Monthly Operations and Monitoring Report May 2006

Site:
Stanton Cleaners Area Groundwater Contamination
Great Neck, NY

Prepared for:
Environmental Chemical Corporation
1293 Broad Street, Suite 200
Bloomfield, New Jersey 07003

Prepared by:
Earth Tech, Inc.
7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228

June 19, 2006

Earth Tech Project No. 70536.02.01.02

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Date: _____

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1.0 INTRODUCTION

This Monthly Operations and Monitoring Report, May 2006 (Monthly Report) has been prepared by Earth Tech, Inc., as a subcontractor to Environmental Chemical Corporation (ECC), under Contract No.5442-001-001.

The Stanton Cleaners Area Groundwater Contamination (Stanton) site is located at 110 Cutter Mill Road in Great Neck, Nassau County, New York. The Stanton Cleaner Property (SCP) is approximately ¼ acre in size and includes a two-story building in which a dry-cleaning business operates and an adjacent one-story boiler/storage building as well as a two-story treatment building. The site is bordered by an indoor tennis facility, a synagogue and school facility.

Improper handling and disposal of spent dry cleaning solvents, including Tetrachloroethylene (PCE), resulted in the release of hazardous substances at the site. PCE migrated from the site's subsurface soils into the indoor air environments of the surrounding buildings and into groundwater beneath the site, resulting in a significant threat to human health.

In 1983, approximately 20 cubic yards of PCE-contaminated soil was removed from behind the Stanton Cleaners property.

In 1989, a groundwater extraction and treatment system was installed by the original Site operator to address groundwater contamination which resulted from improper disposal of spent PCE behind the SCP building. This system is not currently operational.

In 1998, the New York State Department of Environmental Conservation (NYSDEC) funded the construction of a new air stripper treatment system for the WAGNN water supply wells, which are impacted by contamination from the Site. This treatment system is currently in operation. In October 1998, as an immediate response action, the EPA installed a temporary soil vapor interceptor system, adjacent to the tennis club, to mitigate impacts from PCE vapors to the indoor air of this facility.

In 2001, the EPA completed the construction and installation of a soil vapor extraction (SVE) system and a ground water treatment (GWT) system on the SCP. Both the SVE and GWT systems are housed in the treatment building that was constructed on the SCP. The SVE was installed to remediate the VOC-contaminated soils, thus reducing the indoor air contamination in the adjacent affected buildings to safe levels. The GWT system was installed to remediate the VOC-contaminated groundwater and to remove the threat of vapors through the Site soils. Both systems are currently operating at the Site. The collected VOC-contaminated vapors and groundwater from both systems are treated through separate granular activated carbon (GAC) systems.

The site is presently under the jurisdiction of the Remedial Branch of the USEPA, Region II; USACE provides oversight to USEPA for the remedial action and the long-term remedial action programs. ECC provides oversight to the USACE to perform long-term remediation actions. Earth Tech, as a subcontractor to ECC, provides support on the following tasks as described in the Work Plan:

- Operation and maintenance (O&M) of the GWTS and SVE, including sampling and reporting;
- Sampling of monitoring wells associated with the site in order to track the migration of the contaminant plume, along with reporting.

- Sampling of indoor air quality of buildings adjacent to the site in order to identify all the adjacent buildings being impacted by site related contaminants and the effectiveness of the remedial actions being instituted at the site.

All work under this contract is performed in accordance with the following documents:

- Work Plan for Long-Term Remedial Action Support;
- Site-Specific Health and Safety Plan (HASP), dated July 23, 2001 (Revised February 3, 2003) and
- Sampling Quality Assurance Project Plan (SQAPP) dated August 22, 2000.

As required by the Scope of Work for this project, monthly summary reports are prepared to document and summarize the activities taking place. These reports provide a concise description of work performed during the reporting period and include pertinent deliverables as appendices. This monthly summary report covers the period between May 1 and May 31, 2006.

2.0 SUMMARY OF ACTIVITIES DURING MAY 2006

The following list summarizes activities performed and milestone dates under this contract during the reporting period, May 1 through May 31, 2006:

- May 2 – O&M Inspection/System Monitoring
- May 2 – Monthly System Sampling
- May 2 – Oil and grease for the system was replaced
- May 4 – Bi-weekly air monitoring
- May 4 – Carbon in the indoor air filters at Stanton (R2D2's) was replaced
- May 17 – O&M Inspection/System Monitoring/ Bi weekly air monitoring
- May 22 – Monthly water level gauging
- May 23 and 24 – Quarterly monitor well sampling
- May 31 – O&M Inspection/System Monitoring
- May 31 – Bi weekly air monitoring
- May 31 – Calibration of pH and conductivity meters (Recovery Well, Air Stripper and Effluent) by grab sample
- May 31- June 1 – Indoor air quality sampling using Summa canisters

Details of system shutdowns and alarms during the month of May 2006 are discussed in section 3.1. Daily Quality Control Reports (DQCRs), which include projected work for the following two weeks, are completed for each day of site activities. Copies of these reports are included as Appendix A.

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES

3.1 Operation and Maintenance

The GWTS treated and discharged 2,901,180.2 gallons during the month of May 2006. The system was operational (recovery well pumps running) for approximately 744 of the 744 hours during the month, for an average operating flow of 64.99 gallons per minute (gpm). The system has treated a total of 127,583,827 gallons since the plant startup in November 2001.

There are currently two recovery wells pumping water into the system (EPA-EXT-02 and EPA-MW-24). EPA-EXT-02 is located in the triangle, the corner of New Cutter Mill Road and Mirrielees Road. Extraction well MW-24 had been pumping from the triangle location until it was turned off and April 20, 2005. Extraction well EPA-EXT-4R was activated on April 20, 2005. EPA-EXT-4R is located in the parking lot directly in front of the Stanton Dry Cleaners building. The decision to turn off extraction well MW-24 and replace it with EPA-EXT-4R in April 2005 was made by the USEPA. Later, in early 2006, based on an evaluation of laboratory analytical results obtained from extraction well EPA-EXT-4R and monitoring well sampling results for monitoring wells located in the area of EPA-MW-24, the decision was made to shut down extraction well EPA-EXT-4R and re-activate EPA-MW-24. Therefore, EPA-EXT-4R was taken offline and EPA-MW-24 was activated on February 2, 2006.

The facility is equipped with a remote monitoring and control system that was accessed a minimum of three times per week, by the lead engineer, during the reporting period to ensure proper system operation and notify response personnel if a problem or abnormal condition was observed. The system also provides remote notification of alarm conditions via automatic e-mail and text messaging.

The Treatment System Operation and Maintenance Checklist were completed during each O&M inspection event and the checklists for May 2, 4, 17 and 31, 2006 are provided in Appendix B. When the system is operational, any abnormal conditions or parameters outside of the normal operating range are addressed by the lead operator and/or monitoring/environmental technician on site (Jim Simmonds or James Kearns). If they require guidance or notes any serious conditions, the inspector notifies the response manager (Tom Williams). The checklists are completed on site and sent to James Kearns for review and scheduling of additional work if needed. Abnormal conditions and/or parameters outside the operating range are addressed, including repairs, cleaning, and continued monitoring.

System operational and alarm conditions are automatically stored by the PLC. This data is downloaded every two weeks. The March 2006 operational data is included in Appendix C. While operational, the system data are within the normal ranges and are consistent with visual observations, with any exceptions as described above.

The effluent flow data table in Appendix C shows daily discharge flows from each day of system operation and cumulative treated water discharge for each day during the reporting period, as well as a summary of total monthly flow and average daily flow since the system was started up in October 2001.

A review of October's Operations and maintenance logs indicated there has been a slight reduction in discharge flow for the P&T system. In an effort to increase the discharge flow, it was determined that the P&T system aqueous phase carbon vessels needed to be placed in parallel in the system treatment train in an effort to reduce back pressure and increase effluent flow. The altering of the piping for the 2-400 pound aqueous phase carbon vessels from series to parallel was performed on November 1, and 2, 2005.

On November 30, 2005 the SVE systems was offline due to a faulty low level sensor in the SVE knockout tank. The sensor was reviewed during the December 19, 2005 O&M inspection and was deemed to be faulty. A new low-level float switch was installed on January 9, 2006.

On January 9, 2006, three drains were installed in the line of SVE 1 so that the line can be drained weekly and so adequate air flow can be obtained at the SVE 1 air sample ports for the bi weekly air monitoring. On January 24, 2006 the drains were replaced with more permanent ball valve drains.

3.2 Sampling and Analysis

3.2.1 Raw and Treated Groundwater

In accordance with the SQAPP, GWTS sampling is conducted on a monthly basis to monitor plant efficiency, to determine whether liquid carbon breakthrough has occurred, and to verify that contract-specific discharge parameters (in accordance with National Pollutant Discharge Elimination System (NPDES) permit equivalency) are met. The combined GWTS influent, along with the GWTS effluent (discharge), will be sampled by the 15th of each month. Collected samples will be shipped to a designated EPA, CLP lab for analysis of TCL volatile organic compounds.

Earth Tech personnel conducted the GWTS influent and effluent sampling for this report period on May 2, 2006. The samples were shipped to the USEP Region II DESA Laboratory, located in Edison, NJ for analysis of low concentration TCL volatile organic compounds. A copy of the full sampling trip report containing the chain of custody forms and FedEx air bill is included in Appendix D. Laboratory analytical results for the GWTS sampling event during this reporting period will be forwarded to ECC under separate cover from the laboratory.

Measurements of influent and effluent pH and turbidity, along with effluent conductivity, are automatically monitored and recorded by the GWTS PLC on a daily basis; this information is included with the downloaded data in Appendix C.

The next GWTS influent / effluent sampling event is scheduled for June 7, 2006.

3.2.2 Process Air Stream Monitoring

Air monitoring of the SVE and Pump and Treat System is performed on a bi-weekly basis. It includes monitoring for VOCs, air velocity, temperature, humidity, dew point, vacuum pressure and other parameters, as specified in the O&M manual. Air monitoring is performed at the following locations within the system:

- Combined SVE - Influent (pre-treatment),
- Post groundwater Air-Stripper (pre-treatment),
- Post vapor phase carbon vessel 1 – Air Stripper air discharge (post-treatment),
- Post vapor phase carbon vessel 2 – SVE air discharge (post-treatment),
- Sub-slab monitoring points (pre-treatment),
- SVE wells EPA-SVE-1 through EPA-SVE-4 (Shallow and Medium depth)

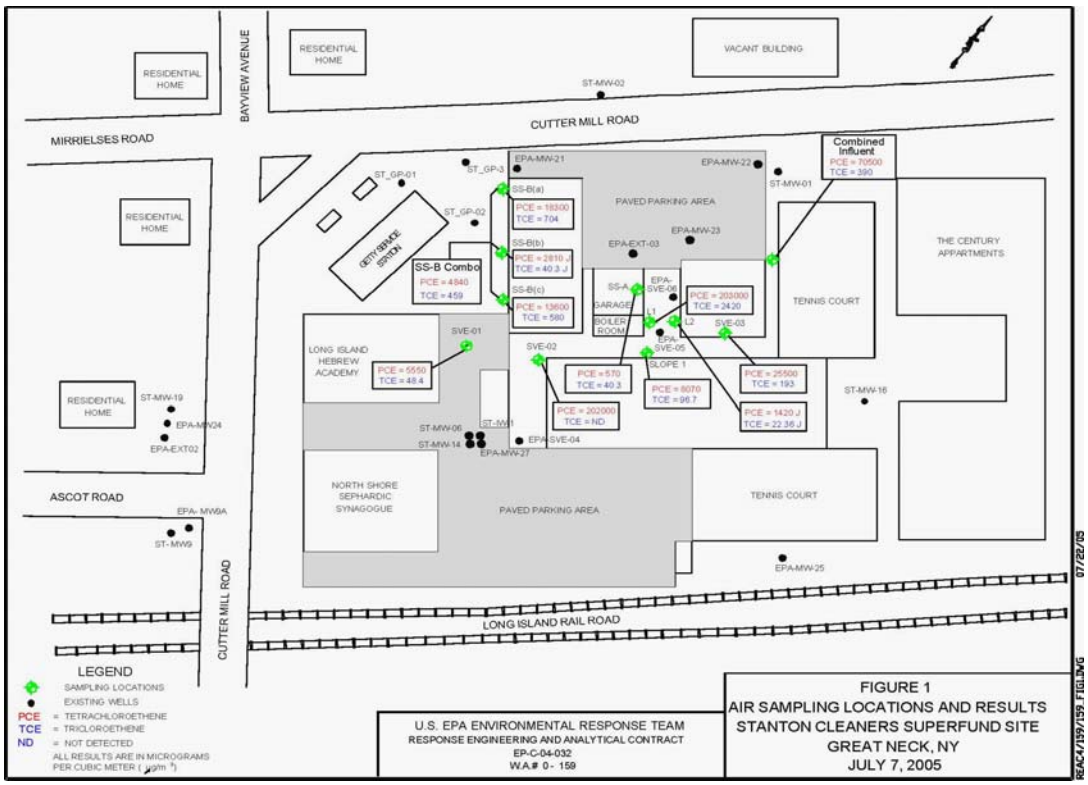
On October 3, 2005, following a review of the REAC SVE System Air Sampling Results for the event performed on July 7, 2005, the active SVE recovery wells were modified in an effort to maximize contaminant recovery rates. Details of the modifications to the active SVE wells prior to and post October 3, 2005 are included in the table below.

Table 1 Modification to Active SVE Wells

SVE Location	Prior to 10/3/05	After 10/3/05
SVE 1	Shallow On	Shallow and Intermediate On
SVE 2	Shallow On	Shallow On
SVE 3	Shallow On	Shallow On
SVE 4	Off	Off
EPA-SVE-4R	On	On
SSA	On	On
SSB-A	On	On
SSB-B	On	Off
SSB-C	On	On
L1	On	On
L2	On	Off

In addition to modifying the active SVE locations, the names of each location were altered in an effort to stay consistent with REAC's nomenclature. Future weekly monitoring logs will be consistent REACs sample numbers. The laboratory analytical results for REAC's sampling of the SVE locations, performed on July, 7, 2005 are included in the figure below (please note the results in the figure are reported in micrograms per cubic meter).

Figure 1 Air Sampling Locations and Results



Additional evaluation/enhancement of the SVE recovery rates is ongoing and the installation of several SVE sample port locations was performed on November 1 and 2, 2005. On January 9, 2006, two more SVE sample port locations were installed in the line of SVE 3. The bi-weekly air monitoring logs are included in Appendix F. Estimated PCE removal rates for the SVE system are presented in Table 1. A Graph showing the estimated PCE removal rate trend over time is presented in Figure 2. The next bi-weekly air-monitoring event is scheduled for June 13, 2006.

4.0 MONITORING WELL SAMPLING

Groundwater samples from select monitoring wells both on and off-site are collected on a quarterly basis and shipped to a designated EPA, CLP lab for analysis. Groundwater sampling activities are performed in accordance with the USEPA Groundwater Sampling SOP #2007 and the USEPA Low-Stress Purging and Sampling SOP provided in the SQAPP. Each quarterly sampling event is coordinated with the local water authority to schedule the event when local water supply drawdown conditions do not impact the measurements. The location and number of monitoring wells as well as analytical parameters will be determined before each event by the USPEA, USACE, and ECC.

The first semi-annual groundwater sampling event of 2005 was conducted by Earth Tech personnel on February 7 through 11, 2005. A total of 25 groundwater monitoring wells were sampled for analysis of the presence of TCL volatiles only. A copy of the full sampling trip report containing the chain of custody forms and FedEx air bills is included in Appendix D.

