ENVIRONMENTAL CHEMICAL CORPORATION

1293 Broad Street
Suite 200
Bloomfield, NJ
07003

TEL: (973) 338-7011
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December 18, 2003

Mr. Shewen Bian
US Army Corps of Engineers, Metro East Residency
Fort Hamilton Military Community
408 Pershing Loop
Brooklyn, NY 11252

RE: **Transmittal of November 2003 Monthly O&M Activity Report**
Stanton Cleaners Area Groundwater Contamination Site, Great Neck, New York
USACE LTRA Contract DACW41-03-D-0004, T.O. 004

Dear Mr. Bian:

Environmental Chemical Corporation (ECC) Is transmitting in this letter one hardcopy of the November 2003 Monthly O&M Activity Report for the Stanton Cleaners LTRA site.

Please review the attached report, and let us know if you have any comments, or require additional information.

If you have any questions, please contact me at (973) 338-7011, ext. 121.

Sincerely,
Environmental Chemical Corporation

David Miller
Project Manager

cc: Mr. Damina Duda, US EPA Region II – 2 copies, and softcopy via e-mail
Mr. Gerard Burke, NYSDEC – 1 softcopy via electronic mail and 1 hardcopy via mail courier:
Division of Env. Remediation
625 Broadway - 11th Floor
Albany, New York 12233-7015
gwburke@gw.dec.state.ny.us
(518) 402-9798

Monthly Operations and Monitoring Report
November 2003

Site:
Stanton Cleaners Area Groundwater Contamination Site
Great Neck, New York

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

December 1, 2003

ET Project No. 70536.02.01.01

Monthly Operations and Monitoring Report
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Site:
Stanton Cleaners Area Groundwater Contamination Site
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Prepared for:
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1293 Broad Street, Suite 200
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ET Project No. 70536.02.01.01

Author: *John Huisman*

Title: *Environmental Scientist*

Date: December 1, 2003

Reviewer: _____

Title: _____

Date: December 1, 2003

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1.0 INTRODUCTION

This Monthly Operations and Monitoring Report, November 2003 (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 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 November 1 and November 30, 2003.

2.0 SUMMARY OF ACTIVITIES DURING NOVEMBER 2003

The following list summarizes activities performed and milestone dates under this contract during the reporting period, November 2003:

- November 1 – System remained shutdown from the October groundwater level measuring event.
- November 12 – Influent / effluent treatment system water samples were collected.
- November 13 – System shutdown due to power outage in Great Neck.
- November 22 – Monthly groundwater levels were recorded.
- November 23 – Monthly groundwater levels were recorded.
- November 25 – System shutdown due to high level in the air strpper.

Details of system shutdowns during the month of November 2003 are discussed in section 3.1. Project summary sheets, which include projected work for the following two weeks, are distributed among the project team on a bi-weekly basis; copies of the summaries for November 2003 are provided in Appendix A. Daily Quality Control Reports (DQCRs) are completed for each day of site activities. Copies of these reports are included as Appendix B.

3.0 GROUNDWATER TREATMENT SYSTEM ACTIVITIES

3.1 Operation and Maintenance

The GWTS treated and discharged 2,656,386 gallons during the month of November 2003. The system was operational (recovery well pumps running) for approximately 696 of the 720 hours during the month, for an average operating flow of 63.6 gallons per minute (gpm). The system has treated a total of 51,263,561 gallons since the plant startup in November 2001.

On November 1, the system was still shut down due to the October groundwater level measurement event to be used in the Capture Zone Analysis Plan. Upon completion, the system was re-started.

On November 13, the system shut down due to a power outage in Great Neck. When the power came back on at 9:43 AM, the system automatically sent out an alarm notification that it was down, and was re-started after being down for less than 4 hours.

On November 25 at 3:33 AM, the system shut down due to a high level in the air stripper. Again the system automatically sent out an alarm notification and was re-started after being down for less than 8 hours. The discharge flow had decreased to a point where the water was coming into the air stripper faster than it was being pumped out. The influent flow control valve from the two recovery well pumps in the triangle was closed to 50%, which reduced the influent flow from 60-65 GPM to approximately 55-60 GPM. The discharge flow from the air stripper is approximately 60-65 GPM.

There are currently two recovery wells pumping water into the system. (EPA-EXT-02 and MW-24) Both wells are located in the triangle, the corner of New Cuttermill Road and Mirrielees Road. The two wells are manifolded 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. The decision to have two wells pumping from the triangle into the system was made by the USEPA.

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 November 5, 12, and 22, 2003 are provided in Appendix D. 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 John Huisman). If they require guidance or notes any serious conditions, the inspector notifies the task manager (Tom Williams). The checklists are completed on site and sent to the task manager 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 November 2003 operational data is included in Appendix E. 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 E 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.

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 November 12, 2003. The samples were shipped to the EPA Region II CLP lab located in Edison, New Jersey for analysis of TCL volatile organic compounds. The Chain-of-custody forms are included in Appendix F. The FedEx airbills are included in Appendix G. A copy of the full sampling trip report is included in Appendix M. Laboratory analytical results for the GWTS sampling event during this reporting period will be forwarded to ECC under separate cover as an addendum to this report.

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 E.

The next GWTS influent / effluent sampling event is scheduled for December 10, 2003.

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 - discharge (post-treatment).

Bi-weekly air monitoring activities were conducted on November 5 and 22, 2003. The bi-weekly air monitoring logs are included in Appendix I. Estimated PCE removal rates for the SVE system from September 2003 through November 2003 are presented in Table 1. A graph showing the average PCE concentration trend from September 2003 through November 2003 is presented in Figures 2. The next bi-weekly air monitoring event is scheduled for December 4, 2003.

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 by the USPEA, USACE, and ECC once the site Capture Zone Analysis Plan is completed.

The first quarterly groundwater sampling event under this contract was conducted by the USEPA Division of Environmental Assessment (DESA) sampling team in September 2003. The next quarterly groundwater sampling event will be performed by Earth Tech personnel and is scheduled for January 2004.

The Chain-of-custody forms and laboratory analytical results for the first quarterly sampling event will be forwarded to ECC under separate cover as an addendum to this report.

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 from 15 monitoring wells on November 22 and 23, 2003. The location and number of monitoring wells was determined by the USEPA based on the site Capture zone Analysis Plan. Groundwater level measurements for November 2003 and historical groundwater level measurements are provided in Appendix K

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 designated EPA, CLP lab for analysis. The location and number of indoor air quality samples to be collected as well as analytical parameters will be determined by the USEPA, USACE and ECC.

The first quarterly indoor air quality samples were collected in September 2003 by the USEPA RST. Analytical results from this sampling event were deemed invalid by the USEPA and the indoor air quality samples were re-sampled on October 8, 2003.

The next quarterly indoor air quality sampling event will be performed by Earth Tech personnel and is scheduled for January 2004.

The Chain-of-custody forms and laboratory analytical results for the September 2003 and October 2003 indoor air quality sampling events will be forwarded to ECC under separate cover as addendums to the applicable monthly report.

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;
- Collect groundwater samples from monitoring wells as directed by USACE/ECC/USEPA;
- Collect indoor air quality samples as directed by USACE/ECC/USEPA.

8.0 PROBLEM AREAS AND RECOMMENDED SOLUTIONS (OUTSTANDING ISSUES)

An Action List of ongoing and completed items is provided in Appendix L to track work tasks that have been targeted as issues to be addressed. No outstanding issues were reported during this report period.

