of environmental samples. Foam products may sometimes be applied to landfills as a temporary day cover and may eventually filter down to the leachate. Bacterial growth is also very common in leachate collection systems often resulting in foaming on the leachate surface and subsequently in the leachate sample provided to the laboratory.

No specific guidance to address handling of foaming samples is provided in the analytical methods. The laboratory must define a procedure, which manages the various potential sources of the foam. Some of the technologies that have been evaluated include physical disruption of the foam bubbles, chemical anti-foaming agents, foam sensors and dilution of the sample.

> *Physical disruption:* "Mud puppies" and "Foam busters" are devices within the sparge vessel that physically breakup any bubbles before they can travel up the neck of the vessel and contaminate the sample pathway. STL has also evaluated custom sparge vessels that are manufactured with dimples within the glassware to physically break up the foam bubbles. These mechanisms have not been found to be 100% successful and continued contamination of the sample pathway was a common problem.
>
> *Chemical disruption:* Anti-foaming agents are designed to reduce the bubbles produced by soaps or surfactants. Use of these agents has not been successful in treating other non-surfactant related foaming.
>
> *Foam Sensors:* The latest technology currently employed within the laboratory is foam sensors. These devices are configured to detect the presence of foam within the sparge vessel. If this system does detect the presence of foam, it automatically shuts off the gas flow to the sample, removes the sample from the sparge vessel and rinses the sparge vessel to minimize any possible reside that could contaminate any other samples. With this current configuration, the instrument does not allow a foaming sample to come in direct contact with any of the internal gas pathways.
>
> *Dilution:* Sample dilution allows for a sample specific approach to reduce the foaming properties. Each sample can be evaluated separately to ensure the instrument sample pathway is not contaminated while providing method compliant data.

Through evaluation of the processes currently available, STL has incorporated a system of instrument foam sensors coupled with sample dilution to address analysis for volatile constituents in samples that exhibit foaming characteristics. To obtain data which meets method compliance, provides the lowest possible reporting limits and still conserves the instrument integrity for production of long-term quality data, the following approach has been developed.

STL Approach

Physical Inspection:
All volatile samples are visually inspected by the analyst prior to any volatile analysis. The analyst inspects for color, clarity, particulates or any other visual clues as to how the sample will behave. A bulging septum may be indicative of built up pressure within the vial due to dissolved gasses within the sample. A yellow to brown color is often indicative of a sample that may contain surfactants, detergents or biological activity, all of which have the potential to foam when

an inert gas is passed through them. If the analyst detects the possibility that the sample has the potential to foam, they will then perform a foam test.

Historical Evaluation:
STL maintains an extensive library of historical data of previous analysis of reoccurring samples. This data includes dilution factors previously required for analysis of the sample as well as the reasoning for the dilution (excessive foaming, high levels of target analytes, high levels of non-target analytes, etc.) If the historical information indicates that a sample will foam, the analyst will perform a foam test.

Foam Test:
To test if the sample will foam during the purging procedure, the analyst will remove a 1ml aliquot of sample from an extra vial and visually inspect this aliquot for production of bubbles in the barrel of the syringe. This visual inspection can give an indication of the optimal dilution factor with which to start the foam test. The 1ml aliquot is then injected into a trial sample tube. The tube is capped and shaken to check for foaming. If the sample does not appear to foam, the analyst will process the sample un-diluted. If the sample foams, the cap is removed and water is added to the trial sample tube so that a dilution factor of 2 is achieved (or a higher dilution factor may be chosen depending on the quantity of bubbles initially noted in the syringe barrel). The sample is then re-capped and shaken again. If the foaming has subsided enough that the sample is considered acceptable for analysis, then the sample is prepared at a dilution factor of 2 and analyzed on an instrument equipped with a foam sensor. If the dilution factor of 2 still demonstrated foaming, the foam test process would be repeated with ever increasing dilution factors (5, 10, 20, etc) until no foaming was observed in the trail sample tube.

Selecting Appropriate Dilution Factor:
Following the foam test, the sample is prepared for analysis at the selected dilution. If a dilution of 2 were required, the sample would be prepared by transferring 25ml of sample into a 50ml volumetric flask. The flask is then brought to full volume of 50ml with the addition of 25ml of volatile free water. The flask is inverted 3 times to ensure that proper mixing is obtained and the contents transferred to a 44ml VOA vial for analysis on the instrument. The 6ml of liquid remaining in the flask is shaken and observed for foaming to ensure that the selected dilution is correct. If the dilution is deemed correct, the analysis will continue at that dilution factor and will be noted in the instrument analytical logbook. If a dilution factor of 2 is deemed to still be insufficient to prevent foaming, the foam test is repeated. The sample is then again, prepared at the new dilution factor using appropriate volumes of sample and volatile free water and transferred to a 44 ml VOA vial. Prior to analysis, the 6 ml remaining in the dilution preparation flask is again shaken to verify that the proper dilution has been selected.

Following analysis of the diluted sample, the data are evaluated to ensure the sample was not over-diluted. If the sample demonstrated no foaming during analysis and the resultant data did not demonstrate the presence of any volatile constituents, the sample may require analysis at a lower dilution. The foam test is repeated at a slightly lower dilution to evaluate correctness of the initial selection. Re-analysis at a lower dilution may be attempted, however if foaming occurs, the instrument foam sensors will discontinue the analysis and no data will be collected for evaluation.

Documentation:
This described process shall be incorporated into STL's Standard Operating Procedure and does not require documentation of each process evaluation step of a specific sample. However, notations shall be documented in the instrument logbook as to the foaming nature of the sample

and the final dilution factor used for any analyses. The quantitation report shall also be appended with the notation that the sample "FOAMS" and was analyzed at the Lowest Possible Dilution, "LPD".

Summary

This process offers a recommended rational approach to processing volatile samples, which present with a common matrix difficulty. It should be noted that these recommendations may be overridden by project specific requirements and that they cannot cover all eventualities. The complexity of some data sets will require the final decision to be made utilizing the judgment of experienced analysts.

APPENDIX E

ANALYTICAL DATA
(PROVIDED ON CD)