The second semi-annual groundwater sampling event was performed the week of August 29, 2005. It included sampling 29 monitoring wells, 15 of which had natural attenuation parameter analyses. Laboratory analytical results for this semi-annual groundwater sampling event were sent directly to ECC under separate cover from the laboratory. The next groundwater monitoring well sampling event is scheduled for the week of May 22, 2006. Below is a list of monitoring wells that will be sampled (per RPM selection/request). Also below is a list of monitored well samples that will be further analyzed for monitoring and natural attenuation parameters.

Table 2 Monitored Well Samples for Further Analysis

Wells to be Sampled	Monitoring & Natural Attenuation Parameter Wells
ST-MW-02	CL-ID
EPA-MW-22	EPA-MW-29
EPA-ME-21	ST-MW-20
ST-MW-15	EPA-MW-26
ST-MW-19	EPA-MW-27
ST-MW-12	ST-MW-17
CL-1D	ST-MW-12
EPA-ME-26	ST-MW-19
SSB-C	EPA-MW-21
EPA-MW-23	EPA-MW-9A*
ST-MW-14	
EPA-MW-27	
EPA-MW-9A	
ST-MW-11	
EPA-MW-29	
CL-4D	
ST-MW-20*	
ST-MW-17*	

*as a back-up only in the event another well cannot be sampled)

5.0 PLUME PERIMETER MONITORING

Groundwater level measurements are obtained from both on-site and offsite wells once a month in order to evaluate capture zone(s) around the groundwater extraction wells. The event is coordinated with the local water authority so the event can be scheduled when the local water supply drawdown conditions will have minimal impact to the measurements.

Water level measurements were collected on May 22, 2006. The location and number of monitoring wells was determined by the USEPA based on the site Capture Zone Analysis Plan. Groundwater level measurements for May 22, 2006 and historical groundwater level measurements are provided in Appendix H.

6.0 INDOOR AIR QUALITY SAMPLING

Indoor air quality samples from select locations within the treatment building and buildings along the perimeter of the site are collected using summa canisters on a quarterly basis and shipped to a laboratory for analysis. The location and number of indoor air quality samples to be collected as well as analytical parameters are determined by the USEPA, USACE and ECC.

The last indoor air quality sampling event was conducted on May 31 and June 1, 2006 by Earth Tech personnel. This sampling event was conducted to address air quality issues within the Long Island Hebrew Academy. The sampling Trip Report is included in Appendix I.

7.0 FUTURE EVENTS PLANNED

The following scheduled events are planned (or have since occurred) during the next three reporting periods:

- Continue to perform GWTS inspection and maintenance as required;
- Continue to perform bi-weekly system air monitoring;
- Collect system influent and effluent samples as directed by USACE/ECC/USEPA;
- Obtain groundwater level measurements as directed by USACE/ECC/USEPA;
- Revise O&M manual to reflect changes to GWP&T carbon vessel set-up (April 2006);
- Aqueous and vapor phase carbon change out (Late June 2006)

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)

The altering of the piping for the 2-400 pound aqueous phase carbon vessels from series to parallel was performed in November 2005. A review of flow rates indicated the effluent flow has increased from approximately 60 gpm to 72 gpm following the change. Action List of ongoing and completed items is provided in Appendix J to track work tasks that have been targeted as issues to be addressed.

Monthly O&M performed on November 29, 2005 indicated the low level float switch for the SVE system knockout tank was not functioning. Further inspection performed in December 2005 indicated a replacement was required. A replacement low level float switch was installed on January 9, 2006.

Figures

Tables

Estimated PCE Recovery Rates
Stanton Cleaners Area Groundwater Contamination Site
250 CFM SVE SYSTEM
September 2003 – May 2006

Date	# of Days	Flow Rate		VOC			
		(cfm)	Avg (cfm)	Concentration (ppm)	Average (ppm)	Discharge Rate (lbs/day)	Total Discharge (lbs)
9/11/2003	1	225	225	4.2	4.20	0.6	0.6
9/25/2003	13	210	217.5	4.7	4.45	0.6	7.8
10/8/2003	13	213	211.5	5	4.85	0.6	8.2
10/23/2003	15	210	210	12.2	8.6	1.1	16.7
11/5/2003	13	215	212.5	6.8	9.5	1.2	16.2
11/22/2003	17	211	213	6	6.4	0.8	14.3
12/4/2003	12	205	208	5.9	5.95	0.8	9.2
12/17/2003	13	200	202.5	4	4.95	0.6	8.0
12/30/2003	13	210	205	4	4.95	0.6	8.1
1/15/2004	16	205	207.5	4.1	4.05	0.5	8.3
2/5/2004	SVE System Manually Shutdown Since 1/16/04						
2/12/2004	8	200	200	3.5	3.5	0.4	3.5
2/26/2004	14	205	202.5	5.3	4.4	0.6	7.7
3/10/2004	12	200	202.5	5	5.15	0.6	7.7
3/25/2004	15	199	199.5	5.1	5.05	0.6	9.3
4/13/2004	19	175	187	6.3	5.7	0.7	12.5
4/29/2004	16	170	172.5	6	6.15	0.7	10.5
						Total	**148.7**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.

New SVE well EPA-EXT-04 on-line 11/04/2004

VOC readings taken before vapor phase carbon off-gas treatment.

Deep SVE Wells Closed on 12/10/03 Per OSC's Request

Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m3}{ft.3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:

Mair = mass loading, removal rate in air (lbs/day)

Qair = flow rate in air (cfm)

Cair = contaminant concentration (mg/m3)

MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

Date	# of Days	Flow Rate		VOC			
		(cfm)	Avg (cfm)	Concentration (ppm)	Average (ppm)	Discharge Rate (lbs/day)	Total Discharge (lbs)
5/13/2004	14	150	160	6	6	0.6	8.3
5/30/2004	17	147	148.5	5.9	5.95	0.5	9.3
6/10/2004	11	150	148.5	4.4	5.15	0.5	5.2
6/30/2004	20	145	147.5	5.6	5	0.5	9.1
7/8/2004	8	140	142.5	4.9	5.25	0.5	3.7
7/22/2004	14	139	139.5	4.8	4.85	0.4	5.8
8/9/2004	18	140	139.5	3.1	3.95	0.3	6.1
8/31/2004	1	135	137.5	3	3.05	0.3	0.3
9/8/2004	8	120	127.5	2.9	2.95	0.2	1.9
9/30/2004	22	121	120.5	3.1	3	0.2	4.9
10/4/2004	5	121	121	2.9	3	0.2	1.1
10/20/2004	15	120	120.5	2.8	2.85	0.2	3.2
11/1/2004	12	121	120.5	3	2.9	0.2	2.6
11/17/2004	16	125	123	4.1	3.55	0.3	4.3
11/29/2004	12	120	122.5	4.2	4.15	0.3	3.8
12/7/2004	8	121	120.5	4.2	4.2	0.3	2.5
12/16/2004	9	120	120.5	4.1	4.15	0.3	2.8
						Total	**223.5**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.

New SVE well EPA-EXT-04 on-line 11/04/2004

VOC readings taken before vapor phase carbon off-gas treatment.

Deep SVE Wells Closed on 12/10/03 Per OSC's Request

Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m^3}{ft.3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:

Mair = mass loading, removal rate in air (lbs/day)

Qair = flow rate in air (cfm)

Cair = contaminant concentration (mg/m3)

MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

Date	# of Days	Flow Rate (cfm)	Flow Rate Avg (cfm)	VOC Concentration (ppm)	VOC Average (ppm)	VOC Discharge Rate (lbs/day)	VOC Total Discharge (lbs)
1/12/2005	27	120	120	4.5	4.3	0.3	8.6
1/17/2005	5	120	120	4.5	4.5	0.3	1.7
2/9/2005	23	120	120	3.9	4.2	0.3	7.2
2/23/2005	14	120	120	3.5	3.7	0.3	3.8
3/2/2005	7	120	120	3.2	3.35	0.2	1.7
3/16/2005	14	120	120	3.5	3.35	0.2	3.5
4/4/2005	19	120	120	3	3.25	0.2	4.6
4/20/2005	16	120	120	2.9	2.95	0.2	3.5
5/3/2005	13	120	120	3.1	3.00	0.2	2.9
5/19/2005	16	120	120	2.9	3.00	0.2	3.6
6/15/2005	26	120	120	1	1.95	0.1	3.8
6/22/2005	7	270	120	8.3	4.65	0.3	2.4
7/25/2005	33	280	275	8.3	8.30	1.4	46.5
8/9/2005	15	290	285	5	6.65	1.2	17.6
8/24/2005	15	290	290	6	5.50	1.0	14.8
9/7/2005	14	260	275	6.5	6.25	1.1	14.9
9/20/2005	13	260	260	6.8	6.65	1.1	13.9
						Total	**378.3**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.

New SVE well EPA-EXT-04 on-line 11/04/2004

VOC readings taken before vapor phase carbon off-gas treatment.

Deep SVE Wells Closed on 12/10/03 Per OSC's Request

Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m^3}{ft.^3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:

Mair = mass loading, removal rate in air (lbs/day)

Qair = flow rate in air (cfm)

Cair = contaminant concentration (mg/m3)

MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Estimated PCE Recovery Rates (continued)

Date	# of Days	Flow Rate (cfm)	Flow Rate Avg (cfm)	VOC Concentration (ppm)	VOC Average (ppm)	VOC Discharge Rate (lbs/day)	VOC Total Discharge (lbs)
10/3/2005	13	270	265	7.4	7.10	1.2	15.1
10/18/2005	15	240	255	3.7	5.55	0.9	13.1
11/7/2005	20	250	245	1.5	2.60	0.4	7.9
11/29/2005	22	200	225	1.7	1.60	0.2	4.9
12/19/2005	20	305	252.5	14.7	8.20	1.3	25.6
1/4/2006	16	260	282.5	3.4	9.05	1.6	25.3
1/19/2006	15	285	272.5	2.5	2.95	0.5	7.4
1/30/2006	10	275	280	2.2	2.35	0.4	4.1
2/16/2006	17	210	242.5	10.7	6.45	1.0	16.4
2/27/2006	11	275	242.5	2.4	6.55	1.0	10.8
3/23/2006	24	245	260	2.3	2.35	0.4	9.1
4/11/2006	19	245	245	1.6	1.95	0.3	5.6
5/4/2006	23	265	255	0	0.80	0.1	2.9
						Total	**526.4**

Notes:

SVE system turned off from 8/24/2004 through 8/31/2004 during tennis court demolition activities.
New SVE well EPA-EXT-04 on-line 11/04/2004
VOC readings taken before vapor phase carbon off-gas treatment.
Deep SVE Wells Closed on 12/10/03 Per OSC's Request
Formula provided by EPA in the "*Elements for Effective Management of Operating Pump and Treatment Systems*" publication.

$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m^3}{ft.^3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

$$C_{air\ (mg/m3)} = \frac{Conc\ (ppmv)}{1E+06} \times \frac{1\ mole\ air}{24.1\ L} \times \frac{1000\ L}{m3} \times \frac{1000\ mg}{g} \times MW_x$$

Notes:
Mair = mass loading, removal rate in air (lbs/day)
Qair = flow rate in air (cfm)
Cair = contaminant concentration (mg/m3)
MWx = molecular weight in grams/mole, for PCE is 166

Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Fahrenheit (0 degrees Celsius), the conversion is (1 mole air)/(22.4 L).

Appendices

Appendix A

Daily Quality Control Reports (DQCRs)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5/2/06 | **Earth Tech Project No.: 70536**

Day	S	M	T	W	T	F	S
Weather			**SUNNY**				
Temp.			**70°F**				
Wind			**SLIGHT**				
Humidity			**LOW**				

Earth Tech Personnel On-Site: **Robert Derrick, Chuck Fernald**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **F 150, Suburban, replacement oil and grease, general sampling equipment, Horiba, water level tape, general hand tools**

Work Performed (include sampling; list by NAS number if applicable):

Weekly system monitoring and O and M inspection
Monthly system sampling
Water level gauging
Replaced system's oil and grease

Quality Control Activities (including field calibrations): N/A

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC	Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5/2/06	**Earth Tech Project No.: 70536**

Test required and inspection techniques to be executed to prove contract compliance (include both expected and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

Tomorrow's Expectations:

Weekly O and M inspection

Bi weekly air monitoring

Change out of carbon in indoor air filters

Quarterly well sampling (week of May 23)

By: Robert Derrick Title: Environmental Scientist

Signature: Robert Derrick (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.

Signature: (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5/4/06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather					**SUNNY**		
Temp.					**80°F**		
Wind					**NONE**		
Humidity					**50%**		

Earth Tech Personnel On-Site: **Robert Derrick**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **F 150, VelociCalc, MultiRae PID, air pump, air sample bag, pressure gauge, general hand tools, carbon for indoor air filters**

Work Performed (include sampling; list by NAS number if applicable):

Bi weekly air monitoring
Change out of carbon in indoor air filters at Stanton (R2D2's)

Quality Control Activities (including field calibrations): **Calibration of PID**

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

Test required and inspection techniques to be executed to prove contract compliance (include both expected

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC	Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5/4/06	**Earth Tech Project No.: 70536**

and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

Tomorrow's Expectations:

Weekly O and M inspection

Bi weekly air monitoring

Quarterly well sampling (week of May 23)

By: Robert Derrick Title: Environmental Scientist

Signature: Robert Derrick (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.

Signature: (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5/17/06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather				**CLOUDY**			
Temp.				**70 F**			
Wind				**NONE**			
Humidity				**50%**			

Earth Tech Personnel On-Site: **Robert Derrick**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site: **F 150, VelociCalc, air pump, air sample bag, pressure gauge, general hand tools**

Work Performed (include sampling; list by NAS number if applicable):

Bi weekly air monitoring
O and M inspection

Quality Control Activities (including field calibrations): **N/A**

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

Test required and inspection techniques to be executed to prove contract compliance (include both expected and actual results): **N/A**

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY	
Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 5/17/06	**Earth Tech Project No.: 70536**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

Tomorrow's Expectations:

Weekly O and M inspection

Bi weekly air monitoring

Quarterly well sampling (week of May 23)

By: Robert Derrick Title: Environmental Scientist

Signature: Robert Derrick (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.