Tables

TABE 1
ESTIMATED PCE RECOVERY RATES
STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
250 CFM SVE SYSTEM
September 2003 - November 2003

Dte	#of Days	Flow Rate (fm)	Avg (fm)	VOC Contration (ppm)	Averge (ppm)	Dilge Rate (bs)	Total Dilge (bs
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
						Toth	638

Notes:

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

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

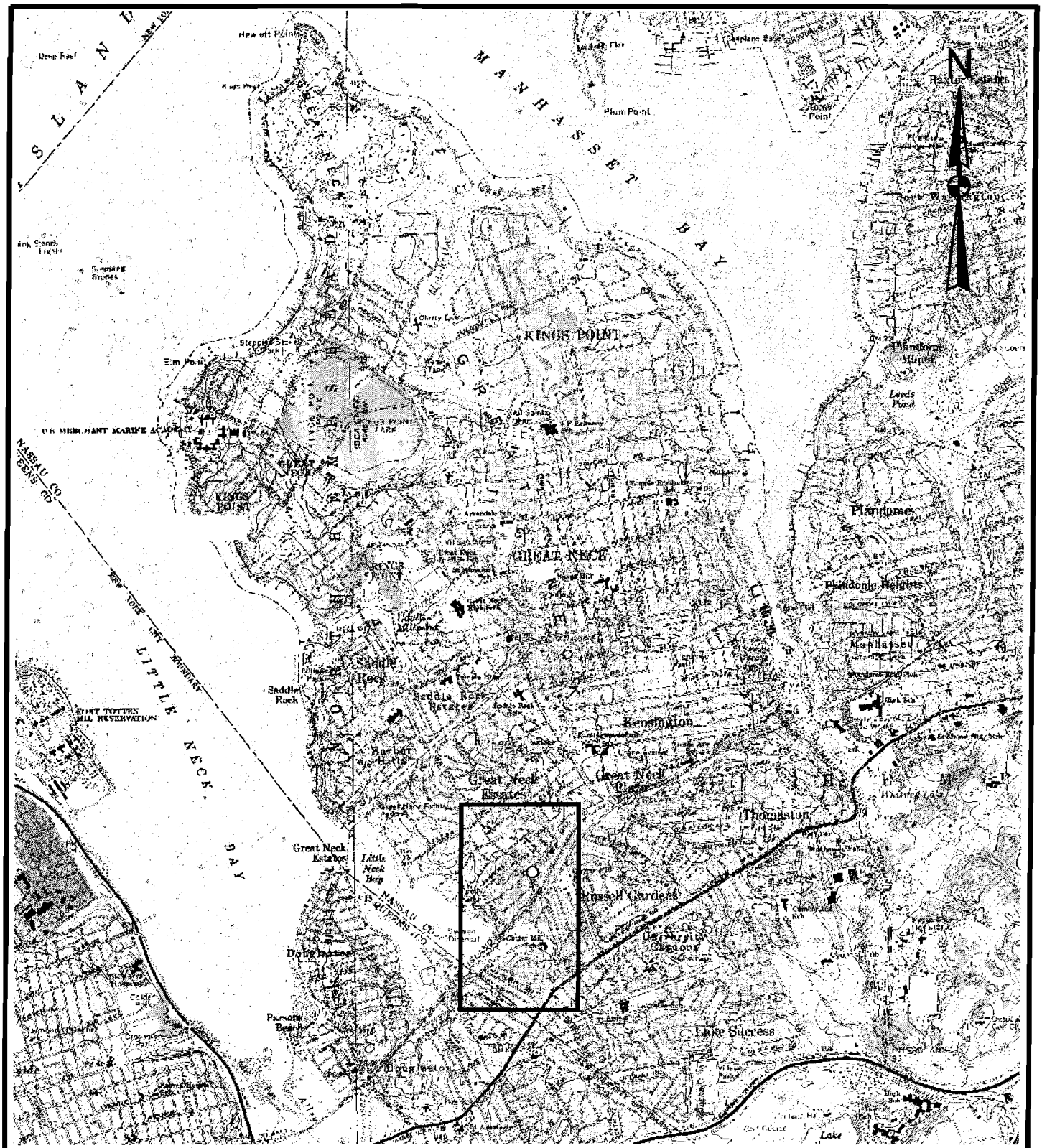
$$M_{air} = Q_{air} \times C_{air} \times \frac{0.0283\ m3}{ft.3} \times \frac{1440\ min.}{day} \times \frac{2.2\ lbs.}{1000000\ mg}$$

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

Notes:
M_{air} = mass loading, removal rate in air (lbs/day)
Q_{air} = flow rate in air (cfm)
C_{air} = contaminant concentration (mg/m3)
MW_x = molecular weight in grams/mole, for PCE is 166

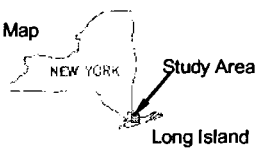
Note: The conversion factor (1 mole air)/(24.1 L) varies with both temperature and pressure. At a pressure of 1 atmosphere and a temperature of 32 degrees Farenheit (0 degrees Celcius), the conversion is (1 mole air)/(22.4 L).

Figures



USGS 7.5 Minute Topographic Quadrangle:
Sea Cliff, N.Y., 1968, Photorevised 1979

Location Map



Legend

- Stanton Cleaners Study Area
- Stanton Cleaners Site

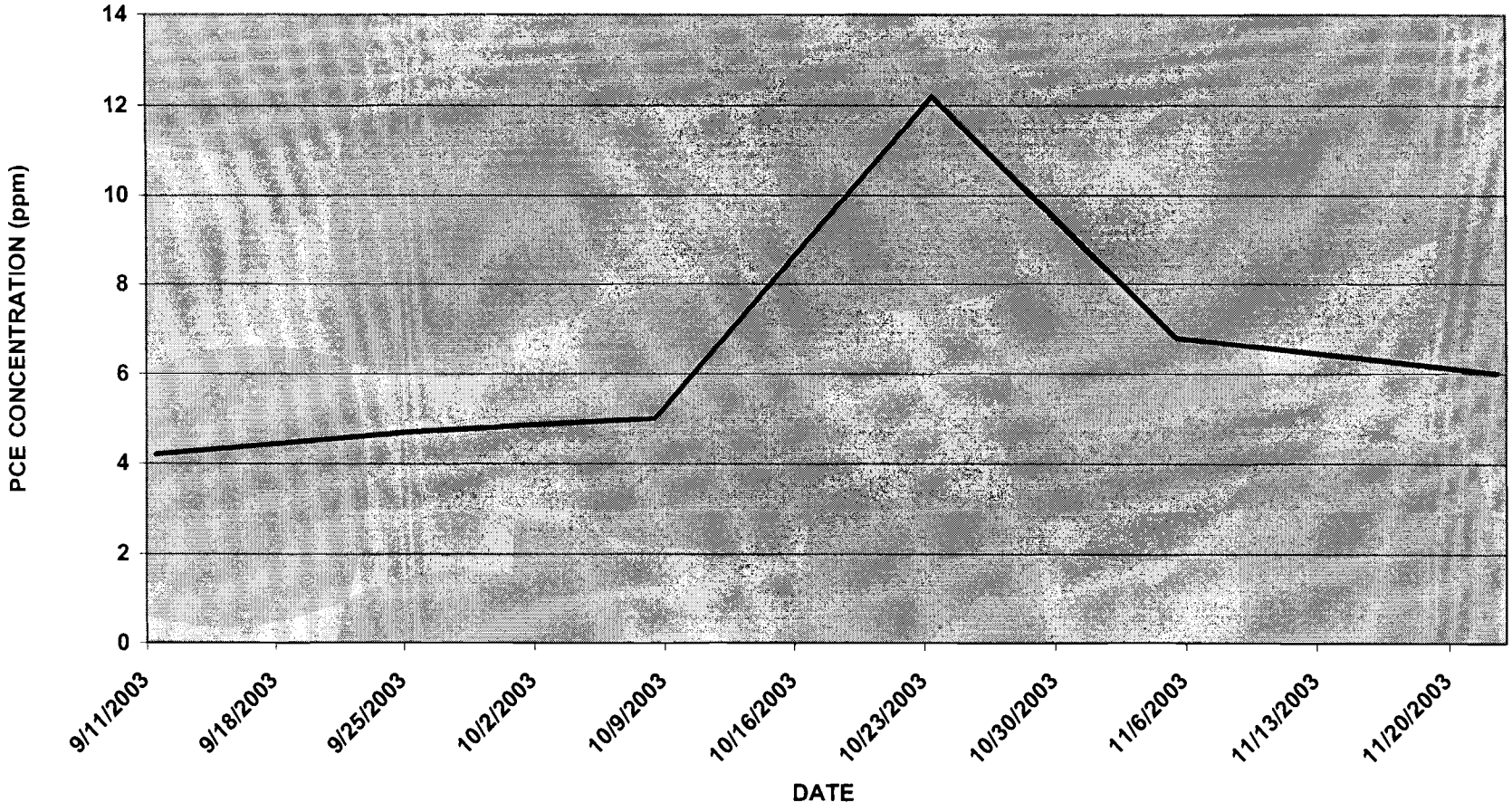
EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

Figure 1
Site Location Map
Stanton Cleaners Area
Groundwater Contamination Site

Stanton Cleaners Area
Groundwater Contamination Site
Great Neck, Nassau County, New York

Figure 2
STANTON CLEANERS AREA GOUNDWATER CONTAMINATION SITE
AVERAGE PCE CONCENTRATIONS (ppm)
250 CFM FINAL SVE SYSTEM
September 2003 - November 2003



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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: 11/5/03 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather				**Overcast**			
Temp.				**56°F**			
Wind				**none**			
Humidity				**High**			

Earth Tech Personnel On-Site: **John Huisman – Randy Bryant**

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

Contract Materials and Equipment on site: **Rental Mitsubishi Galant, Ford F-150, Multi-RAE Multi Gas Monitor, TSI VelociCalc Meter, Gil Air 5 - Gillian Tri-Mode Air Sampler, Isobutylene and 4 Gas Calibration Gas.**

Work Performed (include sampling;list by NAS number if applicable):
Calibrate monitoring equipment and perform bi-weekly Soil Vapor Extraction and Pump and Treat System Air Monitoirng. Record total flow and flow rate from the PLC unit. Conduct weekly O&M inspection. Complete Monthly Operations and Monitoring Report for October 2003.

Quality Control Activities (including field calibrations): **Calibrate Multi RAE Plus Air Monitor**

Multi RAE Plus Multi Gas Monitor	**Isobutylene Cal Gas**	**Calibration Gas Mix**
SN: 02354	**Lot # 75611**	**Lot # 75711**
	100 ppm	**H_2S: 25 ppm O_2: 20.9%**
		CO: 50 ppm LEL: 50%

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

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: 11/5/03 | Earth Tech Project No.: 70536

actual results): **N/A**

Has a phase hazard analysis been perform ed? **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 a nd specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

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

Special Notes: **Gil Air 5 Gillian Tri-mode Air Sampler – SN: 15046**
TSI – VelociCalc Meter – SN: 02090100

Shipped rental equipment back to Pine Environmental via FedEx.
Called Pine Environmental before equipment was shipped to take it "off rent".

Tomorrow's Expectations:

Influent / Effluent treatment system sampling is scheduled for Tuesday November 12.
Weekly O&M inspection will also be conducted the week ending November 14.
Monthly groundwater level measurement will be recorded the week ending November 21.
Weekly O&M inspection will also be conducted the week ending November 21.

By: John Huisman Title: Environmental Scientist

Signature: John Huisman (Quality Control Representative/Manager)

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

Signature: John Huisman (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: 11/12/03 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather				**Overcast**			
Temp.				**56°F**			
Wind				**Mild**			
Humidity				**High**			

Earth Tech Personnel On-Site: **John Huisman, Jimmy Simmonds**

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

Contract Materials and Eqipm ent on site: **Ford F-250, Horiba U-22 Water Quality Meter, Sample bottles, and cooler.**

Work Performed (include sampling;list by NAS num ber if applicable):
Calibrate Horiba U-22 water quality meter and perform monthly Influent / Effluent water sampling of the Pump & Treat System. Measure and record water quality parameters from the influent and effluent ports once readings stabilize. Record total flow and flow rate from the PLC unit. Monthly O&M Inspection.

Qality Control Activities (including f ield calibrations): **Calibrate Horiba U-22 Water Quality Meter. Collect MS/MSD (QA/QC sample) from SC-04 (Effluent). Collect Duplicate sample of SC-01 (influent) labeled SC-60. Included Trip Blank in Sample Cooler. Include Temp Blank.**
Horiba U-22 Auto Cal Solution: PH: 4.0 Conductivuty: 4.49mS/cm Turbidity: 0.0 NTU

Health and Safety Levels and Activities: **Level D**
Problems Encountered/Correction Action Taken: **N/A**

Eplain Developm ents Leading to Change in SOW or Finding of Fact: **N/A**
Preparatory Inspection (list all inspections by subject a nd specification location;attach m inutes of meeting and list of all attendees): **N/A**

Have all reqired subm ittals and samples of construction been approved? **Yes**

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

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

Test required and inspection techniqes to be executed to prove contract compliance (include both epected 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: 11/12/03	Earth Tech Project No.: 70536

Has a phase hazard analysis been perform ed? **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 a nd specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

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

Special Notes: **Fedex airbill numbers for returned rental equipment:842185307871**

Called Pine Environmental before equipment was shipped to take it "off rent"

Influent / Effluent water samples collected were shipped to CLP U.S. EPA Region II Lab.

Fedex airbill number for shipped samples: 842185307790

Case number: N/A

Traffic Report Number: 2-462971652-111203-0009

Trip Report Emailed to: Dave Miller (ECC), Robert Toth (EPA), Adly Michael, Jennifer Ferranda (EPA)

and John Birri (EPA Lab). Fax copy of chain also sent Jennifer Ferranda and Robert Toth.

Horiba U-22 Water Quality Meter Probe / Horiba U-22 Water Quality Data Logger / Flow Through Cell

MFN: N/A **MFN: 927258** **MFN: 202020**

Tomorrow's Expectations:

Weekly Operations and Maintenance Inspection (Week Ending 11/21/03)

Bi-weekly system air monitoring (Week Ending 11/21/03)

Monthly Groundwater Level Measurements - (Week Ending 11/21/03) *–Pending Completion of Capture Zone Analysis Plan.*

By: John Huisman Title: Environmental Scientist

Signature: John Huisman (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: John Huisman (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: 11/22/03 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather							**Sunny**
Temp.							**58°F**
Wind							**Mild**
Humidity							**Low**

Earth Tech Personnel On-Site: **John Huisman, Jimmy Simmonds**

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

Contract Materials and Equipm ent on site: **Ford F-250, Solinst Water Level Meter, Multi-RAE Multi Gas Monitor, TSI VelociCalc Meter, Gil Air 5 - Gillian Tri-Mode Air Sampler, Isobutylene and 4 Gas Calibration Gas.**

Work Performed (include sampling;list by NAS num ber if applicable):
Calibrate monitoring equipment and perform bi-weekly Soil Vapor Extraction and Pump and Treat System Air Monitoirng. Record total flow and flow rate from the PLC unit. Conduct weekly O&M inspection. Start monthly groundwater level measurements. Record serial numbers of recently purchased equipment.

Quality Control Activities (including f ield calibrations): **Calibrate Multi RAE Plus Air Monitor. decontaminate Solinst water level meter before each use with DI water and Alconox solution and DI water rinse.**

Multi RAE Plus Multi Gas Monitor	**Isobutylene Cal Gas**	**Calibration Gas Mix**
SN: 095-511313	**Lot # 76124**	**Lot # 76270**
	100 ppm	**H_2S: 25 ppm 0_2: 20.9%**
		CO: 50 ppm LEL: 50%

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

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

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

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

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

Do the materials and equipm ent to be used conform to the submittals? **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: 11/22/03	Earth Tech Project No.: 70536

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**

Has a phase hazard analysis been perform ed? **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 a nd specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

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

Special Notes: **Contacted Greg Graziano of the Water Authority of Great Neck to record times and flow rates of any of the Water authority's supply wells that may have been pumping during the time water level measurements were recorded.**

Multi Rae Plus 4 Gas Monitor: Serial # 095-511313

Solinst Water Level Meter: Serial # 34407

TSI VelociCal Plus: Serial # 03100273

Gillian Air Pump: Serial # 20031018020

Horiba Water Quality Probe: Manufacturer # 3013027

Horiba Water Quality Data Logger: Manufacturer # 302021

Horriba Flow-Through Cell: Manufacturer # 207

Tomorrow's Expectations:

Complete Monthly Groundwater Level Measurements

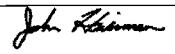
Weekly Operations and Maintenance Inspection (Week Ending 12/5/03)

Bi-weekly system air monitoring (Week Ending 12/5/03)

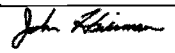
Monthly Influent / Effluent System Sampling - (Week Ending 12/12/03)

Monthly Groundwater Level Measurements - (Week Ending 12/19/03)

By: John Huisman Title: Environmental Scientist

Signature:  (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: 11/23/03 | Earth Tech Project No.: 70536

Day	S	M	T	W	T	F	S
Weather	**Overcast**						
Temp.	**54°F**						
Wind	**Mild**						
Humidity	**Low**						

Earth Tech Personnel On-Site: **John Huisman, Jimmy Simmonds**

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

Contract Materials and Eqipm ent on site: **Ford F-250, Solinst Water Level Meter.**

Work Performed (include sampling;list by NAS num ber if applicable):
Record total flow and flow rate from the PLC unit. Complete monthly groundwater level measurements

Qality Control Activities (including f ield calibrations):
Decontaminate Solinst water level meter before each use with DI water and Alconox solution and DI water rinse.