Signature: (Contractor's Authorized Representative)

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC | Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5-31-06 | **Earth Tech Project No.: 70536**

Day	S	**M**	**T**	**W**	**T**	**F**	**S**
Weather				**SUNNY**			
Temp.				**80F**			
Wind				**0-5 MPH**			
Humidity				**50%**			

Earth Tech Personnel On-Site: **Rob Derrick, John Haffner, Trip Stakem**

Subcontractor (include names & responsibilities): **N/A**

Contract Materials and Equipment on site:**, F-150, Explorer, VelociCalc, pressure gauge, Summa canisters, General hand tools, Horiba U 22**

Work Performed (include sampling; list by NAS number if applicable):

Weekly O and M inspection
Bi weekly air monitoring
Indoor Air Sampling with Summa Canisters

Quality Control Activities (including field calibrations): **Calibration Horiba**

Health and Safety Levels and Activities: **Level D**

Problems Encountered/Correction Action Taken: **N/A**

Explain Developments Leading to Change in SOW or Finding of Fact: **N/A**

Preparatory Inspection (list all inspections by subject and specification location; attach minutes of meeting and list of all attendees): **N/A**

Have all required submittals and samples of construction been approved? **Yes**

Do the materials and equipment to be used conform to the submittals? **Yes**

Has all preliminary work been inspected, tested, and completed? **Yes**

Test required and inspection techniques to be executed to prove contract compliance (include both expected

DAILY QUALITY CONTROL REPORT

Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY

Client: ECC	Contract No: 5442-001-001

Contractor: Earth Tech, Inc.
Address: 7870 Villa Park Drive, Suite 400
Richmond, Virginia 23228
Phone No.: (804) 515-8300

Date: 5-31-06	**Earth Tech Project No.: 70536**

and actual results): **N/A**

Has a phase hazard analysis been performed? **Included in the Site Specific Health & Safety Plan**

Comments and deficiencies noted and corrective actions taken: **Explained in work performed section.**

Initial Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

Follow-up Inspection: List all inspections by subject and specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes:

The PID is out for repairs and therefore couldn't be used in the air monitoring
The Summa sampling will be completed on June 1.
The PLC readings for the pH and conductivity meters for the recovery well, air stripper and effluent do not match those in the treatment system. According to the PLC, the pH for the RW is 8.1 while the meter reads 6.79; RW conductivity on the PLC is 133 while the meter reads 0.65. A sample taken from the influent was measured by the Horiba to have a pH of 6.95 and a conductivity of 0.680. The PLC indicates that the water in the air stripper has a pH of 9.4 while the meter reads 8.06 and a Horiba'd sample reads 8.19. The PLC indicates that the effluent has a pH of 9.6 and a conductivity of 210. The meters read a pH of 8.24 and a conductivity of 1.23. A sample measured by the Horiba indicates a pH of 7.65 and a conductivity of 0.690. The effluent pH meter was calibrated (model TB82) and it gave a fault (PC 15). This was looked up in the manual and it suggests taking the sensor out, cleaning it and using a buffer solution to recalibrate it. This will be done on June 7. The other pH meters are older models (TB417). The conductivity meters are also older models (TB515). These manuals were not in the O and M manual. A call was made to ABB (who owns TBI Bailey) and the manuals were obtained through email. All of the other meters were calibrated. However the readings on the PLC still do not match the meter readings. On June 1, samples will be taken and measured with the Horiba to compare the values to what the meters read. A new calibration schedule will also be put into place. On June 7, some of the sensors for the meters will be taken out, cleaned and calibrated. The two manuals that are not in the O and M manual will be printed out and added to the manual.

.

Tomorrow's Expectations:

Weekly O and M inspection

DAILY QUALITY CONTROL REPORT	
Site Name and Location: Stanton Cleaners Site (LTRA) – Great Neck, NY	
Client: ECC	Contract No: 5442-001-001
Contractor: Earth Tech, Inc. Address: 7870 Villa Park Drive, Suite 400 Richmond, Virginia 23228 Phone No.: (804) 515-8300	
Date: 5-31-06	**Earth Tech Project No.: 70536**
Completion of the Summa Sampling (June 1)	
Monthly system sampling (June 7)	
By: Robert Derrick	Title: Environmental Scientist
Signature: Robert Derrick	(Quality Control Representative/Manager)
The above report is complete and correct. All materials and equipment used and all work performed during this reporting period are in compliance with the contract specifications and submittals, except as noted above.	
Signature:	(Contractor's Authorized Representative)

Appendix B

Groundwater Treatment System Operation & Maintenance Checklists

5/2/05

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES X NO
If so, list where._____

B. Is there water on the floor? YES X NO
If so, list where._____

C. Are all three (3) floor sump level switches in place? X YES NO

D. Is there any evidence of water in any of these floor sumps? YES X NO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following

Currently MW-24 and EPA-EXT-02 are on

1. Recovery Well EPA-EXT-02 flow[1] ____60_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____0_____ GPM
4. Recovery Well EPA-EXT-4R valve open _____0___ %
5. Recovery Well pH _____7.3_____ pH
6. Recovery Well conductivity _____93_____ cond
7. Air Stripper pH ___8.6____ pH
8. Air Stripper temperature _____155_____ deg.
9. Air Stripper air flow _____418_____ CFM
10. Pre-vapor carbon pressure _____0_____ "wc
11. Post carbon air flow _____2691_____ CFM
12. Discharge conductivity _____161_____ cond
13. Discharge pH _____8.8_____ pH
14. Discharge flow _____70_____ GPM
15. Discharge total gallons _____ 124,833,778_____ Gal

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

16. SVE inlet vacuum _____2_____ “Hg

17. SVE air flow _____500_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow _____ 7616234____ Gal

2. Recovery Well EPA-EXT-03 total flow _____ 51 ___ Gal

3. Recovery Well pH _____6.74_____ pH

4. Recovery Well conductivity _____0.64_____ cond

5. Air Stripper pH _____8.00_____ pH

6. Air Stripper temperature ____15.2_____ deg. F

7. Air Stripper Pump water flow _____70_____ GPM

8. Air Stripper Pump pressure _____30_____ PSI

9. Discharge conductivity ___1.20__ cond

10. Discharge pH _____ 8.19____ pH

11. SVE inlet vacuum (digital readout) _____1.6_____ “Hg

12. SVE inlet vacuum _____2.7_____ “Hg

13. SVE post knockout vacuum _____3.3_____ “Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

5/17/06

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES X NO
If so, list where._____

B. Is there water on the floor? YES X NO
If so, list where._____

C. Are all three (3) floor sump level switches in place? X YES NO

D. Is there any evidence of water in any of these floor sumps? YES X NO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following.

1. Recovery Well EPA-EXT-02 flow[1] _____60_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH _____8.1_____ pH
6. Recovery Well conductivity _____133_____ cond
7. Air Stripper pH _____9.4_____ pH
8. Air Stripper temperature _____170_____ deg.
9. Air Stripper air flow _____364_____ CFM
10. Pre-vapor carbon pressure _____4_____ "wc
11. Post carbon air flow _____2546_____ CFM
12. Discharge conductivity _____210_____ cond
13. Discharge pH _____9.6_____ pH
14. Discharge flow _____68_____ GPM
15. Discharge total gallons ___126,255,120_____ Gal

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

16. SVE inlet vacuum _____0_____ “Hg

17. SVE air flow _____201_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow ____8404600_ ____ Gal

2. Recovery Well EPA-EXT-03 total flow _____ ___ Gal

3. Recovery Well pH _____6.79_____ pH

4. Recovery Well conductivity _____0.65____ cond

5. Air Stripper pH _____8.05_____ pH

6. Air Stripper temperature _____15.5_____ deg. F

7. Air Stripper Pump water flow _____70_____ GPM

8. Air Stripper Pump pressure _____30_____ PSI

9. Discharge conductivity ____1.23____ cond

10. Discharge pH _____8.24___ pH

11. SVE inlet vacuum (digital readout) _____01.5_____ “Hg

12. SVE inlet vacuum _____2.5_____ “Hg

13. SVE post knockout vacuum _____5.0_____ “Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

5/31/06

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE WEEKLY CHECKLIST

1. A. Is any part of the system leaking? YES X NO
If so, list where._____

B. Is there water on the floor? YES X NO
If so, list where._____

C. Are all three (3) floor sump level switches in place? X YES NO

D. Is there any evidence of water in any of these floor sumps? YES X NO
Note: If water is present, remove with shop vac or paper towels.

2. A. Display screen on computer will either show system or screen saver. If screen saver is on, tap screen with finger to show screen. If only the desktop is showing with no system screen, click the *Lookout – (Stanton)* icon on the taskbar at the bottom of the screen.

B. From the site display, monitor and record the following.

1. Recovery Well EPA-EXT-02 flow[1] _____60_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well EPA-EXT-4R flow _____ GPM
4. Recovery Well EPA-EXT-4R valve open _____ %
5. Recovery Well pH _____7.9_____ pH
6. Recovery Well conductivity _____1.25_____ cond
7. Air Stripper pH _____9.3_____ pH
8. Air Stripper temperature _____168_____ deg.
9. Air Stripper air flow _____381_____ CFM
10. Pre-vapor carbon pressure _____4_____ "wc
11. Post carbon air flow _____2875_____ CFM
12. Discharge conductivity _____204_____ cond
13. Discharge pH _____9.5_____ pH
14. Discharge flow _____68_____ GPM
15. Discharge total gallons ___127,563,055_____ Gal

[1] *Wells EPA-EXT-02 and MW-24 wells are manifold together in the field and are piped into the treatment building together. The EPA-EXT-02 water flow meter is therefore actually displaying and totalizing the output of both wells.*

16. SVE inlet vacuum _____0_____ “Hg

17. SVE air flow _____500_____ CFM

C. From the treatment room, monitor and record the following.

1. Recovery Well EPA-EXT-02 total flow ____707,800_ ____ Gal

2. Recovery Well EPA-EXT-03 total flow _____ ___ Gal

3. Recovery Well pH _____6.79_____ pH

4. Recovery Well conductivity _____0.65____ cond

5. Air Stripper pH _____8.06_____ pH

6. Air Stripper temperature _____15.6_____ deg. F

7. Air Stripper Pump water flow _____70_____ GPM

8. Air Stripper Pump pressure _____33_____ PSI

9. Discharge conductivity ____1.26____ cond

10. Discharge pH _____8.25___ pH

11. SVE inlet vacuum (digital readout) _____01.5_____ “Hg

12. SVE inlet vacuum _____2.5_____ “Hg

13. SVE post knockout vacuum _____5.0_____ “Hg

3. A. If time allows, check to see that the treatment system is cycling properly as described in STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE O&M MANUAL