Solinst Water Level Meter: Serial # 34407

Health and Safety Levels and Activities: **Level D**
Problems Encountered/Correction Action Taken: **N/A**

Explain Developm ents Leading to Change in SOW or Finding of Fact: **N/A**
Preparatory Inspection (list all inspections by subject a nd specification location;attach m inutes of meeting and list of all attendees): **N/A**

Have all reqired subm ittals and samples of construction been approved? **Yes**

Do the materials and eqipm ent 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: 11/23/03	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 perform ed? **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 a nd specification location. Comment and/or deficiencies noted and corrective actions taken.

Explained in work performed section.

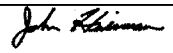
Follow-up Inspection: List all inspections by subject a nd specification location. Comment and/or deficiencies noted and corrective actions taken.

Special Notes: **Contacted Greg Graziano of the Water Authority of Great Neck to record times and flow rates of any of the Water authority's supply wells that may have been pumping during the time water level measurements were recorded.**

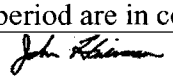
Tomorrow's Expectations:

Weekly Operations and Maintenance Inspection (Week Ending 12/5/03)
Bi-weekly system air monitoring (Week Ending 12/5/03)
Monthly Influent / Effluent System Sampling - (Week Ending 12/12/03)
Monthly Groundwater Level Measurements - (Week Ending 12/19/03)

By: John Huisman Title: Environmental Scientist

Signature:  (Quality Control Representative/Manager)

The above report is complete and correct. All materials and equipm ent 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 C

Meeting Minutes

Not applicable for this month.

Appendix D

Groundwater Treatment System Operation & Maintenance Checklists

11/5/03

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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

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

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

D. Is there any evidence of water in any of these floor sumps? YES ✓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 _____61_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA_____ %
7. Recovery Well pH _____6.6_____ pH
8. Recovery Well conductivity _____50_____ cond
9. Air Stripper pH _____7.6_____ pH
10. Air Stripper temperature _____154*_____ deg.
11. Air Stripper air flow _____8402*_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2551_____ CFM
14. Discharge conductivity _____51_____ cond
15. Discharge pH _____7.9_____ pH
16. Discharge flow _____65_____ GPM
17. Discharge total gallons _____4898278_____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____2004*_____ CFM

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

1. Recovery Well EPA-EXT-02 total flow _____34218_____ Gal

2. Recovery Well IW-01 total flow _____32121_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.62_____ pH

6. Recovery Well conductivity _____0.53_____ cond

7. Air Stripper pH _____7.68_____ pH

8. Air Stripper temperature _____NA_____ deg.

9. Air Stripper Pump water flow _____65_____ GPM

10. Air Stripper Pump pressure _____52_____ PSI

11. Discharge conductivity _____0.56_____ cond

12. Discharge pH _____7.89_____ pH

13. Discharge total gallons _____90413_____ Gal

14. SVE inlet vacuum (digital readout) _____2.3_____ "Hg

15. SVE inlet vacuum _____-4_____ "Hg

16. SVE post knockout vacuum _____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.

11/12/03

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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

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

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

D. Is there any evidence of water in any of these floor sumps? YES ✓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 _____61_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____100_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA_____ %
7. Recovery Well pH _____6.6_____ pH
8. Recovery Well conductivity _____49_____ cond
9. Air Stripper pH _____7.7_____ pH
10. Air Stripper temperature _____154*_____ deg.
11. Air Stripper air flow _____8402*_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2546_____ CFM
14. Discharge conductivity _____56_____ cond
15. Discharge pH _____7.9_____ pH
16. Discharge flow _____63_____ GPM
17. Discharge total gallons _____49631042_____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____2004*_____ CFM

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

1. Recovery Well EPA-EXT-02 total flow _____40373_____ Gal

2. Recovery Well IW-01 total flow _____32121_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.64_____ pH

6. Recovery Well conductivity _____0.55_____ cond

7. Air Stripper pH _____7.70_____ pH

8. Air Stripper temperature _____NA_____ deg.

9. Air Stripper Pump water flow _____65_____ GPM

10. Air Stripper Pump pressure _____55_____ PSI

11. Discharge conductivity _____0.56_____ cond

12. Discharge pH _____7.91_____ pH

13. Discharge total gallons _____96975_____ Gal

14. SVE inlet vacuum (digital readout) _____2.3_____ "Hg

15. SVE inlet vacuum _____-4_____ "Hg

16. SVE post knockout vacuum _____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.

11/22/03

STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE OPERATION AND MAINTENANCE

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

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

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

D. Is there any evidence of water in any of these floor sumps? YES ✓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 _____61_____ GPM
2. Recovery Well EPA-EXT-02 valve open _____65_____ %
3. Recovery Well IW-01 flow _____NA_____ GPM
4. Recovery Well IW-01 valve open _____NA_____ %
5. Recovery Well EPA-EXT-03 flow _____NA_____ GPM
6. Recovery Well EPA-EXT-03 valve open _____NA_____ %
7. Recovery Well pH _____6.6_____ pH
8. Recovery Well conductivity _____53_____ cond
9. Air Stripper pH _____7.7_____ pH
10. Air Stripper temperature _____152*_____ deg.
11. Air Stripper air flow _____8402*_____ CFM
12. Pre-vapor carbon pressure _____0_____ "wc
13. Post carbon air flow _____2546_____ CFM
14. Discharge conductivity _____56_____ cond
15. Discharge pH _____7.9_____ pH
16. Discharge flow _____63_____ GPM
17. Discharge total gallons _____50528304_____ Gal

18. SVE inlet vacuum _____4_____ "Hg

19. SVE air flow _____2004*_____ CFM

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

1. Recovery Well EPA-EXT-02 total flow _____48000_____ Gal

2. Recovery Well 1W-01 total flow _____32121_____ Gal

3. Recovery Well EPA-EXT-03 total flow _____0_____ Gal

5. Recovery Well pH _____6.63_____ pH

6. Recovery Well conductivity _____0.55_____ cond

7. Air Stripper pH _____7.76_____ pH

8. Air Stripper temperature _____NA_____ deg.

9. Air Stripper Pump water flow _____65_____ GPM

10. Air Stripper Pump pressure _____54_____ PSI

11. Discharge conductivity _____0.55_____ cond

12. Discharge pH _____7.95_____ pH

13. Discharge total gallons _____06012_____ Gal

14. SVE inlet vacuum (digital readout) _____0.24_____ "Hg

15. SVE inlet vacuum _____-4_____ "Hg

16. SVE post knockout vacuum _____2.5_____ "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.

Appendix E

Groundwater Treatment System Downloaded Operational Data

Stanton Cleaners Groundwater Contamination Site - November 2003 - Site Operation Data

	Recovery Well 1 Flow (GPM)	Recovery Well 2 Flow (GPM)	Recovery Well 3 Flow (GPM)	Discharge Flow (GPM)	Discharge Flow (CFM)	Influent water Temperature (deg F)	Influent conductivity	Effluent conductivity	Influent water pH	Air Stripper water pH	Discharge water pH	Total gallons discharged
11/1/2003 0:00	0	0	0	0	18	157	60	61	6.6	7.6	7.7	48607175.3
11/1/2003 4:00	0	0	0	0	18	158	59	62	6.7	7.6	7.6	48607175.3
11/1/2003 8:00	0	0	0	0	18	158	59	61	6.7	7.6	7.6	48607175.3
11/1/2003 12:00	0	0	62	66	2390	155	47	57	6.6	7.7	7.8	48617099.4
11/1/2003 16:00	0	0	62	66	2344	155	47	57	6.6	7.7	7.9	48632675.7
11/1/2003 20:00	0	0	62	64	2742	155	36	57	6.6	7.6	7.9	48648237.9
11/2/2003 0:00	0	0	64	66	2539	155	46	57	6.6	7.5	7.9	48663797.2
11/2/2003 4:00	0	0	61	67	2541	154	41	57	6.6	7.6	7.9	48679326.9
11/2/2003 8:00	0	0	61	64	2615	154	42	56	6.6	7.7	7.9	48694858.9
11/2/2003 12:00	0	0	60	68	2541	154	42	57	6.6	7.7	7.9	48710394.3
11/2/2003 16:00	0	0	60	0	2546	154	41	58	6.6	7.7	7.9	48725847.8
11/2/2003 20:00	0	0	62	64	2541	154	47	57	6.6	7.7	7.9	48741479
11/3/2003 0:00	0	0	63	65	2594	154	40	57	6.6	7.7	7.9	48757028.8
11/3/2003 4:00	0	0	62	64	2452	154	47	57	6.6	7.6	7.9	48772584
11/3/2003 8:00	0	0	61	65	2252	155	33	57	6.6	7.7	7.9	48788127.3
11/3/2003 12:00	0	0	62	65	2597	155	49	57	6.6	7.6	7.8	48803689.4
11/3/2003 16:00	0	0	63	65	2601	156	43	58	6.6	7.7	7.9	48819243.4
11/3/2003 20:00	0	0	60	65	2548	155	46	57	6.6	7.6	7.9	48834760.2
11/4/2003 0:00	0	0	62	64	2548	154	41	57	6.6	7.7	7.9	48850493.7
11/4/2003 4:00	0	0	62	67	2599	154	40	57	6.6	7.6	7.9	48865981.3
11/4/2003 8:00	0	0	61	67	2597	154	45	57	6.6	7.6	7.8	48881447.3
11/4/2003 12:00	0	0	62	64	2599	154	40	57	6.6	7.7	7.9	48896913.3
11/4/2003 16:00	0	0	62	64	2440	153	42	56	6.6	7.7	7.9	48912610.5
11/4/2003 20:00	0	0	62	64	2541	154	40	56	6.6	7.7	7.9	48928068.2
11/5/2003 0:00	0	0	62	65	2445	154	42	57	6.6	7.7	7.9	48943534.6
11/5/2003 4:00	0	0	63	68	2684	153	39	56	6.6	7.7	7.9	48959247.4
11/5/2003 8:00	0	0	60	65	2769	154	40	56	6.6	7.7	7.9	48974720.8
11/5/2003 12:00	0	0	59	66	2548	154	52	57	6.6	7.6	7.9	48990298.4
11/5/2003 16:00	0	0	61	64	2548	154	45	56	6.6	7.6	7.8	49005954.2
11/5/2003 20:00	0	0	62	65	2714	154	47	57	6.6	7.6	7.8	49021414.6
11/6/2003 0:00	0	0	64	65	2390	154	43	57	6.6	7.5	7.8	49036882.4
11/6/2003 4:00	0	0	61	67	2394	154	49	57	6.6	7.5	7.8	49052613.7
11/6/2003 8:00	0	0	62	64	2541	154	36	56	6.6	7.6	7.7	49068320.6
11/6/2003 12:00	0	0	61	64	2442	153	43	56	6.6	7.7	7.8	49083837.7
11/6/2003 16:00	0	0	60	65	2447	154	40	56	6.6	7.6	7.8	49099322.5
11/6/2003 20:00	0	0	64	64	2599	153	38	56	6.6	7.6	7.8	49115029.7
11/7/2003 0:00	0	0	63	66	2541	153	40	56	6.6	7.6	7.8	49130736
11/7/2003 4:00	0	0	62	63	2689	153	38	56	6.6	7.6	7.8	49146173.2
11/7/2003 8:00	0	0	62	66	2599	153	51	55	6.6	7.6	7.8	49161802.4
11/7/2003 12:00	0	0	60	64	2686	153	40	55	6.6	7.7	7.8	49177167.1
11/7/2003 16:00	0	0	60	67	2541	153	44	55	6.6	7.6	7.8	49192794.9
11/7/2003 20:00	0	0	60	65	2541	153	40	56	6.6	7.6	7.8	49208389.6
11/8/2003 0:00	0	0	60	65	2541	152	39	55	6.6	7.7	7.8	49223786.1
11/8/2003 4:00	0	0	61	64	2684	152	42	55	6.6	7.7	7.9	49239385.3
11/8/2003 8:00	0	0	61	66	2574	151	42	55	6.6	7.7	7.9	49254972.3
11/8/2003 12:00	0	0	62	63	2926	151	36	55	6.6	7.7	7.9	49270345.1
11/8/2003 16:00	0	0	62	65	2861	150	42	54	6.6	7.7	7.9	49285909
11/8/2003 20:00	0	0	63	64	2861	150	27	55	6.6	7.7	7.9	49301238.4
11/9/2003 0:00	0	0	60	65	2930	150	39	54	6.6	7.7	7.8	49316842.7
11/9/2003 4:00	0	0	60	65	2767	150	38	55	6.6	7.6	7.8	49332441.8
11/9/2003 8:00	0	0	62	63	2859	150	29	55	6.6	7.6	7.8	49347801.4
11/9/2003 12:00	0	0	59	65	2769	150	38	55	6.6	7.7	7.9	49363382.6
11/9/2003 16:00	0	0	61	64	2769	151	31	54	6.6	7.7	7.9	49378955.4
11/9/2003 20:00	0	0	62	68	2903	150	42	54	6.6	7.7	7.9	49394305
11/10/2003 0:00	0	0	62	63	2859	150	42	54	6.6	7.7	7.8	49409887
11/10/2003 4:00	0	0	61	65	2978	150	36	54	6.6	7.7	7.8	49425468
11/10/2003 8:00	0	0	62	64	2859	150	21	54	6.6	7.6	7.8	49441040.9
11/10/2003 12:00	0	0	63	63	2541	151	42	55	6.6	7.6	7.8	49456381.3
11/10/2003 16:00	0	0	62	63	2689	151	32	55	6.6	7.7	7.9	49471918.7
11/10/2003 20:00	0	0	61	68	2735	151	38	55	6.6	7.6	7.8	49487433.2
11/11/2003 0:00	0	0	60	64	2686	150	39	54	6.6	7.6	7.8	49502935
11/11/2003 4:00	0	0	60	66	2735	150	42	54	6.6	7.6	7.8	49518426.1
11/11/2003 8:00	0	0	62	65	2735	151	25	55	6.6	7.6	7.8	49533724.5
11/11/2003 12:00	0	0	63	65	2769	152	54	56	6.6	7.7	7.8	49549211.8
11/11/2003 16:00	0	0	60	63	2597	153	50	56	6.6	7.7	7.9	49564484
11/11/2003 20:00	0	0	60	63	2449	153	47	56	6.6	7.7	7.9	49579959.9
11/12/2003 0:00	0	0	62	64	2541	153	52	56	6.6	7.7	7.9	49595425.8