Appendix C

Groundwater Treatment System Downloaded Operational Data

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
	Flow (GPM)	Flow (GPM)	Flow (GPM)	Flow (GPM)	Flow (CFM)	Temperature (deg F)			pH	pH	pH				
5/1/2006 0:00	0	0	58	66	2601	153	74	139	7	8.2	8.4	124698288.9	458	2601	500
5/1/2006 4:00	0	0	61	65	2909	154	88	155	7.2	8.5	8.7	124713922.3	389	2909	500
5/1/2006 8:00	0	0	60	66	2601	155	97	163	7.4	8.6	8.9	124729562.6	445	2601	500
5/1/2006 12:00	0	0	58	66	2912	154	90	157	7.3	8.5	8.8	124745179.1	483	2912	500
5/1/2006 16:00	0	0	60	70	2746	154	78	144	7	8.3	8.5	124760821.3	418	2746	500
5/1/2006 20:00	0	0	58	67	2774	153	69	134	6.9	8.1	8.3	124776359.7	398	2774	500
5/2/2006 0:00	0	0	60	64	2868	153	76	141	7	8.2	8.5	124792135.6	440	2868	500
5/2/2006 4:00	0	0	58	65	2774	153	88	154	7.2	8.5	8.7	124807724.1	410	2774	500
5/2/2006 8:00	0	0	59	69	2693	156	97	163	7.4	8.6	8.9	124823319.9	388	2693	500
5/2/2006 12:00	0	0	62	69	2742	155	92	160	7.3	8.6	8.8	124838905.9	408	2742	500
5/2/2006 16:00	0	0	60	70	2601	154	72	139	6.9	8.2	8.4	124854513.4	424	2601	500
5/2/2006 20:00	0	0	60	65	2447	154	70	137	6.9	8.1	8.4	124870108.6	430	2447	500
5/3/2006 0:00	0	0	60	66	2744	154	81	147	7.1	8.3	8.6	124885680.7	424	2744	500
5/3/2006 4:00	0	0	59	68	2546	155	87	155	7.2	8.5	8.7	124901291.1	308	2546	500
5/3/2006 8:00	0	0	60	70	2774	155	92	161	7.3	8.6	8.8	124916878.8	381	2774	500
5/3/2006 12:00	0	0	60	68	2601	155	88	157	7.2	8.5	8.7	124932501.2	438	2601	500
5/3/2006 16:00	0	0	60	0	2546	155	77	146	7	8.3	8.5	124948096.1	388	2546	500
5/3/2006 20:00	0	0	61	67	2765	155	74	142	7	8.2	8.4	124963608.4	372	2765	500
5/4/2006 0:00	0	0	61	68	2774	155	81	149	7.1	8.3	8.6	124979224.2	406	2774	500
5/4/2006 4:00	0	0	61	70	2601	155	86	154	7.2	8.4	8.7	124994843	429	2601	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
5/4/2006 8:00	0	0	60	70	2693	156	88	158	7.2	8.5	8.7	125010501.6	353	2693	500
5/4/2006 12:00	0	0	58	70	2748	159	102	174	7.5	8.8	9	125026113.1	374	2748	500
5/4/2006 16:00	0	0	58	65	2507	160	104	177	7.6	8.8	9.1	125041723.8	287	2507	500
5/4/2006 20:00	0	0	59	67	2601	156	82	152	7.1	8.4	8.6	125057424.7	307	2601	500
5/5/2006 0:00	0	0	58	66	2601	155	81	149	7.1	8.4	8.6	125073215.1	414	2601	500
5/5/2006 4:00	0	0	60	67	2546	155	85	154	7.2	8.4	8.6	125088753.1	392	2546	500
5/5/2006 8:00	0	0	62	66	2546	156	89	160	7.2	8.5	8.7	125104294.7	367	2546	500
5/5/2006 12:00	0	0	59	3	2748	156	78	148	7.1	8.3	8.5	125119998.9	386	2748	500
5/5/2006 16:00	0	0	61	66	2601	155	69	137	6.9	8.1	8.3	125135540.6	387	2601	500
5/5/2006 20:00	0	0	59	65	2604	155	68	135	6.9	8.1	8.3	125151048.5	377	2604	500
5/6/2006 0:00	0	0	60	65	2693	155	68	135	6.9	8.1	8.3	125166777	364	2693	500
5/6/2006 4:00	0	0	60	65	2774	154	70	136	6.9	8.1	8.3	125182270.7	428	2774	500
5/6/2006 8:00	0	0	60	70	2868	155	80	147	7.1	8.3	8.5	125197768.7	393	2868	500
5/6/2006 12:00	0	0	61	65	2541	155	75	143	7	8.2	8.4	125213487.9	391	2541	500
5/6/2006 16:00	0	0	60	68	2555	155	69	137	6.9	8.1	8.3	125228978.2	372	2555	451
5/6/2006 20:00	0	0	60	66	2553	155	67	134	6.9	8.1	8.3	125244681.7	444	2553	500
5/7/2006 0:00	0	0	59	66	2691	153	70	134	6.9	8.1	8.3	125260092.7	371	2691	500
5/7/2006 4:00	0	0	61	68	2601	154	85	152	7.2	8.4	8.6	125275750.2	445	2601	500
5/7/2006 8:00	0	0	59	67	2691	156	98	166	7.4	8.7	8.9	125291182	420	2691	500
5/7/2006 12:00	0	0	58	64	2930	156	95	165	7.4	8.6	8.9	125306853.8	383	2930	500
5/7/2006 16:00	0	0	58	67	2601	155	84	151	7.1	8.4	8.6	125322312.6	373	2601	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
5/7/2006 20:00	0	0	59	66	2601	154	75	140	7	8.2	8.4	125338042.8	417	2601	500
5/8/2006 0:00	0	0	60	68	2691	154	85	152	7.2	8.4	8.6	125353546.6	396	2691	500
5/8/2006 4:00	0	0	59	65	2601	156	95	162	7.3	8.6	8.8	125369268.2	442	2601	500
5/8/2006 8:00	0	0	60	65	2909	157	102	169	7.5	8.8	9	125384783.9	424	2909	160
5/8/2006 12:00	0	0	60	66	2928	156	97	164	7.4	8.7	8.9	125400580.1	402	2928	500
5/8/2006 16:00	0	0	59	68	2909	154	87	154	7.2	8.5	8.7	125416052.4	348	2909	500
5/8/2006 20:00	0	0	58	67	2868	154	88	155	7.2	8.5	8.7	125431755.5	378	2868	500
5/9/2006 0:00	0	0	58	66	2691	156	96	164	7.4	8.6	8.9	125447224.2	438	2691	500
5/9/2006 4:00	0	0	60	66	2912	158	103	171	7.5	8.8	9	125462968	344	2912	500
5/9/2006 8:00	0	0	58	66	2546	159	109	177	7.6	8.9	9.1	125478402	489	2546	500
5/9/2006 12:00	0	0	62	66	2691	158	105	173	7.5	8.8	9	125494019.6	434	2691	500
5/9/2006 16:00	0	0	60	66	2774	158	100	168	7.4	8.7	8.9	125509470.9	419	2774	500
5/9/2006 20:00	0	0	62	66	2546	157	98	167	7.4	8.7	8.9	125525238.9	425	2546	500
5/10/2006 0:00	0	0	59	67	2909	159	102	171	7.5	8.8	9	125541010.1	394	2909	500
5/10/2006 4:00	0	0	60	66	2546	158	104	175	7.5	8.8	9	125556466.6	358	2546	500
5/10/2006 8:00	0	0	59	66	2551	159	106	175	7.5	8.8	9.1	125572190	363	2551	500
5/10/2006 12:00	0	0	61	67	2601	158	100	170	7.4	8.7	9	125587917.1	410	2601	500
5/10/2006 16:00	0	0	59	65	2344	156	91	161	7.3	8.6	8.8	125603404.9	376	2344	500
5/10/2006 20:00	0	0	60	65	2746	156	86	156	7.2	8.5	8.7	125619121	357	2746	500
5/11/2006 0:00	0	0	58	66	2774	156	90	161	7.3	8.6	8.8	125634622.7	422	2774	500
5/11/2006 4:00	0	0	59	68	2601	157	96	166	7.4	8.6	8.9	125650397.4	378	2601	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
5/11/2006 8:00	0	0	60	67	2868	158	99	170	7.4	8.7	8.9	125666172.5	394	2868	500
5/11/2006 12:00	0	0	59	66	2601	158	98	168	7.4	8.7	8.9	125681704.6	388	2601	500
5/11/2006 16:00	0	0	59	65	2544	157	92	162	7.3	8.6	8.8	125697409	337	2544	500
5/11/2006 20:00	0	0	59	66	2744	156	91	161	7.3	8.6	8.8	125712898.4	340	2744	500
5/12/2006 0:00	0	0	61	66	2445	157	94	165	7.3	8.6	8.8	125728610.7	407	2445	500
5/12/2006 4:00	0	0	59	66	2691	157	95	166	7.4	8.7	8.9	125741340.2	382	2691	500
5/12/2006 8:00	0	0	58	69	2744	158	99	169	7.4	8.7	8.9	125756850.5	394	2744	500
5/12/2006 12:00	0	0	60	65	2691	157	94	167	7.3	8.6	8.8	125772535	388	2691	500
5/12/2006 16:00	0	0	58	67	2553	157	84	155	7.2	8.4	8.6	125787978.8	418	2553	500
5/12/2006 20:00	0	0	58	69	2553	156	82	152	7.1	8.4	8.6	125803702.6	293	2553	500
5/13/2006 0:00	0	0	60	66	2870	156	88	157	7.2	8.5	8.7	125819441.6	409	2870	500
5/13/2006 4:00	0	0	59	67	2601	156	95	164	7.3	8.6	8.8	125834950.9	379	2601	500
5/13/2006 8:00	0	0	61	66	2601	158	98	168	7.4	8.7	8.9	125850698.3	404	2601	500
5/13/2006 12:00	0	0	61	67	2868	157	97	167	7.4	8.7	8.9	125866389.7	332	2868	500
5/13/2006 16:00	0	0	61	69	2447	156	84	155	7.2	8.4	8.6	125881844.8	342	2447	500
5/13/2006 20:00	0	0	60	66	2746	155	82	149	7.1	8.4	8.6	125897517.4	362	2746	500
5/14/2006 0:00	0	0	58	66	2868	155	92	160	7.3	8.6	8.8	125912933.9	422	2868	500
5/14/2006 4:00	0	0	59	67	2774	158	100	169	7.4	8.7	9	125928598.8	433	2774	500
5/14/2006 8:00	0	0	62	66	2744	159	105	175	7.5	8.8	9.1	125944291.1	382	2744	500
5/14/2006 12:00	0	0	59	67	2592	160	106	177	7.5	8.8	9.1	125959788.8	406	2592	500
5/14/2006 16:00	0	0	60	66	2691	159	101	172	7.5	8.8	9	125975501.9	388	2691	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	SVE Air Flow
5/14/2006 20:00	0	0	58	67	2548	157	101	170	7.4	8.7	9	125991179.7	358	2548	500
5/15/2006 0:00	0	0	60	66	2691	159	106	175	7.5	8.8	9.1	126006658.9	354	2691	500
5/15/2006 4:00	0	0	58	65	2739	160	109	179	7.6	8.9	9.2	126022402.6	392	2739	500
5/15/2006 8:00	0	0	58	65	2742	162	112	185	7.7	9	9.2	126038107.5	354	2742	136
5/15/2006 12:00	0	0	59	65	2742	162	113	184	7.7	9	9.2	126053610.9	366	2742	500
5/15/2006 16:00	0	0	60	69	2394	162	111	183	7.6	8.9	9.2	126069321.8	371	2394	500
5/15/2006 20:00	0	0	58	65	2601	158	101	171	7.5	8.7	9	126084839.4	396	2601	500
5/16/2006 0:00	0	0	61	66	2601	159	105	175	7.5	8.8	9	126100537.1	419	2601	500
5/16/2006 4:00	0	0	59	66	2716	160	109	179	7.6	8.9	9.1	126116258.5	458	2716	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	Recovery Well 1
5/16/2006 8:00	0	0	59	67	2396	167	125	197	7.9	9.2	9.4	126132019.8	435	2396	500
5/16/2006 12:00	0	0	61	66	2544	163	113	185	7.7	9	9.2	126147456.8	381	2544	500
5/16/2006 16:00	0	0	58	67	2396	167	126	200	7.9	9.3	9.5	126163183.9	358	2396	500
5/16/2006 20:00	0	0	60	68	2546	163	114	186	7.7	9	9.3	126178908.7	386	2546	500
5/17/2006 0:00	0	0	60	66	2691	162	115	186	7.7	9	9.3	126194594.8	306	2691	500
5/17/2006 4:00	0	0	59	66	2544	164	118	189	7.8	9.1	9.3	126210104.9	349	2544	500
5/17/2006 8:00	0	0	61	65	2744	164	120	193	7.8	9.1	9.4	126225820	433	2744	104
5/17/2006 12:00	0	0	58	66	2691	162	109	182	7.6	8.9	9.1	126241500.1	407	2691	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	Recovery Well 1
5/17/2006 16:00	0	0	60	68	2555	170	132	207	8.1	9.4	9.6	126256967.6	361	2555	500
5/17/2006 20:00	0	0	60	66	2691	170	133	208	8.1	9.4	9.6	126272690.6	327	2691	500
5/18/2006 0:00	0	0	58	66	2544	169	133	207	8	9.4	9.6	126288373.9	379	2544	500
5/18/2006 4:00	0	0	59	67	2746	169	132	206	8	9.4	9.6	126304018.6	430	2746	95
5/18/2006 8:00	0	0	58	68	2551	168	126	201	7.9	9.2	9.5	126319658.4	366	2551	500
5/18/2006 12:00	0	0	59	67	2447	172	137	214	8.1	9.5	9.7	126335072.7	430	2447	500
5/18/2006 16:00	0	0	59	65	2748	172	138	214	8.2	9.5	9.8	126350752.7	281	2748	500
5/18/2006 20:00	0	0	61	69	2601	164	117	191	7.8	9.1	9.3	126366388.6	342	2601	500
5/19/2006 0:00	0	0	59	65	2546	162	112	185	7.7	9	9.2	126382002.5	340	2546	500
5/19/2006 4:00	0	0	60	64	2447	162	112	185	7.6	8.9	9.2	126397634.7	352	2447	500
5/19/2006 8:00	0	0	61	66	2691	162	112	183	7.6	8.9	9.2	126413274.1	381	2691	500
5/19/2006 12:00	0	0	60	69	2744	160	109	180	7.6	8.9	9.1	126428895	399	2744	500
5/19/2006 16:00	0	0	59	65	2601	159	102	171	7.5	8.8	9	126444491.1	417	2601	86
5/19/2006 20:00	0	0	60	69	2551	158	101	171	7.5	8.8	9	126460107.4	313	2551	500
5/20/2006 0:00	0	0	60	65	2774	160	109	178	7.6	8.9	9.1	126475717	377	2774	500
5/20/2006 4:00	0	0	58	65	2691	162	114	185	7.7	9	9.2	126491353.7	396	2691	500
5/20/2006 8:00	0	0	61	69	2544	164	119	190	7.8	9.1	9.3	126507175.8	354	2544	500
5/20/2006 12:00	0	0	58	65	2744	162	111	184	7.6	9	9.2	126522759.7	359	2744	500
5/20/2006 16:00	0	0	60	66	2691	159	101	171	7.5	8.8	9	126538125.2	312	2691	500
5/20/2006 20:00	0	0	60	64	2546	155	92	161	7.3	8.6	8.8	126553771.8	402	2546	126
5/21/2006 0:00	0	0	59	64	2551	157	100	169	7.4	8.7	9	126569588.4	374	2551	500
5/21/2006 4:00	0	0	60	66	2774	159	108	178	7.6	8.9	9.1	126585194.4	386	2774	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	Recovery Well 1
5/21/2006 8:00	0	0	60	69	2696	162	115	185	7.7	9	9.2	126600814.2	383	2696	500
5/21/2006 12:00	0	0	60	67	2341	160	107	177	7.6	8.9	9.1	126616394.3	417	2341	500
5/21/2006 16:00	0	0	60	66	2544	158	99	169	7.4	8.7	8.9	126631985.8	413	2544	500
5/21/2006 20:00	0	0	59	69	2746	156	97	165	7.4	8.7	8.9	126647593.8	356	2746	500
5/22/2006 0:00	0	0	60	68	2742	159	108	176	7.6	8.9	9.1	126663169.8	403	2742	500
5/22/2006 4:00	0	0	60	69	2742	162	118	187	7.7	9.1	9.3	126678730.6	422	2742	500
5/22/2006 8:00	0	0	60	66	2774	164	124	194	7.9	9.2	9.4	126694334.7	386	2774	500
5/22/2006 12:00	0	0	61	66	2691	162	115	185	7.7	9	9.3	126709947.7	423	2691	500
5/22/2006 16:00	0	0	61	66	2744	159	103	172	7.5	8.8	9	126725596.2	406	2744	500
5/22/2006 20:00	0	0	59	65	2546	155	93	161	7.3	8.6	8.8	126741221.8	336	2546	500
5/23/2006 0:00	0	0	60	65	2551	159	107	174	7.5	8.9	9.1	126756841.1	447	2551	500
5/23/2006 4:00	0	0	59	65	2601	162	121	190	7.8	9.2	9.4	126772479.8	418	2601	500
5/23/2006 8:00	0	0	62	67	2601	166	128	200	7.9	9.3	9.5	126788116	387	2601	213
5/23/2006 12:00	0	0	60	67	2742	164	120	190	7.8	9.1	9.4	126803492.1	430	2742	500
5/23/2006 16:00	0	0	58	68	2544	168	130	205	8	9.4	9.6	126819157	353	2544	500
5/23/2006 20:00	0	0	61	64	2776	169	136	210	8.1	9.5	9.7	126834834.8	330	2776	500
5/24/2006 0:00	0	0	60	64	2606	169	136	209	8.1	9.4	9.7	126850494.6	337	2606	500
5/24/2006 4:00	0	0	58	69	2601	170	137	210	8.1	9.5	9.7	126865945	369	2601	500
5/24/2006 8:00	0	0	61	66	2599	170	139	212	8.1	9.5	9.7	126881619.3	384	2599	500
5/24/2006 12:00	0	0	60	66	2447	172	141	216	8.2	9.6	9.8	126897316.6	332	2447	500
5/24/2006 16:00	0	0	60	69	2546	171	136	211	8.1	9.5	9.7	126912977.3	347	2546	500
5/24/2006 20:00	0	0	59	65	2691	171	137	211	8.2	9.5	9.8	126928365.2	409	2691	221

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	Recovery Well 1
5/25/2006 0:00	0	0	58	64	2546	170	137	210	8.1	9.5	9.7	126943995.9	452	2546	500
5/25/2006 4:00	0	0	59	69	2774	170	137	211	8.1	9.5	9.7	126959614.8	353	2774	500
5/25/2006 8:00	0	0	61	65	2774	169	132	207	8	9.3	9.6	126975250	326	2774	500
5/25/2006 12:00	0	0	59	65	2555	169	130	206	8	9.4	9.6	126990886.3	404	2555	500
5/25/2006 16:00	0	0	61	67	2601	158	99	170	7.4	8.7	8.9	127006286.3	401	2601	500
5/25/2006 20:00	0	0	60	67	2601	156	89	159	7.3	8.5	8.7	127021873	396	2601	500
5/26/2006 0:00	0	0	61	66	2601	156	93	165	7.3	8.6	8.8	127037443.7	384	2601	500
5/26/2006 4:00	0	0	58	65	2774	158	98	169	7.4	8.7	8.9	127053019.4	406	2774	500
5/26/2006 8:00	0	0	60	66	2551	159	100	173	7.4	8.7	8.9	127068576.6	386	2551	500
5/26/2006 12:00	0	0	60	68	2748	158	91	164	7.3	8.6	8.8	127084197.2	357	2748	500
5/26/2006 16:00	0	0	58	66	2604	157	83	154	7.1	8.4	8.6	127099819.5	389	2604	500
5/26/2006 20:00	0	0	60	64	2601	157	77	150	7	8.3	8.5	127115678	347	2601	500
5/27/2006 0:00	0	0	59	66	2396	157	80	151	7.1	8.3	8.5	127131189.7	361	2396	500
5/27/2006 4:00	0	0	60	69	2546	157	84	156	7.2	8.4	8.6	127146712.7	351	2546	500
5/27/2006 8:00	0	0	59	67	2551	157	89	160	7.2	8.5	8.7	127162261.4	399	2551	500
5/27/2006 12:00	0	0	58	65	2502	158	84	157	7.1	8.4	8.6	127177875	366	2502	500
5/27/2006 16:00	0	0	61	64	2505	157	70	142	6.9	8.2	8.4	127193697.7	381	2505	500
5/27/2006 20:00	0	0	59	68	2509	157	68	139	6.9	8.1	8.3	127209244.7	303	2509	500
5/28/2006 0:00	0	0	59	66	2546	157	69	139	6.9	8.1	8.3	127224811.1	366	2546	500
5/28/2006 4:00	0	0	58	66	2394	156	69	140	6.9	8.1	8.3	127240621.8	347	2394	500
5/28/2006 8:00	0	0	58	64	2896	157	75	145	7	8.2	8.4	127256172.6	367	2896	500
5/28/2006 12:00	0	0	58	64	2546	157	72	142	6.9	8.2	8.4	127271908.4	352	2546	500

Stanton Cleaners Groundwater Contamination Site - May 2006 - Site Operation Data															
	Recovery Well 1	Recovery Well 2	Recovery Well 3	Discharge	Discharge	Influent water	Influent conductivity	Effluent conductivity	Influent water	Air Stripper water	Discharge water	Total gallons discharged	Air Stripper Air Flow	Combined Discharge Air Flow	Recovery Well 1
5/28/2006 16:00	0	0	58	67	2546	157	69	141	6.9	8.1	8.3	127287384.7	393	2546	109
5/28/2006 20:00	0	0	60	67	2396	156	67	137	6.9	8.1	8.3	127302841	366	2396	500
5/29/2006 0:00	0	0	58	66	2601	156	69	138	6.9	8.1	8.3	127318539.4	368	2601	500
5/29/2006 4:00	0	0	60	64	2691	156	72	142	6.9	8.2	8.4	127333997.1	378	2691	500
5/29/2006 8:00	0	0	60	64	2581	157	79	150	7.1	8.3	8.5	127349774.9	398	2581	481
5/29/2006 12:00	0	0	60	0	2447	158	73	144	7	8.2	8.4	127365383.6	394	2447	500
5/29/2006 16:00	0	0	59	68	2447	158	68	141	6.9	8.1	8.3	127381004.2	362	2447	500
5/29/2006 20:00	0	0	58	65	2509	157	67	138	6.9	8.1	8.3	127396632.9	378	2509	500
5/30/2006 0:00	0	0	60	66	2348	157	69	139	6.9	8.1	8.3	127412083.3	430	2348	500
5/30/2006 4:00	0	0	62	63	2604	157	70	139	6.9	8.1	8.3	127427811.4	361	2604	500
5/30/2006 8:00	0	0	58	65	2601	158	88	162	7.2	8.5	8.7	127443509.6	401	2601	500
5/30/2006 12:00	0	0	58	64	2604	172	131	212	8	9.4	9.6	127458964.1	382	2604	500
5/30/2006 16:00	0	0	60	68	2447	171	129	210	8	9.4	9.6	127474662	359	2447	500
5/30/2006 20:00	0	0	59	65	2604	174	142	222	8.2	9.6	9.9	127490321.3	396	2604	199
5/31/2006 0:00	0	0	60	64	2548	174	145	225	8.3	9.7	9.9	127505968.2	398	2548	500
5/31/2006 4:00	0	0	58	66	2774	174	145	223	8.3	9.6	9.9	127521610.3	396	2774	500
5/31/2006 8:00	0	0	59	68	2553	175	149	229	8.3	9.7	9.9	127537246	306	2553	500
5/31/2006 12:00	0	0	61	66	2691	170	127	206	8	9.3	9.5	127552639.2	381	2691	500
5/31/2006 16:00	0	0	59	66	2748	169	124	203	7.9	9.3	8.8	127568234.7	338	2748	500
5/31/2006 20:00	0	0	58	65	2691	168	127	132	8.1	9.4	8.8	127583827.2	414	2691	348

Appendix D

Sampling Trip Reports

SAMPLING TRIP REPORT

Site Name: STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
CERCLIS ID Number: NYD047650197
Sampling Dates: May 2, 2006
CLP Case Number: N/A
Site Location: 110 Cutter Mill Road, Great Neck, New York, 11021
Sample Descriptions: Groundwater Treatment System Influent / Effluent.

Laboratories Receiving Samples (Table 1):

Case Number	Sample Type	Name and Address of Laboratory
N/A	TCL-VOAs OLC 03.2	John Birri USEPA Region II DESA LAB Building 209 MS-230 2890 Woodbridge Avenue Edison, N.J. 08837

Sample Dispatch Data (Table 2):
On May 2, 2006, a total of four (4) groundwater samples, including one (1) duplicate sample and one (1) trip blank were shipped to the U.S. Environmental Protection Agency Region II Lab (USEPA) for TCL-VOAs analysis.

FedEx Air Bill No.	Number of Coolers	Number and Type of Samples	Time and Date of Shipping
855368817044	1	Total of 4 Aqueous Samples to include 1 duplicate sample, and 1 Trip Blank for TCL-VOAs	5/2/06 @ 10:45 TO: USEPA

Sampling Personnel (Table 3):

Name	Organization	Site Duties
Tom Williams	Earth Tech, Inc.	Earth Tech Project Manager
James Kearns	Earth Tech, Inc.	Earth Tech Task Manager/ Health and Safety
Robert Derrick	Earth Tech, Inc.	Sampler

Sample Numbers and Collection Points (Table 4):

Laboratory	Analysis	Sample Type	Sample #	Sample Collection Point(SCP)
USEPA Region II DESA LAB Building 209 MS-230 2890 Woodbridge Avenue Edison, N.J. 08837	TCL-VOAs	Aqueous Groundwater	Influent (MW-24 and EPA-EXT-02)	Influent (MW-24 and EPA-EXT-02)
			Effluent	Effluent
			Effluent A	Duplicate of Effluent
			TB	Trip Blank

Additional Comments:

The Influent, Effluent and Effluent-A samples were collected after a five gallon purge from the sample ports located within the treatment system. The influent sample includes MW-24 and EPA-EXT-02. These two wells combine before they reach the treatment room and therefore cannot be sampled individually. These samples were collected for the following analysis: Target Compound List (TCL) Volatile Organic Compounds. In addition, one duplicate sample (Effluent-A) was collected from the effluent of the groundwater treatment process and was a duplicate sample of sample Effluent. One trip blank (TB) was also included in the shipment. Copies of the Chain of Custody forms and a copy of the FedEx air bill are included in Appendix A and B, respectively.

Earth Tech personnel also collected real time water quality parameters from the raw water for all the following sampling locations: Influent and Effluent (Discharge) and the results are included in Appendix C.

Chain of Custody
(May 2, 2006 System Sampling Event)

USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No:
DAS No:
SDG No: L

Date Shipped:	5/2/2006
Carrier Name:	FedEx
AirBill:	855368817044
Shipped to:	USEPA REGION II DESA LAB Building 209, MS-230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886

Chain of Custody Record

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	5-2-06/10:45		
2			
3			
4			

Sampler Signature: [signature]

For Lab Use Only

Lab Contract No:
Unit Price:
Transfer To:
Lab Contract No:
Unit Price:

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	FOR LAB USE ONLY Sample Condition On Receipt
EFFLUENT	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Effluent	S: 5/2/2006	9:01		
EFFLUENT-A	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Effluent	S: 5/2/2006	9:03		
INFLUENT (MW-24 AND	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Influent (MW-24 and EPA-EXT-02)	S: 5/2/2006	8:53		
TB	Field QC/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Trip Blank	S: 5/2/2006	8:00		

Shipment for Case Complete?N	Sample(s) to be used for laboratory QC: TB	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt	Chain of Custody Seal Number:
Analysis Key:	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G		Custody Seal Intact? ___ Shipment Iced? ___
VOA = CLP TCL Volatiles				

TR Number: 2-445049606-050206-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.
Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

EPA USEPA Contract Laboratory Program
Organic Traffic Report & Chain of Custody Record

Case No: R
DAS No:

Region:	2	Date Shipped:	5/2/2006
Project Code:		Carrier Name:	FedEx
Account Code:		Airbill:	855368817044
CERCLIS ID:	NYD047650197	Shipped to:	USEPA REGION II DESA LAB Building 209, MS-230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886
Spill ID:	02LH		
Site Name/State:	Stanton Cleaners Area Groundwater Contami		
Project Leader:	James Kearns		
Action:	Operations and Maintenance		
Sampling Co:	Earth Tech		

Chain of Custody Record

Sampler Signature: [signature]

Relinquished By	(Date / Time)	Received By	(Date / Time)
1 [signature]	5/2/06 10:45		
2			
3			
4			

ORGANIC SAMPLE No.	MATRIX/ SAMPLER	CONC/ TYPE	ANALYSIS/ TURNAROUND	TAG No./ PRESERVATIVE/ Bottles	STATION LOCATION	SAMPLE COLLECT DATE/TIME		INORGANIC SAMPLE No.	QC Type
EFFLUENT	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Effluent	S: 5/2/2006	9:01		--
~~EFFLUENT-A~~	~~Ground Water/~~ Robert Derrick	~~L/G~~	~~VOA (14)~~	~~(HCL) (3)~~	Effluent	S: 5/2/2006	9:03		Field Duplicate
INFLUENT (MW-24 AND	Ground Water/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Influent (MW-24 and EPA-EXT-02)	S: 5/2/2006	8:53		--
TB	Field QC/ Robert Derrick	L/G	VOA (14)	(HCL) (3)	Trip Blank	S: 5/2/2006	8:00		Trip Blank

Shipment for Case Complete? N	Sample(s) to be used for laboratory QC: TB	Additional Sampler Signature(s):	Chain of Custody Seal Number:
Analysis Key: VOA = CLP TCL Volatiles	Concentration: L = Low, M = Low/Medium, H = High	Type/Designate: Composite = C, Grab = G	Shipment Iced?

TR Number: 2-445049606-050206-0002

PR provides preliminary results. Requests for preliminary results will increase analytical costs.

Send Copy to: Sample Management Office, 2000 Edmund Halley Dr., Reston, VA. 20191-3400 Phone 703/264-9348 Fax 703/264-9222

FedEx Air Bill
(May 2, 2006 System Sampling Event)

FedEx Express **US Airbill**

FedEx Tracking Number: 8553 6881 7044

Form ID No. 0200 — **Sender's Copy**

1 From *Please print and press hard.*

Date: 5-2-06 Sender's FedEx Account Number: 237472598

Sender's Name: Robert Derrick Phone: (201) 508-9611

Company: Earth Tech

Address: 110 Cutter Mill Road Dept./Floor/Suite/Room

City: Great Neck State: NY ZIP: 11021

2 Your Internal Billing Reference First 24 characters will appear on invoice: 70536.0203 OPTIONAL

3 To

Recipient's Name: John Birri Phone: (732) 906-6886

Company: USEPA Region II

Recipient's Address: 2890 Woodbridge Avenue Building 209, MS-230 Dept./Floor/Suite/Room
We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address
To request a package be held at a specific FedEx location, print FedEx address here.

City: Edison State: NJ ZIP: 08837

4a Express Package Service To add SATURDAY Delivery, see Section 6. *Packages up to 150 lbs.* * To most locations.

- [X] FedEx Priority Overnight — Next business morning.*
- [ ] FedEx Standard Overnight — Next business afternoon.*
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.*
- [ ] FedEx 2Day — Second business day.*
- [ ] FedEx Express Saver — Third business day.*

FedEx Envelope rate not available. Minimum charge: One-pound rate.

4b Express Freight Service To add SATURDAY Delivery, see Section 6. *Packages over 150 lbs.* ** To most locations.

- [ ] FedEx 1Day Freight* — Next business day.**
- [ ] FedEx 2Day Freight — Second business day.**
- [ ] FedEx 3Day Freight — Third business day.**

* Call for Confirmation:

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [X] Other

6 Special Handling Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes.
- [ ] HOLD Weekday at FedEx Location — NOT Available for FedEx First Overnight.
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [X] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. or Credit Card No.: Exp. Date:

Total Packages	Total Weight	Total Declared Value†
1		$ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details.

FedEx Use Only

8 NEW Residential Delivery Signature Options If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies*

520

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Water Quality Parameters
(May 2, 2006 System Sampling Event)

STANTON CLEANERS SITE LTRA

Groundwater Pump and Treatment System
Water Quality Parameters Log

Date: 5/2/06
Project # 70536

	pH	COND.	TURB.	DO	TEMP.	SALINITY
Influent*	6.21	0.688	15.2	10.3	14.63	0.0
Discharge	6.81	0.667	8.7	10.1	13.98	0.0

Total Gallons pumped: 124,833,778 gallons
Flow rate: 70 gpm

*** The influent consists of MW-24 and EPA-EXT-02. These wells combine before they reach the treatment room and therefore cannot be individually sampled for analysis.**

Equipment Calibrated by: **Robert Derrick** **Comments:**
Water samples collected by: **Robert Derrick**
Water monitoring performed by: **Robert Derrick**

TEMP. - Temperature measured in degrees Fahrenheit.
COND. - Conductivity measured in milliSiemens per centimeter (mS/cm).
TURB. - Turbidity measure in nephelometric turbidity units (NTU).
DO - Dissolved Oxygen measured in milligrams per liter (mg/L).
SALINITY - Salinity in percentage.

Appendix E

Groundwater Treatment System Raw and Treated Analytical Data

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B0001	10/27/2003	MTBE	2	J	?
				cis -1,2-Dichloroethene	2	J	?
				Trichloroethene (TCE)	3	J	5
				Toluene	3	J	5
				Tetrachloroethene	350 (D)		5
Effluent	SC-04	B0002	10/27/2003	None			
Trip Blank	SC-TB	B0003	10/27/2003	Acetone	61	J	5
				Methylene chloride	2	J	5
Influent	SC-01	B0177	11/12/2003	Tetrachloroethene (PCE)	240		5
				Chlorodifluoromethane	8.6	NJ	
				1,2-Dichloroethene	3.3	NJ	5
Effluent	SC-04	B0178	11/12/2003	Chlorodifluoromethane	22	NJ	
Influent Dup	SC-60	B0179	11/12/2003	Tetrachloroethene	250		5
				Chlorodifluoromethane	29	NJ	
				1,2-Dichloroethene	3.4	NJ	
Trip Blank	SC-TB	B0180	11/12/2003	Tetrachloroethene	9.4		5
				Chlorodifluoromethane	4.3	NJ	
Influent	SC-01	B17J3	12/10/2003	Tetrachloroethene	290 (D)		5
				cis -1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
Effluent	SC-04	B17J4	12/10/2003	None			
Influent Dup	SC-61	B17J5	12/10/2003	Tetrachloroethene	280 (D)		5
				cis -1,2-Dichloroethene	2	J	
				Trichloroethene	3	J	
Trip Blank	SC-TB	B17J6	12/10/2003	MTBE	5	J	
				Toluene	2	J	
				Ethylbenzene	2	J	
Influent	SC-01	B1000	1/12/2004	MTBE	2.7		
				cis -1,2-Dichloroethene	1.5		
				Trichloroethene	2.5		
				Tetrachloroethene	280		5
Effluent	SC-04	B1001	1/12/2004	None			
Influent Dup	SC-62	B1002	1/12/2004	MTBE	2.6		
				cis -1,2-Dichloroethene	1.5		
				Trichloroethene	2.5		
				Tetrachloroethene	300		5
Trip Blank	SC-TB	B1003	1/12/2004	Methylene chloride	0.6	K	
				MTBE	3.7		
				Tetrachloroethene	7.9		5
				m&p-Xylene	0.7		
Influent	SC-01	B17Z0	2/12/2004	*cis* -1,2-Dichloroethene	1.7		
				Trichloroethene	3.0		
				Tetrachloroethene	610 (D)		5
				Unknown TIC	0.53	J	
Effluent	SC-04	B17Z1	2/12/2004	Acetone	3.8	J	5
Influent Dup	SC-63	B17Z2	2/12/2004	Acetone	25	J	5
				cis -1,2-Dichloroethene	1.7		
				Trichloroethene	2.8		
				Tetrachloroethene	440 (D)		5
Trip Blank	SC-TB	B17Z3	2/12/2004	Methylene chloride	0.16	J	
				MTBE	4.7		
				Chloroform	0.26	J	
				Tetrachloroethene	7.1		5
				Xylene (total)	0.56		
				1,3-Dichlorobenzene	0.40	J	
				1,4-Dichlorobenzene	0.38	J	
				Unknown TIC	0.58	J	
				Benzene, 1-ethyl-3-methyl-	0.72	JN	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B17Z6	3/10/2004	MTBE	2.7		
				cis -1,2-Dichloroethene	1.2		
				Trichloroethene	2.3		
				Tetrachloroethene	260		5
Effluent	SC-04	B17Z7	3/10/2004	Tetrachloroethene	0.70		5
Influent Dup	SC-64	B17Z8	3/10/2004	MTBE	2.8		
				cis -1,2-Dichloroethene	1.2		
				Trichloroethene	2.3		
				Tetrachloroethene	260		5
Trip Blank	SC-TB	B17Z9	3/10/2004	Acetone	1.8		5
				Toluene	0.50		
				Isobutane	41	NJ	
Influent	SC-01	B1BS2	4/14/2004	MTBE	1.9		
				cis -1,2-Dichloroethene	0.83		
				Trichloroethene	1.5		
				Tetrachloroethene	380 (D)		5
Effluent	SC-04	B1BS3	4/14/2004	Tetrachloroethene	1.9		5
Influent Dup	SC-65	B1BS4	4/14/2004	Acetone	1.2	J	5
				MTBE	1.5		
				cis -1,2-Dichloroethene	0.67	J	
				Trichloroethene	1.1		
				Tetrachloroethene	260 (D)		5
Trip Blank	SC-TB	B1BS5	4/14/2004	Methylene chloride	0.17	J	
				Chloroform	2.8		
				Bromodichloromethane	0.80		
Influent	SC-01	B1BS6	5/20/2004	MTBE	2.1		
				cis -1,2-Dichloroethene	1.0		
				Trichloroethene	1.8		
				Tetrachloroethene	190		5
Effluent	SC-04	B1BS7	5/20/2004	Acetone	1.2		5
Influent Dup	SC-66	B1BS8	5/20/2004	Acetone	0		5
				MTBE	2.1		
				cis -1,2-Dichloroethene	0.9		
				Trichloroethene	1.6		
				Tetrachloroethene	200		5
Trip Blank	SC-TB	B1BS9	5/20/2004	Acetone	1		5
				Chloroform	0		
				Bromodichloromethane	0		
Influent	SC-01	B1BS6	6/15/2004	Carbon Disulfide	1.1		
				MTBE	2.7		
				cis -1,2-Dichloroethene	1.3		
				Trichloroethene	2.4		
				Tetrachloroethene	320		5
Effluent	SC-04	B1BS7	6/15/2004	Tetrachloroethene	2.1		5
Influent Dup	SC-67	B1BS8	6/15/2004	MTBE	2.3		
				cis -1,2-Dichloroethene	1.2		
				Trichloroethene	2.2		
				Tetrachloroethene	330		5
Trip Blank	SC-TB	B1BS9	6/15/2004	None			