11/12/2003 4:00	0	0	64	68	2399	153	49	56	6.6	7.7	7.9	49610881.6
11/12/2003 8:00	0	0	61	67	2689	153	50	56	6.6	7.7	7.9	49626335.2
11/12/2003 12:00	0	0	60	63	2548	154	51	57	6.6	7.6	7.9	49641744.3
11/12/2003 16:00	0	0	61	64	2739	154	49	56	6.6	7.6	7.9	49657160
11/12/2003 20:00	0	0	61	66	2493	153	47	57	6.6	7.7	7.9	49672568.6
11/13/2003 0:00	0	0	61	62	2689	154	46	57	6.6	7.7	7.9	49687980.5
11/13/2003 4:00	0	0	60	68	2689	154	49	57	6.6	7.7	7.9	49700659.4
11/13/2003 8:00	0	0	0	0	20	151	49	56	6.6	7.7	7.9	49715556.4
11/13/2003 12:00	0	0	59	63	2553	151	51	55	6.6	7.7	7.6	49723857.6
11/13/2003 16:00	0	0	59	68	2599	151	52	56	6.6	7.7	7.6	49738615.7
11/13/2003 20:00	0	0	61	62	2689	151	46	55	6.6	7.7	7.6	49753608.3
11/14/2003 0:00	0	0	59	65	2732	150	50	54	6.6	7.7	7.6	49768331.8
11/14/2003 4:00	0	0	60	63	2599	150	49	54	6.6	7.7	7.7	49783313.4
11/14/2003 8:00	0	0	61	63	2546	150	50	54	6.6	7.7	7.7	49798077.3
11/14/2003 12:00	0	0	57	65	2730	150	54	55	6.6	7.7	7.7	49812844
11/14/2003 16:00	0	0	58	62	2442	151	50	55	6.6	7.7	7.8	49827840.1
11/14/2003 20:00	0	0	58	65	2541	151	51	55	6.6	7.7	7.8	49842624.6
11/15/2003 0:00	0	0	57	66	2905	151	52	55	6.6	7.7	7.8	49857422.1
11/15/2003 4:00	0	0	59	67	2689	151	51	55	6.6	7.7	7.8	49870481.2
11/15/2003 8:00	0	0	59	65	2594	150	52	54	6.6	7.7	7.8	49885263.3
11/15/2003 12:00	0	0	58	0	2760	151	50	55	6.6	7.7	7.8	49900097.7
11/15/2003 16:00	0	0	61	62	2597	151	53	56	6.6	7.7	7.8	49914978.5
11/15/2003 20:00	0	0	57	65	2771	151	52	55	6.6	7.7	7.8	49929704.7
11/16/2003 0:00	0	0	59	68	2689	151	49	55	6.6	7.7	7.8	49944436.3
11/16/2003 4:00	0	0	57	0	2769	150	51	55	6.6	7.7	7.8	49959250.7
11/16/2003 8:00	0	0	58	64	2732	151	52	55	6.6	7.7	7.8	49974156.5
11/16/2003 12:00	0	0	60	65	2735	152	51	56	6.6	7.6	7.8	49988894
11/16/2003 16:00	0	0	58	67	2689	152	52	56	6.6	7.7	7.8	50003651.8
11/16/2003 20:00	0	0	60	0	2541	152	45	56	6.6	7.7	7.9	50018571.2
11/17/2003 0:00	0	0	60	64	2737	152	50	56	6.6	7.6	7.8	50033384.3
11/17/2003 4:00	0	0	59	65	2546	152	55	56	6.6	7.7	7.8	50048163.9
11/17/2003 8:00	0	0	60	66	2689	152	52	56	6.6	7.7	7.8	50062923.9
11/17/2003 12:00	0	0	59	65	2767	153	54	56	6.6	7.7	7.9	50077692
11/17/2003 16:00	0	0	60	65	2537	153	49	56	6.6	7.7	7.9	50092477.6
11/17/2003 20:00	0	0	60	64	2737	152	52	56	6.6	7.7	7.9	50107232.5
11/18/2003 0:00	0	0	58	0	2861	152	53	56	6.6	7.6	7.9	50122109.7
11/18/2003 4:00	0	0	60	63	2771	152	54	56	6.6	7.6	7.9	50136965.6
11/18/2003 8:00	0	0	60	62	2599	152	53	56	6.6	7.7	7.9	50151731.7
11/18/2003 12:00	0	0	63	64	2739	152	50	56	6.6	7.7	7.9	50166730.1
11/18/2003 16:00	0	0	61	64	2599	153	44	56	6.6	7.7	7.9	50182013.8
11/18/2003 20:00	0	0	61	63	2863	153	43	56	6.6	7.7	7.9	50197293.9
11/19/2003 0:00	0	0	61	63	2394	153	53	57	6.6	7.7	7.9	50212805.1
11/19/2003 4:00	0	0	60	67	2541	154	54	57	6.6	7.8	8	50228087.4
11/19/2003 8:00	0	0	60	67	2541	154	52	58	6.6	7.7	8	50243363.9
11/19/2003 12:00	0	0	61	65	2445	155	52	58	6.6	7.8	8	50259000.5
11/19/2003 16:00	0	0	64	63	2546	155	48	57	6.6	7.8	8	50274266.7
11/19/2003 20:00	0	0	60	66	2541	155	51	58	6.6	7.8	8	50289518.2
11/20/2003 0:00	0	0	63	65	2548	154	53	57	6.6	7.7	8	50305011.9
11/20/2003 4:00	0	0	59	63	2546	153	54	56	6.6	7.7	7.9	50320253.6
11/20/2003 8:00	0	0	62	65	2601	152	46	56	6.6	7.7	7.9	50335472.2
11/20/2003 12:00	0	0	60	62	2737	152	52	56	6.6	7.7	7.9	50350902.5
11/20/2003 16:00	0	0	62	64	2769	152	50	56	6.6	7.7	7.9	50366090.3
11/20/2003 20:00	0	0	59	64	2541	151	47	55	6.6	7.7	7.9	50381498.7
11/21/2003 0:00	0	0	60	66	2737	151	49	55	6.6	7.7	7.9	50396667.8
11/21/2003 4:00	0	0	59	63	2767	151	52	55	6.6	7.7	7.9	50411821.1
11/21/2003 8:00	0	0	60	64	2541	152	52	56	6.6	7.7	7.9	50427190.8
11/21/2003 12:00	0	0	59	65	2541	153	52	57	6.6	7.7	7.9	50442341.3
11/21/2003 16:00	0	0	60	62	2548	153	55	57	6.6	7.7	7.9	50457728.1
11/21/2003 20:00	0	0	61	62	2541	152	49	56	6.6	7.6	7.9	50472904.1
11/22/2003 0:00	0	0	61	65	2771	152	55	56	6.6	7.6	7.9	50488307.6
11/22/2003 4:00	0	0	60	62	2735	152	52	56	6.6	7.6	7.9	50503678.5
11/22/2003 8:00	0	0	60	65	2769	152	53	56	6.6	7.7	7.9	50518809
11/22/2003 12:00	0	0	62	63	2693	152	51	56	6.6	7.7	7.9	50534173.3
11/22/2003 16:00	0	0	61	63	2541	153	53	56	6.6	7.6	7.9	50549518.5
11/22/2003 20:00	0	0	59	64	2539	152	52	56	6.6	7.6	7.9	50564656
11/23/2003 0:00	0	0	60	65	2541	152	52	55	6.6	7.6	7.9	50580027.1
11/23/2003 4:00	0	0	61	63	2541	152	53	55	6.6	7.6	7.9	50595374.9
11/23/2003 8:00	0	0	62	63	2689	152	52	56	6.6	7.7	7.9	50610717.4
11/23/2003 12:00	0	0	62	67	2769	152	41	56	6.6	7.7	7.9	50626056.4
11/23/2003 16:00	0	0	62	64	2452	152	45	56	6.6	7.7	7.9	50641393
11/23/2003 20:00	0	0	61	64	2691	152	40	56	6.6	7.7	7.9	50656703.6
11/24/2003 0:00	0	0	60	63	2850	152	45	56	6.6	7.7	7.9	50672012.7