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1FJ2	7/13/2004	Acetone	0.8		5
				MTBE	2.3		
				cis -1,2-Dichloroethene	1.1		
				Trichloroethene	1.7		
				Tetrachloroethene	170		5
Effluent	SC-04	B1FJ3	7/13/2004	Acetone	0.72		5
				Tetrachloroethene	2		5
Influent Dup	SC-67	B1FJ4	7/13/2004	MTBE	2.4		
				cis -1,2-Dichloroethene	1.1		
				Trichloroethene	1.8		
				Tetrachloroethene	160		5
Trip Blank	SC-TB	B1FJ5	7/13/2004	Acetone	0.73		5
				Acetic Acid, Ethyl Ester	2.5	NJ	
Influent	SC-01	B1GH2	8/16/2004	MTBE	1.9		
				cis -1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	200		5
				Acetone	2		5
Effluent	SC-04	B1GH3	8/16/2004	Tetrachloroethene	5.4		5
				Acetone	1.6		5
Influent Dup	SC-69	B1GH4	8/16/2004	Acetone	1.2		5
				MTBE	2		
				cis -1,2-Dichloroethene	0.7		
				Trichloroethene	1.5		
				Tetrachloroethene	210		5
Influent	SC-01			Chloromethane	0.80		
				Acetone	1.0		5
				MTBE	1.5		
				cis- 1,2-Dichloroethene	0.70		
				Trichloroethene	1.4		
				Tetrachloroethene	200		5
Effluent	SC-04			Chloromethane	0.80		
				Acetone	2.1		5
				Tetrachloroethene	1.7		5
Influent Dup	SC-70			Acetone	1.0		5
				MTBE	1.3		
				cis- 1,2-Dichloroethene	0.60		
				Trichloroethene	1.4		
				Tetrachloroethene	210		5
Trip Blank	SC-TB			Acetone	2.2		5
				2-Butanone	1.5		
Influent	SC-01	B1LZ2	10/21/2004	Acetone	5	J	5
				Methylene chloride	0.2	J	
				MTBE	0.82		
				cis -1,2-Dichloroethene	0.5		
				Trichloroethene	1.2		
				Tetrachloroethene	220		5
Effluent	SC-04	B1LZ3	10/21/2004	Acetone	5	J	5
				Methylene chloride	0.5	UJ	
				Tetrachloroethene	0.2	J	5
Influent Dup	SC-71	B1LZ4	10/21/2004	Acetone	5	J	5
				Methylene chloride	1.1		
				MTBE	1.1		
				cis -1,2-Dichloroethene	0.64		
				Trichloroethene	1.1		
				Tetrachloroethene	210	(D)	5
Trip Blank	SC-TB	B1LZ5	10/21/2004	Acetone	5.7		5
				Methylene chloride	0.68		
				Toluene	0.39	J	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1T22	11/17/2004	Acetone	3	J	5
				Methylene chloride	1.3	U	
				MTBE	1.3		
				cis -1,2-Dichloroethene	0.64		
				Trichloroethene	1.2		
				Tetrachloroethene	170	(D)	5
Effluent	SC-04	B1T23	11/17/2004	Methyl Acetate	0.5	UJ	
				Methylene chloride	0.5	U	
Influent Dup	SC-72	B1T24	11/17/2004	Methylene chloride	0.85	U	
				MTBE	1.3		
				cis -1,2-Dichloroethene	0.5		
				Trichloroethene	0.83		
				Tetrachloroethene	160	(D)	5
Trip Blank	SC-TB	B1T25	11/17/2004	Acetone	3	J	5
				Methyl Acetate	0.5	UJ	
				Methylene chloride	0.46	J	
				2-Butanone	2.4	J	
				Tetrachloroethene	9.6		5
				1,2,3-Trichlorobenzene	0.5	UJ	5
Influent	SC-01	B1T79	12/15/2004	MTBE	1.6		
				cis -1,2-Dichloroethene	0.45	J	
				Trichloroethene (TCE)	1.0	J	5
				Tetrachloroethene	100	(D)	5
				Methylcyclohexane	1	UJ	
				Bromomethane	1	UJ	
				Bromodichloromethane	1	UJ	
				Chloromethane	1	UJ	
				1,2-Dichloroethene	1	UJ	
				1,2-Dichloropropane	1	UJ	
				2-Hexanone	10	R	
				4-Methyl-2-pentanone	10	R	
Effluent	SC-04	B1T81	12/15/2004	Benzene	0.5	JB	
				1,2,4-Trichlorobenzene	0.5	JB	
				1,2,3-Trichlorobenzene	0.5	JB	5
Influent Dup	SC-73	B1T80	12/15/2004	Methyl tert-Butyl Ether	1.6		
				cis-1,2-Dichloroethene	0.48	J	
				Trichloroethene	0.98	J	
				4-Methyl-2-pentanone	10	R	
				Tetrachloroethene	98	(D)	5
				2-Hexanone	10	R	
Trip Blank	SC-TB	B1T82	12/15/2004	Chloroform	0.1	J	
				Cyclohexane	0.15	J	
				Benzene	0.5	JB	
				Toluene	0.21	J	

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent	SC-01	B1W00	1/21/2005	MTBE	1.5		
				cis -1,2-Dichloroethene	0.7		
				Trichloroethene (TCE)	1.4		5
				Tetrachloroethene	160		5
Effluent	SC-04	B1W02	1/21/2005	Acetone	1.8		5
Influent Dup	SC-74	B1W01	1/21/2005	Methyl tert-Butyl Ether	1.4		
				cis-1,2-Dichloroethene	0.7		
				Trichloroethene	1.4		
				Tetrachloroethene	150		5
				Acetone	10		5
Trip Blank	SC-TB	B1W03	1/21/2005	Acetone	3.5		5
Influent	SC-01	AG00197	2/3/2005	MTBE	1.4		
				cis -1,2-Dichloroethene	0.5		
				Trichloroethene (TCE)	1.1		5
				Tetrachloroethene	140		5
Effluent	SC-04	AG00198	2/3/2005	Acetone	1.2		5
Influent Dup	SC-75	AG00199	2/3/2005	Methyl tert-Butyl Ether	1.5		
				cis-1,2-Dichloroethene	0.54		
				Trichloroethene	1.1		
				Tetrachloroethene	140		5
				Acetone	1.1		5
Trip Blank	SC-TB	AG00200	2/3/2005	Acetone	4.3		5
				4-Methyl-2-pentanone	1.2		
Influent	SC-01	AG00468	3/9/2005	MTBE	1.4		
				Acetone	2.5		5
				Trichloroethene (TCE)	1.1		5
				Tetrachloroethene	130		5
Effluent	SC-04	AG00469	3/9/2005	Acetone	1.8		5
Influent Dup	SC-76	AG00470	3/9/2005	MTBE	1.4		
				Acetone	1.2		5
				Trichloroethene	1.1		
				Tetrachloroethene	130		5
Trip Blank	SC-TB	AG00471	3/9/2005	Acetone	1.7		5
				Chloroform	1.6		
Influent (EPA-EXT-02)	SC-01	AG00825	4/22/2005	MTBE	1.7		
				2-Butanone	2.2		
				Acetone	2.4		5
				Trichloroethene (TCE)	1.1		5
				Tetrachloroethene	65		5
Influent (EPA-EXT-4R)	SC-02	AG00826	4/22/2005	2-Butanone	2.5		
				Acetone	5.1		5
				Trichloroethene (TCE)	1.3		5
				Tetrachloroethene	9.5		5
Effluent	SC-04	AG00827	4/22/2005	None			
Influent Dup ~~(EPA-EXT-02)~~ (EPA-EXT-4R)	SC-77	AG00828	4/22/2005	2-Butanone	2.8		
				Acetone	4.9		5
				Trichloroethene	1.3		
				Tetrachloroethene	9		5

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Trip Blank	SC-TB	AG00829	4/22/2005	Acetone	1		5
				Chloroform	1.7		
				Trichloroethene (TCE)	0.84		5
Influent (EPA-EXT-02)	SC-01	AG01320	5/24/2005	MTBE	1.1		
				Trichloroethene (TCE)	1.0		5
				Tetrachloroethene	100		5
Influent (EPA-EXT-4R)	SC-02	AG01321	5/24/2005	Tetrachloroethene	8.8		5
Effluent	SC-04	AG01322	5/24/2005	Acetone	1.3		5
Influent Dup ~~(EPA-EXT-02)~~ (EPA-EXT-4R)	SC-78	AG01323	5/24/2005	Tetrachloroethene	8.6		5
Trip Blank	SC-TB	AG01324	5/24/2005	Acetone	1.3		5
				Chloroform	13		
				Bromodichloromethane	2.5		
Influent (EPA-EXT-02)	SC-01	AG02074	6/22/2005	MTBE	0.98		
				Trichloroethene (TCE)	0.8		5
				Tetrachloroethene	95		5
				Acetone	2.7	K	5
				Ethyl Acetate	10	JN	
Influent (EPA-EXT-4R)	SC-02	AG02075	6/22/2005	Tetrachloroethene	9.1		5
				Acetone	1.9	K	5
				Ethyl Acetate	3.6	JN	
				Propane, 2-Isothiocyanto-2	0.8	JN	
Influent		AG02076	6/22/2005	MTBE	0.64		
				Tetrachloroethene	50		5
				Acetone	2	K	5
				Trichloroethene (TCE)	0.56		5
				Ethyl Acetate	8.8	JN	
Effluent	SC-04	AG02072	6/22/2005	Acetone	2.6	K	5
				Ethyl Acetate	6.2	JN	
EffluenDup	SC-04	AG02073	6/22/2005	Acetone	2.6	K	5
				Ethyl Acetate	3.3	JN	
Trip Blank	SC-TB	AG02077	6/22/2005	Acetone	2.4	K	5
				Chloroform	13		
				Bromodichloromethane	2.7		
				Ethyl Acetate	3.1	JN	
Influent (EPA-EXT-02)	SC-01	AG02780	7/12/2005	MTBE	0.9		
				Trichloroethene (TCE)	0.8		5
				Tetrachloroethene	85		5
				Acetone	1	K	5
Influent (EPA-EXT-4R)	SC-02	AG02781	7/12/2005	Tetrachloroethene	7.4		
				Acetone	2.1	K	5
				Ethyl Acetate	4.1	JN	
				Propane, 2-Isothiocyanto-2	1.4	JN	
Influent		AG02782	7/12/2005	MTBE	0.52		
				Tetrachloroethene	43		5
Effluent	SC-04	AG02778	7/12/2005	Acetone	2.8	K	5
				Ethyl Acetate	11	JN	
EffluenDup	SC-04	AG02779	7/12/2005	Acetone	1.9	K	5
				Ethyl Acetate	5.2	JN	
Trip Blank	SC-TB		7/12/2005	Acetone	1.5	K	5
				Chloroform	12		
				Bromodichloromethane	2.6		

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (EPA-EXT-02)	SC-01	AG03721	8/15/2005	MTBE	0.68		
				Trichloroethene (TCE)	0.73		5
				Tetrachloroethene	88		5
Influent (EPA-EXT-4R)	SC-02	AG03722	8/15/2005	Tetrachloroethene	9.7		5
				Propane, 2-Isothiocyanto-2	0.53	JN	
Influent		AG03723	8/15/2005	Tetrachloroethene	43		5
Effluent	SC-04	AG03725	8/15/2005	Acetone	ND (5.0)		5
EffluenDup	SC-04	AG03720	8/15/2005	Acetone	ND (5.0)		5
Trip Blank	SC-TB	AG03724	8/15/2005	Chloroform	13		
				Bromodichloromethane	2.6		
Influent (EPA-EXT-02)	SC-01	AG04086	9/8/2005	MTBE	0.76		
				Trichloroethene (TCE)	0.74		5
				Tetrachloroethene	90		5
Influent (EPA-EXT-4R)	SC-02	AG04087	9/8/2005	Tetrachloroethene	9.8		5
Influent		AG04088	9/8/2005	MTBE	0.63		
				Tetrachloroethene	44		5
Effluent	SC-04	AG04084	9/8/2005	Acetone	ND (1.0)		5
EffluentDup	SC-04	AG04085	9/8/2005	Acetone	1.0		5
Trip Blank	SC-TB	AG04089	9/8/2005	Chloroform	11		
				Bromodichloromethane	2.2		
Influent (EPA-EXT-02)	SC-01	AG07649	10/5/2005	MTBE	0.82		
				Trichloroethene (TCE)	0.78		5
				Tetrachloroethene	100		5
Influent (EPA-EXT-4R)	SC-02	AG07650	10/5/2005	Tetrachloroethene	9.3		5
Influent		AG07651	10/5/2005	MTBE	0.6		
				Acetone	1		5
				Tetrachloroethene	52		5
Effluent	SC-04	AG07647	10/5/2005	Acetone	1.1		
EffluentDup	SC-04	AG07648	10/5/2005	Acetone	1.4		
Trip Blank	SC-TB	AG07652	10/5/2005	Chloroform	ND		
Influent (EPA-EXT-02)	SC-01	AG08530	11/14/2005	Acetone	1.4	K	
				MTBE	0.92		
				Trichloroethene (TCE)	0.81		5
				Tetrachloroethene	95		5
Influent (EPA-EXT-4R)	SC-02	AG08531	11/14/2005	Acetone	1.0	K	5
				Tetrachloroethene	10		5
Influent		AG08532	11/14/2005	MTBE	0.9		
				Acetone	1.4	K	5
				Trichloroethene (TCE)	0.74		5
				Tetrachloroethene	91		5
Effluent	SC-04	AG08528	11/14/2005	Acetone	ND		5
EffluentDup	SC-04	AG08529	11/14/2005	Acetone	ND		5
Trip Blank	SC-TB	AG08533	11/14/2005	Acetone	2.0	K	5

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (EPA-EXT-02)	SC-01	AG08953	12/6/2005	Acetone	4.1		
				MTBE	0.85		
				Trichloroethene (TCE)	0.67		5
				Tetrachloroethene	90		5
				1-Butanol	0.63	NJ	
Influent (EPA-EXT-4R)	SC-02	AG08954	12/6/2005	Acetone	1.4	K	5
				Tetrachloroethene	9.5		5
Influent		AG08955	12/6/2005	MTBE	0.9		
				Acetone	1.4	K	5
				Trichloroethene (TCE)	0.77		5
				Tetrachloroethene	89		5
Effluent	SC-04	AG08951	12/6/2005	Acetone	1.5	K	5
EffluentDup	SC-04	AG08952	12/6/2005	Acetone	3.0	K	5
Trip Blank	SC-TB		12/6/2005	Acetone	ND		5
Influent (EPA-EXT-02)	SC-01	AH00216	1/10/2006	Acetone	ND		5
				MTBE	0.98		
				Trichloroethene (TCE)	0.79		5
				Tetrachloroethene	93		5
Influent (EPA-EXT-4R)	SC-02	AH00217	1/10/2006	Acetone	ND (1.0)		5
				Tetrachloroethene	8.2		5
Influent		AH00218	1/10/2006	MTBE	0.94		
				Acetone	ND (1.0)		5
				Trichloroethene (TCE)	0.85		5
				Tetrachloroethene	90		5
Effluent	SC-04	AH00214	1/10/2006	Acetone	ND (1.0)		5
EffluentDup	SC-04	AH00215	1/10/2006	Furan, Tetrahydro	0.52	NJ	
Trip Blank	SC-TB	AH00219		Acetone	ND (1.0)		5
Influent	SC-01	AH01177	2/15/2006	MTBE	1.2		
				Trichloroethene (TCE)	0.72		5
				Tetrachloroethene	80		5
MW-19		AH01178	2/15/2006	Acetone	1.2		5
				Trichloroethene (TCE)	1.2		5
				Tetrachloroethene	85		5
MW-21		AH01179	2/15/2006	Trichloroethene (TCE)	2.6		5
				Tetrachloroethene	27		5
Effluent		AH01175	2/15/2006		ND		
Effluent Duplicate		AH01176	2/15/2006		ND		
Trip Blank	SC-TB	AH00219	2/15/2006	Chloroform	10		
				Bromodichloromethane	2.3		
Influent	SC-01	AH01256	3/8/2006	MTBE	1.4		
				Trichloroethene (TCE)	0.71		5
				Tetrachloroethene	83		5
				Acetone	2		5
Effluent	SC-04	AH01254	3/8/2006	Acetone	2		5
Effluent Duplicate	SC-04	AH01255	3/8/2006	Acetone	2.4		5
Trip Blank	SC-TB	AH01257	3/8/2006	Acetone	2		5
				Bromodichloromethane	5		
				Chloroform	14		
Influent	SC-01	AH01641	4/5/2006	MTBE	1.5		
				TRICHLOROETHENE	0.57		
				TETRACHLOROETHENE	68		
				ACETONE	1.7		
				ETHYL ACETATE	1.5	NJ	
Effluent	SC-04	AH01639	4/5/2006	ACETONE	1.7		
				EHHYL ACETATE	1.7	NJ	
Effluent A	SC-04	AH01640	4/5/2006	ACETONE	4.6		
			4/5/2006	EHHYL ACETATE	5.3	NJ	
Trip Blank	SC-TB	AH01642	4/5/2006	ACETONE	1.7		

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria
Influent (MW-24 & EPA-EXT-02)	SC-01	AH02078	5/3/2006	ACETONE	2.3		5
				MTBE	1.7		
				TRICHLOROETHENE	0.72		
				TETRACHLOROETHENE	80		5
Effluent	SC-04	AH02076	5/3/2006	CHLOROMETHANE	0.51		
				ACETONE	1.6		5
Effluent-A	SC-04	AH02077	5/3/2006	ACETONE	2.2		5
Trip Blank	SC-TB	AH02079	5/3/2006	ACETONE	1.8		5

Stanton Cleaners Analytical Tracking Table
Influent and Effluent Groundwater Data

Sample Location	ECC ID*	EPA ID	Date Collected	Compounds Detected	Result (µg/L)	Qualifier**	Discharge Criteria

Notes:

***** = Unless otherwise noted, samples collected from ECC ID SC-04 were used as the matrix spike / matrix spike duplicate sample.

****** = Data validation was performed by EPA Region II. ECC carried over assigned qualifers and did not perform a separate review or validation of the data.

(D) = Detection from a dilution of the sample.

J = qualified as estimated

JN = Presumptive evidence for the presence of the material at an estimated value.

K = The reported value may be biased high.

µg/L = micrograms per liter

MTBE = Tert-butyl-methyl-ether

NJ = TIC. The reported value is estimated.

TIC = Tentatively Identified Compound.

Appendix F

Soil Vapor Extraction and Pump and Treat System Bi-weekly Air Monitoring Logs

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Bi-Weekly Air Monitoring Log

Date: 5/4/06
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**	**Temp.**	**Vac. Pre.**	**%RH**	**Dew pt.**	**Flow**
SVE-Influent	2.4	0	20.3%	0%	0%	110.3	N/A	25.5%	67.0	240
Post Air Stripper	0.0	0	21.2%	0%	0%	59.0	N/A	96.0%	57.7	2150
SVE-Effluent[1]	0.0	0	20.5%	0%	0%	93.2	N/A	42.8%	67.3	265
GW Post Vapor Effluent[2]	0.0	0	20.9%	0%	0%	59.8	N/A	93.0%	57.7	2210
EPA-SVE-1 (shallow)	0.1	0	20.9%	0%	0%	78.0	9.50	42.0%	51.3	5.40
EPA-SVE-1 (medium)	0.1	0	20.9%	0%	0%	76.0	10.50	60.1%	61.3	0.20
EPA-SVE-2 (shallow)	0.0	0	20.9%	0%	0%	89.9	3.00	37.4%	60.8	1.50
EPA-SVE-2 (medium)	0.0	0	20.9%	0%	0%	85.4	2.50	40.0%	58.7	1.700
SS-A	0.0	0	20.9%	0%	0%	75.5	4.00	48.0%	53.9	28.0
EPA-SVE-04R/SS-B(A)	0.0	0	20.7%	0%	0%	80.6	2.25	41.0%	54.0	2.00
SS-B-C	0.6	2	20.9%	0%	0%	82.0	3.00	38.5%	54.7	37.0
SS-C	0.0	1	20.5%	0%	0%	84.0	2.25	48.0%	62.5	36.0
L1	0.4	0	20.9%	0%	0%	83.0	5.00	44.0%	61.7	82.5
L2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SS-B(B)	Blocked by car									
SS Vent-LIHA	0.0	1	20.6%	0%	0%	77.6	2.50	49.7%	55.5	104.0
Vapor Point-1/Slope 1	0.0	1	20.2%	0%	0%	N/A	N/A	N/A	N/A	N/A
SVE-3A*	0.0	2	20.9%	0%	0%	N/A	10.50	N/A	N/A	>200
SVE-3B	0.0	2	20.9%	0%	0%	73.1	9.50	59.2	60	101.5
Background	0.0	0	20.9%	0%	0%	75.9	N/A	50.5%	39.9	N/A

***Flow to strong to take VelociCalc readings**

Equipment calibrated by: Rob Derrick
Air readings collected by: Rob Derrick

***Approximately**

Comments:

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Fahrenheit
pressure: measured in inches of water (in/H2O), inches of mercury (in/Hg), or pounds per square inch

[1]Formerly Post SVE Carbon

(psi).
Flow: measured in cubic feet per minute (cfm)

%RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper
SVE: Soil Vapor Extraction System

[2]Formerly Post Air Stripper Carbon
[3]Formerly Sub-Slab A,B, and C respectively
[4]Formerly Sub-Slab D
[5]Formerly Sub-Slab B

NA- Not Available

	Prior to 10/3/05	**After 10/3/05**
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
Sub-slab sample ports online since 3/22/05
L2 is offline

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Bi-Weekly Air Monitoring Log

Date: 5-17-06
Project # 70536

	MultiRAE Plus PGM-50					**VelociCalc Plus**				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**	**Temp.**	**Vac. Pre.**	**%RH**	**Dew pt.**	**Flow**
SVE-Influent						107.8	N/A	26.8%	66.3	265
Post Air Stripper						58.6	N/A	97.0%	57.6	2300
SVE-Effluent[1]						91.0	N/A	44.7%	65.9	250
GW Post Vapor Effluent[2]						60.4	N/A	93.2%	58.2	2250
EPA-SVE-1 (shallow)						72.0	8	42.7%	48.4	500
EPA-SVE-1 (medium)						77.9	1000	56.0%	55.0	4.00
EPA-SVE-2 (shallow)						81.3	2.25	53.0%	64.5	4.00
EPA-SVE-2 (medium)						83.0	0.25	39.0%	55.0	2.000
SS-A						73.6	4.00	48.0%	53.0	32.3

EPA-SVE-04R/SS-B(A)						76.3	4.25	41.0%	51.3	1.50
SS-B-C						75.9	3.75	45.5%	53.2	34.5
SS-C						85.0	3.25	43.5%	59.0	30.0
L1						70.2	7.25	67.3%	58.5	86.0
L2	Offline									
SS-B(B)	Blocked by car									
SS Vent-LIHA						80.4	2.00	51.5%	60.9	81.0
Vapor Point-1/Slope 1										
SVE-3A						67.8	9.00	77.5	60.3	113.0
SVE-3B						Flow too great for Velocicalc.				>200
Background						72.2	N/A	44.5%	49.6	N/A

Equipment calibrated by:
Air readings collected by:

***Approximately**

Comments:

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Fahrenheit
pressure: measured in inches of water (in/H2O), inches of mercury (in/Hg), or pounds per square inch (psi).
Flow: measured in cubic feet per minute (cfm)

%RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper
SVE: Soil Vapor Extraction System

[1]Formerly Post SVE Carbon
[2]Formerly Post Air Stripper Carbon
[3]Formerly Sub-Slab A,B, and C respectively
[4]Formerly Sub-Slab D
[5]Formerly Sub-Slab B
NA- Not Available

	Prior to 10/3/05	**After 10/3/05**
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04

Sub-slab sample ports online since 3/22/05
L2 is offline

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
Soil-Vapor Extraction and Pump and Treat System
Bi-Weekly Air Monitoring Log

Date: 5-31-06
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	**CO**	**Oxygen**	**LEL**	**H2S**	**Temp.**	**Vac. Pre.**	**%RH**	**Dew pt.**	**Flow**
SVE-Influent						112.0	N/A	27.5%	70.7	274
Post Air Stripper						59.2	N/A	98.8%	58.2	2170
SVE-Effluent[1]						99.6	N/A	38.4%	69.9	280
GW Post Vapor Effluent[2]						60.4	N/A	91.6%	57.8	2400
EPA-SVE-1 (shallow)						76.6	5.00	56.3%	56.3	1.00
EPA-SVE-1 (medium)						79.3	8.00	64.3%	64.3	1.25
EPA-SVE-2 (shallow)						80.8	5.75	56.2%	63.8	5.00
EPA-SVE-2 (medium)						83.5	0.25	59.0%	66.0	1.00
SS-A						81.4	3.50	52.0%	62.5	2.75
EPA-SVE-04R/SS-B(A)						83.9	2.25	50.5%	63.5	0.50
SS-B-C						80.5	2.00	52.7%	64.3	32.7
SS-C						90.5	2.00	48.0%	67.1	25.5
L1						84.3	4.75	56.6%	67.0	26.5
L2	Offline									
SS-B(B)	Blocked by car									
SS Vent-LIHA						89.9	1.00	43.3%	64.5	64.5
Vapor Point-1/Slope 1						N/A	N/A	N/A	N/A	N/A
SVE-3A	water in line, flow too strong for VelociCalc to work (flow greater than 200)									
SVE-3B						82.3	4.75	66.0	69.3	95.0
Background						82.0	N/A	53.5%	61.8	N/A

Equipment calibrated by:
Air readings collected by:

***Approximately**

Comments:

VOC: Volatile Organic Compounds
CO: Carbon Monoxide
LEL: Lower Explosive Limit
ppm: parts per million
temperature: measured in degrees Fahrenheit

pressure: measured in inches of water (in/H2O), inches of mercury (in/Hg), or pounds per square inch (psi).
Flow: measured in cubic feet per minute (cfm)

%RH: relative humidity

Dew Pt.: dew point in degrees Fahrenheit

AS: Air Stripper
SVE: Soil Vapor Extraction System

[1]Formerly Post SVE Carbon
[2]Formerly Post Air Stripper Carbon
[3]Formerly Sub-Slab A,B, and C respectively
[4]Formerly Sub-Slab D
[5]Formerly Sub-Slab B
NA- Not Available

	Prior to 10/3/05	**After 10/3/05**
SVE 1	shallow on	shallow and medium on
SVE 2	shallow on	shallow on
SVE 3	shallow on	shallow on
SVE 4	off	off
EPA-SVE-04R/SSB(A)	on	on
SS-A	on	on
SS-B(B)	on	off
SS-B(C)	on	on
L1	on	on
L2	on	off

Comments:
New SVE well EPA-EXT-04 online since 11/4/04
Sub-slab sample ports online since 3/22/05
L2 is offline

Appendix G

Semi-Annual Groundwater Sampling Analytical Data

No Groundwater Sampling Event this Month

Appendix H

Historical Groundwater Level Monitoring Results (Ongoing)

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	**JOB NUMBER:**	70536
LOCATION:	Great Neck, NY	**DATE:**	5/22/2006
CLIENT:	USACE / USEPA	**MEASURED BY:**	Robert Derrick
SURVEY DATUM:	ft msl		
MEASURING DEVICE:	Solinst Water Level Indicator S/N# 34407		

	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
ST-MW-02	TOC	82.03	63.36	18.67	
ST-MW-16	TOC	75.78	54.52	21.26	
EPA-MW-25	TOC	73.24	54.03	19.21	
EPA-MW-26	TOC	78.37	58.64	15.14	
ST-MW-15	TOC	90.13	72.78	17.35	
ST-MW-18	TOC	84.40	71.90	12.50	
ST-MW-12	TOC	87.20	70.40	16.80	
ST-MW-17	TOC	86.53	69.96	16.57	
ST-MW-20	TOC	84.53	71.37	13.16	
ST-MW-19	TOC	N/A	66.30		
ST-MW-09	TOC	N/A			well concreted over
EPA-MW-9A	TOC	80.24	65.18	15.06	well vault smashed, casing intact
ST-MW-06	TOC	69.83	44.50	25.53	
EPA-MW-27	TOC	69.32	51.03	18.29	
ST-MW-14	TOC	69.73	55.35	14.38	
EPA-MW-23	TOC	82.83	63.83	19.00	at site building parking lot
EPA-MW-21	TOC	84.13	65.60	18.53	in front of cleaners
EPA-MW-22	TOC	82.20	63.27	18.93	end of site parking lot
ST-MW-13	TOC	103.94	85.61	18.33	

N/A: Data not available

HISTORICAL GROUNDWATER ELEVATIONS
STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
GREAT NECK, NASSAU COUNTY, NEW YORK

Well ID	Top of PVC Elevation (ft msl)	10/29/2003		10/31/2003		11/22/03 - 11/23/03	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	57.74	16.89	57.94	16.69	60.07	14.56
EPA-MW-21	84.13	66.70	17.43	66.14	17.99	66.86	17.27
EPA-MW-22	82.20	64.51	17.69	64.08	18.12	65.09	17.11
EPA-MW-23	82.83	64.97	17.86	64.54	18.29	78.61	4.22
EPA-MW-27	69.32	51.74	17.58	51.12	18.20	52.85	16.47
ST-MW-02	82.03	64.19	17.84	63.78	18.25	64.40	17.63
ST-MW-06	69.83	63.43	6.40	44.82	25.01	44.92	24.91
ST-MW-09	78.13	61.39	16.74	60.67	17.46	62.52	15.61
ST-MW-11	75.25	58.67	16.58	58.06	17.19	60.59	14.66
ST-MW-12	87.20	73.84	13.36	70.18	17.02	72.01	15.19
ST-MW-14	69.73	50.94	18.79	50.76	18.97	56.40	13.33
ST-MW-16	75.78	55.51	20.27	55.53	20.25	65.51	10
ST-MW-17	86.53	69.95	16.58	69.27	17.26	71.55	14.98
ST-MW-19	82.50	67.01	15.49	64.93	17.57	68.04	14.46
ST-MW-20	84.53	65.99	18.54	65.83	18.70	73.45	11.08