11/24/2003 4:00	0	0	61	64	2590	151	45	55	6.6	7.7	7.9	50687310.6
11/24/2003 8:00	0	0	61	62	2686	152	41	56	6.6	7.7	7.9	50702600.1
11/24/2003 12:00	0	0	61	63	2541	153	42	56	6.6	7.8	8	50717899.3
11/24/2003 16:00	0	0	61	63	2541	153	44	56	6.6	7.8	8	50733204.5
11/24/2003 20:00	0	0	61	63	2541	153	49	56	6.6	7.8	8	50748506.1
11/25/2003 0:00	0	0	61	63	2739	152	50	56	6.6	7.7	8	50763825.3
11/25/2003 4:00	0	0	0	0	20	150	48	55	6.6	7.7	8	50777803.9
11/25/2003 8:00	0	0	0	0	18	151	50	58	6.6	7.7	7.9	50777803.9
11/25/2003 12:00	0	0	62	62	2599	151	44	54	6.6	7.7	7.9	50781120.4
11/25/2003 16:00	0	0	61	66	2737	151	42	55	6.6	7.7	7.9	50796363.3
11/25/2003 20:00	0	0	58	63	2693	151	15	54	6.6	7.7	7.9	50811365.4
11/26/2003 0:00	0	0	59	64	2737	150	48	54	6.6	7.7	7.9	50826353.2
11/26/2003 4:00	0	0	60	65	2861	150	40	54	6.6	7.7	7.9	50841581.3
11/26/2003 8:00	0	0	61	62	2689	150	39	54	6.6	7.6	7.9	50856590.2
11/26/2003 12:00	0	0	59	65	2445	151	42	55	6.6	7.7	7.9	50871593.8
11/26/2003 16:00	0	0	61	64	2541	151	50	55	6.6	7.7	7.9	50886786.4
11/26/2003 20:00	0	0	60	65	2689	151	48	55	6.6	7.7	7.9	50901756.7
11/27/2003 0:00	0	0	61	63	2737	151	47	55	6.6	7.7	7.9	50916926.2
11/27/2003 4:00	0	0	60	63	2737	151	47	55	6.6	7.6	7.9	50931882.4
11/27/2003 8:00	0	0	62	63	2737	151	46	55	6.6	7.6	7.9	50947070.1
11/27/2003 12:00	0	0	60	62	2907	152	43	56	6.6	7.7	7.9	50962023.6
11/27/2003 16:00	0	0	61	64	2599	152	48	56	6.6	7.7	7.9	50977258.9
11/27/2003 20:00	0	0	59	62	2541	152	43	56	6.6	7.7	8	50992235.3
11/28/2003 0:00	0	0	60	61	2546	153	41	56	6.6	7.7	8	51007433
11/28/2003 4:00	0	0	61	64	2599	153	47	57	6.6	7.7	8	51022385.2
11/28/2003 8:00	0	0	60	64	2599	153	47	56	6.6	7.7	8	51037608.5
11/28/2003 12:00	0	0	62	65	2493	154	44	57	6.6	7.8	8	51052830
11/28/2003 16:00	0	0	60	65	2486	154	47	57	6.6	7.8	8	51067832.6
11/28/2003 20:00	0	0	59	62	2541	155	43	57	6.6	7.8	8	51083062.9
11/29/2003 0:00	0	0	60	64	2599	154	46	56	6.6	7.7	8	51098282
11/29/2003 4:00	0	0	60	62	2541	151	43	55	6.6	7.7	8	51113456.3
11/29/2003 8:00	0	0	60	66	2926	151	38	55	6.6	7.7	8	51128620.1
11/29/2003 12:00	0	0	62	63	2445	151	48	55	6.6	7.7	8	51143567.7
11/29/2003 16:00	0	0	61	62	2539	151	43	55	6.6	7.7	8	51158749.1
11/29/2003 20:00	0	0	60	63	2689	151	39	55	6.6	7.7	8	51173674.9
11/30/2003 0:00	0	0	61	63	2771	151	44	55	6.6	7.7	8	51188835.4
11/30/2003 4:00	0	0	61	61	2769	151	45	54	6.6	7.7	8	51203970
11/30/2003 8:00	0	0	63	62	2863	150	43	55	6.6	7.7	8	51218880.1
11/30/2003 12:00	0	0	62	63	2597	151	46	55	6.6	7.7	8	51234006.4
11/30/2003 16:00	0	0	59	63	2544	151	42	55	6.6	7.7	8	51248890.2
11/30/2003 20:00	0	0	57	62	2684	151	42	55	6.6	7.7	8	51263561.6

Appendix F

Chain-of-Custody Forms

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

Case No:
DAS No:
SDG No: L

Date Shipped:	11/12/2003
Carrier Name:	FedEx
Airbill:	842185307790
Shipped to:	USEPA REGION II Building 209 MS230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886

Chain of Custody Record

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	John Huisman	11-12-03 / 1500	FedEx	11-12-03 / 1500
2				
3				
4				

Sampler Signature: John Huisman

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
B0177	Ground Water/ JOHN HUISMAN	/G	VOA (21)	1 (HCL), 2 (HCL), 3 (HCL) (3)	SC-01	S: 11/12/2003	11:30		
B0178	Ground Water/ JOHN HUISMAN	/G	VOA (21)	10 (HCL), 11 (HCL), 12 (HCL), 4 (HCL), 5 (HCL), 6 (HCL), 7 (HCL), 8 (HCL), 9 (HCL) (9)	SC-04	S: 11/12/2003	12:00		
B0179	Ground Water/ JOHN HUISMAN	/G	VOA (21)	14 (HCL), 15 (HCL), 16 (HCL) (3)	SC-60	S: 11/12/2003	11:30		
B0180	Field QC	/G	VOA (21)	16 (HCL), 17 (HCL), 18 (HCL) (3)	SC-TB	S: 11/12/2003			

Sample Method: OLM04.3

Additional Volumes collected at SC-04 for MS/MSD

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt	Chain of Custody Seal Number:	
	B0178				
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: 2-462971652-111203-0009

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

LABORATORY COPY

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

Case No:
DAS No:

R

Region:	2
Project Code:	
Account Code:	
CERCLIS ID:	NYD047650197
Spill ID:	02LH
Site Name/State:	Stanton Cleaners Site/NY
Project Leader:	TOM WILLIAMS
Action:	Operations and Maintenance
Sampling Co:	Earth Tech

Date Shipped:	11/12/2003
Carrier Name:	FedEx
Airbill:	842185307790
Shipped to:	USEPA REGION II Building 209 MS230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6886

Chain of Custody Record | **Sampler Signature:**

	Relinquished By	(Date / Time)	Received By	(Date / Time)
1	John Huisman	11-12-03/1500	FedEx	11-12-03 /1500
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
B0177	Ground Water/ JOHN HUISMAN	/G	VOA (21)	1 (HCL), 2 (HCL), 3 (HCL) (3)	SC-01	S: 11/12/2003 11:30		--
B0178	Ground Water/ JOHN HUISMAN	/G	VOA (21)	10 (HCL), 11 (HCL), 12 (HCL), 4 (HCL), 5 (HCL), 6 (HCL), 7 (HCL), 8 (HCL), 9 (HCL) (9)	SC-04	S: 11/12/2003 12:00		--
B0179	Ground Water/ JOHN HUISMAN	/G	VOA (21)	14 (HCL), 15 (HCL), 16 (HCL) (3)	SC-60	S: 11/12/2003 11:30		Field Duplicate
B0180	Field QC	/G	VOA (21)	16 (HCL), 17 (HCL), 18 (HCL) (3)	SC-TB	S: 11/12/2003		Trip Blank

Sample Method: OLM04.3
Additional Volumes collected at SC-04 for MS/MSD

Shipment for Case Complete? Y	**Sample(s) to be used for laboratory QC:** B0178	**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: 2-462971652-111203-0009

REGION COPY

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

F2V5.1.045

Appendix G

Federal Express Airbill Forms

FedEx Express **USA Airbill** FedEx Tracking Number **842185307790**

Sender's Copy

1 From *Please print and press hard.*

Date 11/12/03 Sender's FedEx Account Number 2374-4259-8

Sender's Name John Huisman Phone (516) 352-4133

Company Earth Tech, Inc.

Address 110 Cuttermill Road Dept./Floor/Suite/Room

City Great Neck State NY ZIP 11021

2 Your Internal Billing Reference First 24 characters will appear on invoice. 5442001

3 To

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

Company USEPA Region 2

Address Building 209 MS 230 We cannot deliver to P.O. boxes or P.O. ZIP codes.

To "HOLD" at FedEx location, print FedEx address.

Address 2890 Woodbridge Avenue Dept./Floor/Suite/Room

City Edison State NJ ZIP 08837

Try online shipping at fedex.com/us/ship

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com
or call 1.800.Go.FedEx® 800.463.3339.

4a Express Package Service *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

- [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 *Packages over 150 lbs.* Delivery commitment may be later in some areas.

- [ ] 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
- [X] Other

6 Special Handling Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight and FedEx 2Day 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. / Credit Card No. Exp. Date

Total Packages	Total Weight	Total Declared Value†	
1		$ .00	FedEx Use Only

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

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

446

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RETAIN THIS COPY FOR YOUR RECORDS.

Appendix H

Groundwater Treatment System Raw and Treated Groundwater Analytical Data

Not applicable for this month.

Appendix

Silver Vapor Extraction and Pump and Treat System Relay Monitoring

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

Date: 11/ 05 / 2003
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
Influent SVE	6.8	0	20.80%	0%	0	108.3	NA	24.00%	63.60	215
Post Air Stripper	0.0	0	21.00%	0%	0	58.8	NA	10.00%	58.80	2270
Discharchge	0.3	0	19.80%	0%	0	64.2	NA	90.60%	61.40	2500
Background	0.0	0	20.90%	0%	0	56.0	NA	45.00%	22.00	NA

Total gallons pumped: 48,982,602 gallons
Flow Rate: 61 gpm

Equipment calibrated by: J. Huisman
Air sample collected by: J. Huisman
Air sample readings performed by: J. Huisman

Comments:
Weekly O&M Performed.

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

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

Date: 11/ 22 / 2003
Project # 70536

	MultiRAE Plus PGM-50					VelociCalc Plus				
	VOC	CO	Oxygen	LEL	H2S	Temp.	Vac. Pre.	%RH	Dew pt.	Flow
Influent SVE	6.0	0	21.00%	0%	0	100.6	NA	12.00%	50.00	211
Post Air Stripper	0.0	0	20.90%	0%	0	54.8	NA	17.00%	57.00	2260
Discharchge	0.3	0	20.00%	0%	0	60.5	NA	88.80%	58.00	2505
Background	0.0	0	20.90%	0%	0	57.8	NA	52.30%	34.50	NA

Total gallons pumped: 50,283,200 gallons
Flow Rate: 63 gpm

Equipment calibrated by: J. Huisman
Air sample collected by: J. Huisman
Air sample readings performed by: J. Huisman

Comments:
Weekly O&M Performed.

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

Appendix J

Indoor Air Quality Data

This data can be obtained by contacting:

U.S. Environmental Protection Agency
Region II – Removal Program
2890 Woodbridge Avenue
Edison, NJ 08837 -3679

Appendix K

Groundwater Level Monitoring Results (Ongoing)

EARTH TECH

A Tyco Infrastructure Services Company

WATER LEVEL DATA SUMMARY

PROJECT:	Stanton Cleaners	JOB NUMBER:	71487.01
LOCATION:	Great Neck, NY	DATE:	11/22/03 & 11/23/03
CLIENT:	USACE / USEPA	MEASURED BY:	John Huisman
SURVEY DATUM:	ft msl		Jim Simmonds
MEASURING DEVICE:	Solinst Water Level Indicator S/N# 34407		

WELL NUMBER	MEASURING POINT		DEPTH TO WATER (FT)	ELEVATION OF WATER (FT)	COMMENTS
	Description	Elevation (FT)			
EPA-MW-11D	ft BTOC	74.63	60.07	14.56	missing 1 bolt
EPA-MW-21	ft BTOC	84.13	66.86	17.27	missing 1 bolt
EPA-MW-22	ft BTOC	82.20	65.09	17.11	
EPA-MW-23	ft BTOC	82.83	78.61	4.22	
EPA-MW-27	ft BTOC	69.32	52.85	16.47	no bolts
ST-MW-02	ft BTOC	82.03	64.40	17.63	
ST-MW-06	ft BTOC	69.83	44.92	24.91	
ST-MW-09	ft BTOC	78.13	62.52	15.61	
ST-MW-11	ft BTOC	75.25	60.59	14.66	no bolts
ST-MW-12	ft BTOC	87.20	72.01	15.19	missing 1 bolt
ST-MW-14	ft BTOC	69.73	56.40	13.33	no bolts
ST-MW-16	ft BTOC	75.78	65.51	10.27	no bolts
ST-MW-17	ft BTOC	86.53	71.55	14.98	no bolts
ST-MW-19	ft BTOC	82.50	68.04	14.46	no bolts
ST-MW-20	ft BTOC	84.53	73.45	11.08	no bolts

Notes:

WAGNN Well #9 was pumping at 1,000 GPM during water level measurements on 11/22 and 11/23

Treatment System:
Total Gallons Pumped: 50,545,118
Pumping Rate: 64 GPM

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

Appendix L

Action List

Not applicable for this month.

Appendix M

Miscellaneous / Trip Reports

SAMPLING TRIP REPORT

Site Name: STANTON CLEANERS AREA GROUNDWATER CONTAMINATION SITE
CERCLIS ID Number: NYD047650197
Sampling Dates: November 12, 2003
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 OLM04.3	USEPA Region II Building 209 MS-230 2890 Woodbridge Avenue Edison, N.J. 08837

Sample Dispatch Data (Table 2):

On November 12, 2003, three (3)groundwater samples, including extra volume for Matrix Spike / Matrix Spike Duplicate (MS/MSD) analysis and one trip blank were shipped to the U.S. Environmental Protection Agency Region II Lab (USEPA) for TCL-VOAs analysis.

FedEx Airbill No.	Number of Coolers	Number and Type of Samples	Time and Date of Shipping
842185307790	1	3 Aqueous Samples, 1 MS/MSD and 1 Trip Blank for a total of 5 samples for TCL-VOAs.	11/12/03 @ 1500 TO: USEPA

Sampling Personnel (Table 3):

Name	Organization	Site Duties
Tom Williams	Earth Tech, Inc.	Task Manager
John Huisman	Earth Tech, Inc.	Health & Safety/Sampler

Sample Numbers and Collection Points (Table 4):

Laboratory	Analyses	Sample Type	Sample #	Sample Collection Point(SCP)
USEPA	TCL-VOAs	Aqueous Groundwater	B0177	SC-01
			B0178	SC-04 (MS/MSD)
			B0179	SC-60 (Dupl SP-01)
			B0180	SC-TB (Trip Blank)

Additional Comments:

All groundwater samples were collected after a five gallon purge from the sample ports located within the treatment system. Volumes were collected from the influent (SC-01) and effluent (SC-04) of the treatment system for the following analysis: Target Compound List (TCL) Volatile Organic Compounds.

Extra volumes for MS/MSD analysis were collected from SC-04, the effluent sample location. SC-60 is a duplicate sample of influent sample SC-01.

Earth Tech personnel also collected real time water quality parameters from the raw water (influent) and treated water (effluent) using a Horiba U-22 water quality meter.

APPENDIX A

CHAIN OF CUSTODY FORMS

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

Case No:
DAS No:
SDG No: L

Date Shipped:	11/12/2003
Carrier Name:	FedEx
Airbill:	842185307790
Shipped to:	USEPA REGION II Building 209 MS230 2890 Woodbridge Avenue Edison NJ 08837 (732) 906-6866

Chain of Custody Record

Sampler Signature: John Huisman

	Relinquished By (Date / Time)	Received By (Date / Time)
1	John Huisman 11-12-03/1500	FedEx 11-12-03/1500
2		
3		
4		

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
B0177	Ground Water/ JOHN HUISMAN	/G	VOA (21)	1 (HCL), 2 (HCL), 3 (HCL) (3)	SC-01	S: 11/12/2003	11:30		
B0178	Ground Water/ JOHN HUISMAN	/G	VOA (21)	10 (HCL), 11 (HCL), 12 (HCL), 4 (HCL), 5 (HCL), 6 (HCL), 7 (HCL), 8 (HCL), 9 (HCL) (9)	SC-04	S: 11/12/2003	12:00		
B0179	Ground Water/ JOHN HUISMAN	/G	VOA (21)	14 (HCL), 15 (HCL), 16 (HCL) (3)	SC-60	S: 11/12/2003	11:30		
B0180	Field QC	/G	VOA (21)	16 (HCL), 17 (HCL), 18 (HCL) (3)	SC-TB	S: 11/12/2003			

Sample Method: OLM04.3

Additional Volumes collected at SC-04 for MS/MSD

Shipment for Case Complete?Y	Sample(s) to be used for laboratory QC:	Additional Sampler Signature(s):	Cooler Temperature Upon Receipt	Chain of Custody Seal Number:	
	B0178				
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: 2-462971652-111203-0009

LABORATORY COPY

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

APPENDIX B

WATER QUALITY DATA

STANTON CLEANERS SITE LTRA

Groundwater Pump and Treatment System
Water Quality Parameters Log

Date: 11/12/03
Project # 70536

	pH	COND.	TURB.	DO	TEMP.	SALINITY
Combined Influent	5.20	0.591	1.0	7.66	59.5	0.02
Discharge	7.15	0.57	0.0	10.26	59.8	0.02

Total Gallons pumped: 49,631,104 gallons
Flow rate: 61 gpm

Equipment Calibrated by: John Huisman
Water samples collected by: John Huisman
Water monitoring performed by: John Huisman

Comments:
SC-01 : Influent Sample Collected
SC-04 : Effluent Sample Collected & (MS/MSD)
SC-60 : Duplicate Sample of SC-01

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.