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	12/17/03 - 12/18/03		1/12/2004		2/26/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.00	15.63	57.52	17.11	56.50	18.13
EPA-MW-21	84.13	64.99	19.14	66.17	17.96	64.30	19.83
EPA-MW-22	82.20	63.03	19.17	63.99	18.21	61.90	20.30
EPA-MW-23	82.83	77.05	5.78	64.45	18.38	63.00	19.83
EPA-MW-27	69.32	51.75	17.57	51.22	18.10	50.50	18.82
ST-MW-02	82.03	63.25	18.78	64.03	18.00	62.03	20.00
ST-MW-06	69.83	43.10	26.73	45.74	24.09	44.40	25.43
ST-MW-09	78.13	61.50	16.63	--	--	60.00	18.13
ST-MW-11	75.25	59.23	16.02	62.10	13.15	60.90	14.35
ST-MW-12	87.20	72.00	15.20	70.27	16.93	60.50	26.70
ST-MW-14	69.73	55.05	14.68	NA	NA	48.70	21.03
ST-MW-16	75.78	64.18	11.60	54.99	20.79	53.00	22.78
ST-MW-17	86.53	69.99	16.54	69.40	17.13	67.25	19.28
ST-MW-19	82.50	67.21	15.29	--	--	65.25	17.25
ST-MW-20	84.53	71.56	12.97	63.51	21.02	61.75	22.78

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	3/29/2004		4/5/2004		5/19/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	60.00	14.63	60.36	14.27	60.30	14.33
EPA-MW-21	84.13	66.99	17.14	67.38	16.75	67.10	17.03
EPA-MW-22	82.20	61.90	20.30	65.00	17.20	64.98	17.22
EPA-MW-23	82.83	65.10	17.73	65.59	17.24	65.25	17.58
EPA-MW-27	69.32	52.08	17.24	52.84	16.48	53.10	16.22
ST-MW-02	82.03	63.99	18.04	64.90	17.13	64.87	17.16
ST-MW-06	69.83	45.60	24.23	46.24	23.59	46.25	23.58
ST-MW-09	78.13	62.80	15.33	--	--	62.00	16.13
ST-MW-11	75.25	60.00	15.25	60.85	14.40	60.46	14.79
ST-MW-12	87.20	72.22	14.98	72.22	14.98	72.12	15.08
ST-MW-14	69.73	56.99	12.74	57.87	11.86	58.13	11.60
ST-MW-16	75.78	54.68	21.10	55.48	20.30	55.09	20.69
ST-MW-17	86.53	70.25	16.28	71.76	14.77	71.80	14.73
ST-MW-19	82.50	66.00	16.50	--	--	65.78	16.72
ST-MW-20	84.53	71.45	13.08	73.78	10.75	73.65	10.88

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	6/14/2004		7/21/04 - 7/22/04		8/2/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.97	14.66	59.75	14.88	59.75	14.88
EPA-MW-21	84.13	67.00	17.13	66.99	17.14	66.11	18.02
EPA-MW-22	82.20	64.78	17.42	64.50	17.70	64.33	17.87
EPA-MW-23	82.83	66.21	16.62	66.10	16.73	65.16	17.67
EPA-MW-27	69.32	53.05	16.27	52.98	16.34	54.86	14.46
ST-MW-02	82.03	65.11	16.92	65.00	17.03	59.85	22.18
ST-MW-06	69.83	45.99	23.84	45.66	24.17	44.11	25.72
ST-MW-09	78.13	62.00	16.13	61.79	16.34	--	--
ST-MW-11	75.25	60.40	14.85	60.39	14.86	60.50	14.75
ST-MW-12	87.20	72.29	14.91	72.20	15.00	71.36	15.84
ST-MW-14	69.73	58.55	11.18	58.34	11.39	55.56	14.17
ST-MW-16	75.78	55.09	20.69	55.01	20.77	54.85	20.93
ST-MW-17	86.53	71.52	15.01	71.46	15.07	70.80	15.73
ST-MW-19	82.50	65.00	17.50	64.77	17.73	--	--
ST-MW-20	84.53	73.44	11.09	73.25	11.28	71.66	12.87

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	9/28/04 - 9/29/04		10/12/04 -10/13/04		11/3/2004	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.70	14.93	58.97	15.66	58.95	15.68
EPA-MW-21	84.13	66.75	17.38	66.50	17.63	66.41	17.72
EPA-MW-22	82.20	64.41	17.79	64.34	17.86	64.32	17.88
EPA-MW-23	82.83	65.11	17.72	65.00	17.83	64.87	17.96
EPA-MW-27	69.32	52.31	17.01	52.25	17.07	52.26	17.06
ST-MW-02	82.03	65.00	17.03	65.03	17.00	65.00	17.03
ST-MW-06	69.83	44.55	25.28	55.34	14.49	55.29	14.54
ST-MW-09	78.13	62.00	16.13	62.12	16.01	62.15	15.98
ST-MW-11	75.25	60.41	14.84	60.50	14.75	60.34	14.91
ST-MW-12	87.20	72.00	15.20	72.21	14.99	72.22	14.98
ST-MW-14	69.73	56.71	13.02	56.50	13.23	56.49	13.24
ST-MW-16	75.78	55.10	20.68	57.00	18.78	57.01	18.77
ST-MW-17	86.53	70.99	15.54	70.98	15.55	70.95	15.58
ST-MW-19	82.50	64.84	17.66	64.80	17.70	64.79	17.71
ST-MW-20	84.53	71.97	12.56	72.00	12.53	72.55	11.98

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	12/8/2004		1/3/2005		2/7/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.75	14.88	59.10	15.53	57.63	17.00
EPA-MW-21	84.13	66.61	17.52	65.67	18.46	65.80	18.33
EPA-MW-22	82.20	64.33	17.87	64.44	17.76	65.32	16.88
EPA-MW-23	82.83	65.16	17.67	65.10	17.73	64.44	18.39
EPA-MW-27	69.32	52.24	17.08	51.87	17.45	50.85	18.47
ST-MW-02	82.03	64.54	17.49	64.78	17.25	63.90	18.13
ST-MW-06	69.83	44.11	25.72	55.41	14.42	47.32	22.51
ST-MW-09	78.13	59.98	18.15	62.31	15.82	63.44	14.69
ST-MW-11	75.25	60.50	14.75	59.99	15.26	58.64	16.61
ST-MW-12	87.20	71.36	15.84	71.98	15.22	70.45	16.75
ST-MW-14	69.73	55.56	14.17	56.51	13.22	50.15	19.58
ST-MW-16	75.78	54.85	20.93	57.08	18.70	55.15	20.63
ST-MW-17	86.53	70.80	15.73	71.03	15.50	70.75	15.78
ST-MW-19	82.50	64.32	18.18	64.76	17.74	65.01	17.49
ST-MW-20	84.53	71.66	12.87	72.43	12.10	65.09	19.44

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	3/22/2005		4/11/2005		5/19/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	60.00	14.63	60.99	13.64	61.00	13.63
EPA-MW-21	84.13	64.50	19.63	64.00	20.13	63.21	20.92
EPA-MW-22	82.20	64.55	17.65	65.12	17.08	65.43	16.77
EPA-MW-23	82.83	65.00	17.83	65.10	17.73	65.00	17.83
EPA-MW-27	69.32	51.67	17.65	51.60	17.72	51.33	17.99
ST-MW-02	82.03	63.99	18.04	63.89	18.14	63.40	18.63
ST-MW-06	69.83	55.40	14.43	55.42	14.41	55.32	14.51
ST-MW-09	78.13	61.20	16.93	61.78	16.35	61.72	16.41
ST-MW-11	75.25	60.10	15.15	60.00	15.25	59.99	15.26
ST-MW-12	87.20	72.00	15.20	71.21	15.99	71.12	16.08
ST-MW-14	69.73	56.20	13.53	56.33	13.40	56.34	13.39
ST-MW-16	75.78	57.00	18.78	57.10	18.68	57.30	18.48
ST-MW-17	86.53	70.78	15.75	70.00	16.53	59.90	26.63
ST-MW-19	82.50	63.23	19.27	63.00	19.50	63.00	19.50
ST-MW-20	84.53	71.32	13.21	71.21	13.32	71.71	12.82

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	6/15/2005		7/7/2005		8/4/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	58.70	15.93	58.51	16.12	59.07	15.56
EPA-MW-21	84.13	66.35	17.78	66.27	17.83	66.85	17.28
EPA-MW-22	82.20	63.83	18.37	63.78	18.42	64.38	17.82
EPA-MW-23	82.83	64.32	18.51	64.29	18.54	64.88	17.95
EPA-MW-27	69.32	51.45	17.87	51.35	17.97	51.84	17.48
ST-MW-02	82.03	--	--	--	--	--	
ST-MW-06	69.83	45.70	24.13	45.90	23.93	45.80	24.03
ST-MW-09	78.13	63.45	14.68	63.29	14.84	63.94	14.19
ST-MW-11	75.25	--	--	--	--	--	
ST-MW-12	87.20	71.02	16.18	70.71	16.49	71.42	15.78
ST-MW-14	69.73	55.08	14.65	54.99	14.74	55.45	14.28
ST-MW-16	75.78	54.54	21.24	54.71	21.07	54.82	20.96
ST-MW-17	86.53	70.35	16.18	70.17	16.36	70.78	15.75
ST-MW-19	82.50	66.82	15.68	66.89	15.61	66.53	15.97
ST-MW-20	84.53	71.20	13.33	71.07	13.46	71.59	12.94

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	8/30/2005		10/11/2005		11/6/2005	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63			59.28	15.35	60.09	
EPA-MW-21	84.13	67.03	17.10	67.35	16.78	67.14	16.99
EPA-MW-22	82.20	64.52	17.68	64.93	17.27	64.67	17.53
EPA-MW-23	82.83	65.03	17.80	65.43	17.40	65.17	17.66
EPA-MW-27	69.32	55.11	14.21	52.38	16.94	52.27	17.05
ST-MW-02	82.03	64.42	17.61				
ST-MW-06	69.83	46.25	23.58	45.99	23.84	43.69	26.14
ST-MW-09	78.13			64.28	13.85	64.40	13.73
ST-MW-11	75.25		--				--
ST-MW-12	87.20	71.61	15.59	71.68	15.52	71.76	15.44
ST-MW-14	69.73	55.71	14.02	55.71	14.02	57.16	12.57
ST-MW-16	75.78	55.21	20.57	55.78	20.00	54.55	21.23
ST-MW-17	86.53	70.99	15.54	71.09	15.44	71.36	15.17
ST-MW-19	82.50	66.71	15.79	66.90	15.60	66.86	15.64
ST-MW-20	84.53	71.83	12.70	71.78	12.75	74.56	9.97

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	12/19/2005		1/24/2006		2/22/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.19	15.44	59.22	15.41	58.37	16.26
EPA-MW-21	84.13	66.84	17.29	66.55	17.58	65.72	18.41
EPA-MW-22	82.20	64.39	17.81	64.09	18.11	63.38	18.82
EPA-MW-23	82.83	64.89	17.94	64.61	18.22	63.91	18.92
EPA-MW-27	69.32	51.96	17.36	51.72	17.60	51.10	18.22
ST-MW-02	82.03	--	--				
ST-MW-06	69.83	44.43	25.40	44.08	25.75	44.88	24.95
ST-MW-09	78.13	63.96	14.17	63.77	14.36	63.24	14.89
ST-MW-11	75.25	--	--				
ST-MW-12	87.20	71.43	15.77	71.17	16.03	70.58	16.62
ST-MW-14	69.73	55.58	14.15	56.09	13.64	54.86	14.87
ST-MW-16	75.78	54.77	21.01	54.43	21.35	54.17	21.61
ST-MW-17	86.53	70.82	15.71	70.62	15.91	70.03	16.50
ST-MW-19	82.50	66.94	15.56	66.66	15.84	66.46	16.04
ST-MW-20	84.53	71.64	12.89	72.13	12.40	70.81	13.72

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	4/11/2006		5/2/2006	
		DTW (ft BTOC)	Elevation (ft msl)	DTW (ft BTOC)	Elevation (ft msl)
EPA-MW-11D	74.63	59.30	15.33	64.90	9.73
EPA-MW-21	84.13	66.23	17.90	63.84	20.29
EPA-MW-22	82.20	63.89	18.31	63.59	18.61
EPA-MW-23	82.83	64.44	18.39	68.99	13.84
EPA-MW-27	69.32	51.72	17.60	51.28	18.04
ST-MW-02	82.03				
ST-MW-06	69.83	46.54	23.29	44.58	25.25
ST-MW-09	78.13	63.96	14.17	63.50	14.63
ST-MW-11	75.25				
ST-MW-12	87.20	71.35	15.85	73.87	13.33
ST-MW-14	69.73	56.10	13.63	55.71	14.02
ST-MW-16	75.78	54.58	21.20	54.63	21.15
ST-MW-17	86.53	70.76	15.77	70.35	16.18
ST-MW-19	82.50	67.13	15.37	66.69	15.81
ST-MW-20	84.53	72.13	12.40	71.80	12.73

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Well ID	Top of PVC Elevation (ft msl)	5/22/2006	
		DTW (ft BTOC)	Elevation (ft msl)
ST-MW-02	82.03	63.36	18.67
ST-MW-16	75.78	54.52	21.26
EPA-MW-25	73.24	54.03	19.21
EPA-MW-26	78.37	58.64	19.73
ST-MW-15	90.13	72.78	17.35
ST-MW-18	84.4	71.9	12.50
ST-MW-12	87.2	70.4	16.80
ST-MW-17	86.53	69.96	16.57
ST-MW-20	84.53	71.37	13.16
ST-MW-19	N/A	66.3	
ST-MW-09	N/A		
EPA-MW-9A	80.24	65.18	15.06
ST-MW-06	69.83	44.5	25.33
EPA-MW-27	69.32	51.03	18.29
ST-MW-14	69.73	55.35	14.38

Notes:

ft msl - feet mean sea level

ft BTOC - feet below top of casing

-- - Not measured

Appendix I

Indoor Air Quality Analytical Data

Appendix J

Action List Dated May 2006

EarthTech
A tyco International Ltd. Company

MAY 2006 ACTION LIST SUMMARY

PROJECT: Stanton Cleaners **JOB NUMBER:** 70536
LOCATION: Great Neck, NY **DATE:** June 13, 2006
CLIENT: USACE / USEPA

COMPLETED ITEMS	**DATE PERFORMED**
O&M Inspection/ System Monitoring	5/2/2006
Monthly System Sampling	5/2/2006
System Oil and Grease Replaced	5/2/2006
Bi Weekly Air Monitoring	5/4/2006
Change out of Carbon in Indoor Air Filters (R2D2's)	5/4/2006
Bi Weekly Air Monitoring/ O&M Inspection/ System Monitoring	5/17/2006
Quarterly Monitoring Well Sampling	5/23 and 5/24/2006
Bi Weekly Air Monitoring/ O&M Inspection/ System Monitoring	5/31/2006
Calibration of all pH and Conductivity Meters	5/31/2006
Indoor Air Quality Sampling with Summa Canisters	5/31 and 6/1/2006

OUTSTANDING ITEMS /	**RECOMMENDED SOLUTION**
Change out of Vapor Phase Carbon	To be performed June 2006